The dialectic of control: A critical ethnography of renal nurses' decision-making

Thesis submitted by

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STATEMENT ON THE CONTRIBUTION OF OTHERS

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KEY TO TRANSCRIPTS AND FIELD NOTES

In the presentation of the research findings (Chapter 5, 6 and 7), where excerpts from the participants are included, the following abbreviations and font styles have been used:

Long quotes:	All the names used within this thesis are pseudonyms (refer to appendix 2 for further information). Pseudonym name, date and paragraph or sentence (#) identifies excerpts from participant interviews.
	E.G. I felt that this was not the case but the other nurse did not seem to pay any attention (Julie, 26/10, # 16).
Short quotes:	When a few words, or word, have been applied within a sentence in the main text, this is specified through the use of italics.
	E.G. It was not unusual for the nurses to speak <i>about being in control</i> and <i>autonomous</i> in their practice as they went about their day.
Field notes (FN):	Field notes are signified as FN, and are structured in the same manner, with exception to the font style of italics. Regular font refers to researcher comment. Comments made by nurses that have been captured as fieldnotes are indicated by speech marks and are not verbatim.
	E.G. Julie held the cup in her hand and proceeded to the door. [I watched from a distance but close enough to see her facial expression] She listened tentatively to what the doctor was saying but seemed doubtful of the diagnosis as she raised her eyes in an upward motion, later adding that "nothing changes!" (FN, 23/7, # 5).
•••	Indicates that the researcher has edited the material

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ABSTRACT

Renal disease in Australia is increasing at an alarming rate. Many of the patients presenting with renal failure are from rural and remote areas where renal and other health care services are minimal. What services are available tend to be predominantly managed by nurses because of the way that renal services are organised in regional areas. Consequently, there is an assumption that renal nurses are autonomous in their practice and accountable for the decisions they make. The purpose of this study was to explore these assumptions within the bounds and context of a regional renal unit. The aim of the study was to increase nurses' awareness about their responsibility when taking on expanded nursing roles in terms of their decision-making ability, and capacity, and what this means in terms of accountability.

Critical ethnography was adopted as the methodology to explore the nature of decision-making in the renal unit context. Particular emphasis was placed on how nurses used their knowledge during daily routine practice. Carspecken's (1996) fivestage method of critical ethnography incorporated periods of prolonged participantobservation, structured and unstructured interviews and documentation review. Concepts from Giddens' (1984) structuration theory provided a theoretical framework that sensitised the researcher to certain 'aspects of nursing practice' to guide data collection and analysis. These, in turn, provided major chapter headings for the thesis: decision-making across time-space encounters (Contextuality), the rules and resources (Social Structures) available for decision-makers and the nurses' ability and skills (Knowledgeability). In addition, Giddens (1984) 'Dialectic of Control' was threaded throughout the finding chapters as a major theme that addressed the nurses' capacity (power and control) to make and implement decisions. Collectively the researcher and participants gained new insights about decisionmaking practices, during reflection and dialogue, one learning from the other. It was assumed that if, and when, decision-making concerns were recognised, the nurses themselves could possibly make changes to their practice with the aim of enhancing patient outcomes.

Time-space played an important factor in controlling nurses' decision-making, but this was often in complex and subtle ways. Encounters across time-space often controlled who made decisions and when. This alternating decision-making behaviour caused conflict and confusion that, at times, undermined some nurses' authority and overall responsibility as decision makers. Even though many nurses spoke about being autonomous decision makers, most unknowingly followed established routines and practices that was not always conducive to best-practice principles. Social structures, the rules and resources, could enable and constrain decision-making within this context. The rules that nurses ascribed to were not always known at a discursive level, therefore, rationale could not always be given for the decisions they made. When rules could be spoken about, not all the nurses followed them. Reasons for breaching unit rules varied such as out-dated rules or policies, limited resources that required 'short-cuts' and, at times, no recognition that rules were being broken. Knowing the rules and prescribing to routine practices provided a sense of safety as the nurses made decisions. This did not necessarily mean that best decisions were being made but gave a presentation that the decisions being made were satisfactory. Knowledgeability about the rules and resources available to nurses, and decision-making encounters across time-space, appeared to be a key feature that enabled the nurses to exercise their dialectic of control. When a nurse had, or perceived to have, control over the decisions they made, this, in turn, facilitated a sense of "being autonomous". Despite this shared perception of being in control, several nurses remained frustrated and constrained by bureaucratic policies and hierarchical structures. However, the nurses, too, could create these constraints, knowingly or unknowingly, as they went about their day.

Recommendations resulting from these findings include that further research is required on certain aspects of decision-making such as the role emotions play when making decisions, how ethical issues embedded in routine practice are recognised, and how risk and uncertainty are acknowledged and then managed. When nurses do not question their decision-making roles, they can become constrained in their decision-making capacity and ability. Without deliberate reflection aspects that control nurses' decision-making may never be exposed, thus changed. The implications of this study are central for both patient outcomes and the professional development of nursing.

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CHAPTER ONE: SETTING THE SCENE

Defining the research question is the most important step to be taken in a research study, so patience and sufficient time should be allowed for this task (Yin, 1994, p. 3).

Introduction to the study

Sellman (2003) questions the assumption that nurses are autonomous practitioners, accountable for their actions. This entails that nurses make autonomous decisions within the health care organisation. However, nurses are obliged to follow institutional rules, which are administered and maintained via authoritative hierarchies, and comply with professional codes of practice, all of which can enable and constrain decision-making capacity. Many other factors can influence autonomous decision-making processes, some of which may not always be known. The purpose of this study was to explore different aspects of nurses' decision-making in a number of ways from both the participants and researcher perspectives. This includes how the nurses, and the researcher, perceive their ability (knowledge and skills), capacity (perceived power and control) and autonomy as decision makers, and what this may mean for patient outcomes.

This chapter briefly describes the evolution of the research question; and how I, the researcher and a Registered Nurse working part-time in the study context, was positioned in terms of the research project. An overview of renal nursing within the Australian context is described, as well as the context in which the study was conducted. Critical ethnography is then briefly presented as the selected methodology, informed by Giddens' (1984) theory of structuration. The significance of nurses' decision-making as a research topic then follows. To conclude, an overview of the thesis is presented.

The term 'renal' nurse rather than 'nephrology' nurse was employed throughout the thesis as this was the expression used by the nurse participants themselves. In the context of this study, 'renal nurse' signified any nurse working within the renal unit regardless of official renal qualifications. Furthermore, 'patient' rather than 'client' was the dominant term applied by the nurses, and for this reason was also adopted.

Finding the research question

Published studies that address renal nursing within the Australian context to date have been few, and so the field is open for many potential questions to be explored. The management of renal anaemia was one area found to be in need of exploration. This led me to conduct a preliminary study on the management of renal anaemia within a regional renal unit, written as a separate report from this thesis (Hardcastle, 2002). Nonetheless, the preliminary study served two main purposes. First, it addressed the problem of renal anaemia from a nursing perspective and, second, issues were identified that could be further investigated. One particular issue arising from the preliminary study was how the nurses spoke about their level of autonomy as decision makers, and was the catalyst for this study.

One colleague, during personal communication, expressed the belief that nurses consciously selected to work in the area of renal nursing because of the power and control *they* had within the renal unit setting. After reflecting further on this, I became aware that I had not specifically identified, or looked for, aspects of nurses' power and control, although emerging themes from the preliminary study suggested that power and control were apparent for certain nurses. These ideas drew me into a new direction and provided the foundations for this study. Furthermore, these developing thoughts appeared to be relevant to the context of this particular renal unit given that the nephrologist was a visiting physician spending less than nine official hours a week within the hospital context. Because of his minimal presence, there was an assumption that the experienced renal nurses filled this void, which, in turn, facilitated their sense of autonomy. However, it could not be assumed that nurses were autonomous in this de facto decision-making role.

In order to address this assumption, I believed that two questions needed to be answered:

- Which aspects of nursing practice in this renal unit control how nurses make decisions? and;
- Which aspects of nursing practice, in this renal unit, control how nurses' perceive their decision-making capacity?

Positioning myself as a nurse and researcher

Streubert and Carpenter (1999) suggest that the researcher must share their perceptions and thoughts about a research topic prior to engaging in the study. Assumptions, beliefs and values once exposed in this way can be acknowledged and challenged, although full disclosure may never be possible since many biases and ideas are not consciously known or talked about (Giddens, 1984). Furthermore, as the data collection tool throughout the study, the researcher's role required honesty which contributed to the rigour of the study (Rice & Ezzy, 1999).

Prior to the study, I had not considered myself as a critical theorist. In fact, before embarking on this journey, I was not sure what a critical theorist of any kind was. I had always tried to avoid conflict, both at work and in my personal life. I did not perceive myself as a politician, rather as a peacekeeper. However, even peacekeepers can be politicians and advocates of change, something which I learned during the life of this project. Critical ethnography was selected as an appropriate methodology, not only as a means to explore nurses' decision-making within the unit as a strategy to illuminate 'power' and 'control' (concepts addressed later in this chapter), but also as a way to actively involve the unit nurses in the research process. I believed that empowering my colleagues would indirectly 'empower' the patients for whom we cared. Thus, my position as the researcher became one of change facilitator, naively helping the nurses increase their decision-making awareness, hopefully with the potential of improving both patient and nursing outcomes. Such emotive words as helping and hoping made me re-evaluate my good intentions throughout the research journey. Consequently, I was constantly being positioned and repositioned during participant-researcher encounters. Dialogue during these encounters persistently reconstituted my understanding about social practice within the unit, and as a result, further repositioned me as the researcher and clinician.

The title 'renal nurse' was bestowed upon me, like many of my colleagues, not based on renal qualifications but because of where I worked. I perceived myself as a competent renal practitioner but not an expert. While nursing in the renal unit, I worked alongside many of the nurse participants in this study. Prior to this study, decision-making was not something I had consciously thought about. Rather, I just knew what decisions I could and could not make, and what acceptable and unacceptable decision-making behaviour within this unit was. How I had come to learn this remained somewhat of a mystery. As a competent nurse, there was an expectation that I would make decisions, some of which I did not always feel confident in making. For example, adjusting a patient's ideal or target body weight and deciding the amount of potassium to be added to the dialysate fluid, known as a potassium bath. During these times I would frequently refer the decision to another nurse who I would consider as being more experienced in making such decisions.

Over time during this study, I was able to reflect more on my clinical role as a decision maker and a researcher. Bonner (2001) identified that a dual role of nurse clinician and researcher can have both advantages and disadvantages. Because of the critical nature of this study, addressing who or what controlled nurses' decision-making; my dual role sometimes constrained my ability in exploring the research questions comprehensively. For this reason I decided early in the study to resign from my clinical role. Understanding where I was positioned in terms of this study was only one important aspect in terms of the research process. Locating the project within the Australian context in terms of socio-political aspects was as important and now follows.

Decision-making in the study unit

The renal unit in this study is located within a regional Queensland hospital, serving both peritoneal and haemodialysis patients from a large geographic area. The visiting nephrologist worked nine hours per week, his time divided between the hospital's renal health care services and this unit. As a result, the nurses had limited contact with the nephrologist or his medical team, although someone was always available in case of an emergency. In this unit the nurses made many 'routine' decisions, altering patients' therapy according to individual needs. What was considered 'routine' varied from one nurse to the next but generally captured things that were repetitive, time-scheduled and, not out of the ordinary for a renal nurse. For example, adjusting a patient's body weight, deciding how much heparin to administer and taking monthly bloods were generally accepted as 'routine'. However, one experienced nurse spoke about the routine of deciding how much fluid to remove during haemodialysis as *walking a fine line*, inferring this was more than a routine decision, unlike a novice renal nurse who *followed the careplan*, thus was considered routine practice. Consequently day-to-day dialysis decision-making, although repetitive, was at times, complex and demanding if, and when, acknowledged as such. When renal nurse shortages persisted, temporary nurses, who were usually inexperienced in the specialty, worked in the unit. Routines, for this reason were helpful in that they provided patterned ways of 'how to go on', although this still placed extra demands on the experienced nurses, who directed not only the junior nurses but also the medical staff with limited nephrology experience. This was also the case when the nurses made decisions in collaboration with the intensive care team when dialysing acute and/or unstable patients.

Renal health care in Australia

At the time the study was conducted, renal specialists (nephrologists) comprised less than 0.01 percent (n = 170) of the total Australian medical specialist labour force (AIHW, 2000, table 17), of whom 10 percent (n = 17) were located within Queensland. Within Queensland, 11 acute hospitals provide in and out-patient specialised renal services that are either based at major metropolitan or regional centre hospitals (AIHW, 2000). A further 14 hospitals also conduct maintenance renal dialysis for long-term patients who generally require less medical and nursing interventions, alongside the satellite units based in the community (AIHW, 2000). Queensland's renal transplantation unit is based in metropolitan Brisbane.

Eighty-five percent of Queensland's nephrologists are predominantly located in metropolitan areas (AIHW, 2000), yet over 80 percent of public hospitals are located outside the Queensland metropolitan area (Surrao, Taylor, Turner, & Donald, 2002, p. 103). This seemingly unequal allocation of nephrologists is possibly due to population density and distribution, geographic location and personal life choices. For example, the distribution of renal units is dependent on where nephrologists, and experienced renal nurses, are willing to work, rather than where dialysis patients reside. Resource allocation and maximisation is another factor. This frequently requires patients to relocate away from their communities, although this problem has

been recognised. The number of hours worked by nephrologists can vary between less than 20 hours up to 80 plus hours (AIHW, 2000, table 64) depending on a renal unit's location and accessibility. Nephrologist availability, therefore, have a potential impact on the nursing labour force, possibly placing more responsibility on nurses working in regional renal units. Furthermore, the number of patients who received satellite community-based dialysis during 2001 increased by 10 percent, a trend mirroring previous years (McDonald, 2002a, p. 24) and continues to rise. In addition, renal health care services are being expanded into rural and remote Australia. All these circumstances require more human and technological resources.

Several factors have been identified as major causes of renal disease. These include type-II diabetes, glomerulonephritis, and hypertension (McDonald & Russ, 2002). More recent work has identified intrauterine malnutrition and/or genetic influences as further contributing to the burden of renal disease within the Indigenous population (Cass, Cunningham, Snelling, Wang, & Hoy, 2002; Hoy et al., 1998). Such co-morbidities add to the complexity and diversity of nurses' decision-making, particularly in areas where Indigenous people access renal services. Queensland has the third highest rate of people (98 per million population) accessing renal treatment care for the first time, although this rate is much lower than Western Australia (105 per million population) and the Northern Territory (293 per million population) (McDonald, 2002b). These figures are elevated due to the alarming rate of Indigenous people entering renal health care programs (Hoy, 1996). In this particular study, approximately 60 percent of the patients are either Aboriginal or Torres Strait Islander. This is also a worrying figure since Indigenous people only represent 27 percent of Queensland's population (Australian Bureau of Statistics, 2000). For this reason specialised renal nurses are required to make decisions in order to prevent, identify and treat renal patients, placing additional demand on human and technological resources.

Renal nursing shortages - local and global

Nursing shortages have been identified throughout Queensland, particularly within the specialty of renal nursing and outside the metropolitan centres (AIHW, 2001, table 16). This places extra demands faced by the health care organisation and for renal nurses in an already challenging situation. The employment of renal technicians, enrolled nurses and health care supporters has been recommended as possible solutions to address work force shortages (Bonner, 2001). However, the renal nurses themselves may not necessarily consider these as good options. A Dedicated Educated Unit (DEU) model has also commenced in South Australia as another solution to the renal nurse shortage. This program entices undergraduate students to the field of nephrology and other specialty areas (Bennett, 2002). This problem is not restricted to Australia alone since the shortage of doctors and nurses within nephrology is a global issue (Blantz, 2001; De Vos, 2002; Owen, 2000a). For these reasons, renal nurses have taken on extended roles, either willingly or reluctantly, raising the question if renal nurses are prepared for such roles?

The birth of nephrology nursing

By the early 1960s, both peritoneal and haemodialysis were becoming successful. The development of the arterio-venous shunt established accessibility to the blood supply necessary for haemodialysis (Hanson, Carmody, Keogh et al., 1967 cited in Tiller, Johnson, May, & Sands, 1969). This technique was considered a worthwhile therapeutic treatment as "President Nixon in 1967 declared that dialysis was no longer experimental" (Hansen, 1996, p. 689). This declaration placed North American nurses in the middle of the dialysis scene. Haemodialysis moved from experimental to a treatment option, provided within the hospital context. However, as Hansen comments, dialysis still remained beyond the scope of nursing practice within the United States, (and Australia) since "the 1965 Nurse Practice Act explicitly forbade nurses to have any procedure that directly involved the blood stream" (Hansen, 1996, p. 689). Fortunately, a timely amendment was made to the United States Nurse Practice Act which allowed nurses to insert intravenous needles and handle blood; It was around this time that nephrology nursing became established (Hansen, 1996). This, in turn, had a global impact for the development of renal nursing generally.

Dialysis in Australia

Peritoneal dialysis was established in Australia thirty years prior to haemodialysis in the treatment of renal failure (McKenzie, 1981). Haemodialysis "remained a major

and hazardous operation, extremely difficult to perform, whose outcome was always in balance" (McKenzie, 1981, p. 21). Consequently, the progress of haemodialysis initially was slow since the procedure was still considered in its pioneer stage, but with the introduction of the arterio-venous shunt, haemodialysis was readily adopted in Australia (McKenzie, 1981). The first reported haemodialysis treatment for acute renal failure was performed on 10th February 1954 at the Brisbane General Hospital, under the supervision of Dr Dique, lasting six hours and 15 minutes (Rodda, 1983). Maintenance haemodialysis now became an option, commencing at the Queen Elizabeth Hospital, South Australia in 1964 (Lawrence, 1984).

The first home dialysis conducted in Australia was 1967, the same year the renal unit at the Royal Prince Alfred Hospital (Sydney) was established. The unit's main aim was to support the transplant unit, where "responsibility for the patient and the machine was divided between the nursing sisters and the technical staff" (Tiller, Johnson, May et al., 1969, p. 1231). Initially, the majority of patients were accepted on dialysis treatment programs in Australia with the understanding that they would be trained to conduct dialysis within their home or attend a satellite unit (McKenzie, 1981). However, over time and, with the increasing number of patients accessing the expensive treatment, resources became limited. This reduced the number of patients who could actually conduct home dialysis as reflected in the Australian and New Zealand Dialysis and Transplant Registry's (McDonald & Russ, 2002) annual report. For example, during 2001 only 37 percent of patients dialysed at home, of whom 70 percent were on peritoneal dialysis (McDonald, 2002b). The "meticulous supervision by the nurses" was one reason why haemodialysis was becoming successful (Tiller, Johnson, May et al., 1969, p. 1234). Dr Dique also acknowledged the special role of the renal nurse, which is summarised below:

Nurse C had spent most of her morning setting up the dialysis machine. The treatment was just about to commence when the Sister came and sent her for her tea break. Despite the nurse's pleas the Sister was adamant that she left the room. During Nurse C's absence dialysis was attempted but to no avail as the machine would not operate. The electricians went through their checks but could not find where the problem was. Nurse C returned from her break to find to her surprise nothing has started, asking "why have you not started"? On being told the problem she walked towards the electric switch and lifted it up and the machine came to life. Only Nurse C knew that that switch was upside down (Dique, 1983, p. 20).

This story is important when addressing the development of the renal nurse's role in Australia. The person perhaps perceived as the least powerful in this scenario was, in fact, powerful in terms of knowing the context where decisions were made.

The role of renal nurses in Australia

Renal nursing has been considered an established specialty within the developed world, although Polaschek (2003) maintains that there have been few published articles in relation to this specialised, distinctive role. Initially, renal nursing provided palliative care to patients with acute renal failure who ultimately died (Bevan, 2000). With the advent of dialysis therapy renal nursing was transformed since treatment could be given and life prolonged. The nurse's role was one of doctor's assistant, preparing the machines, monitoring the patients and cleaning up once treatment was completed (Hoffart, 1989). Patient safety was a major issue since the machines did not have the safety technology nurses are accustomed to today, and therefore, required diligent monitoring that doctors did not have time to do. Consequently, haemodialysis became the nurse's responsibility from initiation to completion of treatment. Tasks such as performing cannulations, prescribing dialysis treatment, assessing target body weight, collecting blood and monitoring the results could be considered as extended nursing skills (Hamilton, 1997). Therefore, complex knowledge and skills became necessary in the development of the renal nurse's role (Parker, 1998). Bevan (1998, p. 730) suggests that this expanded role is often at a great cost to caring, since dialysis can often reflect a "production-line" in order to meet the increasing workload demand. Polaschek (2003) extends the role of the renal nurse beyond clinical activities to incorporate how nurses respond to the experience of the person who is living on dialysis that contrasts Bevan's (1998) production-line analogy. Pinkney (1996) presents a different view, comparable to Polaschek (2003), in that renal nurses are not only physically and technically focused, but also attempt to meet socio-cultural, emotional and spiritual needs. Similarly, Arnell-Cullen (1999) emphasises the relationship that develops with patients and their families in order to enhance holistic care, which can have a direct impact on the patient's life. Consequently, the role of renal nurses continues to evolve and incorporates multiple role functions (Bonner, 2001). These include educator, facilitator, researcher,

advocate, counselor, administrator, technician and a care provider for both acute and chronic patients. This becomes problematic in a world of increasing technology that is faced by all nurses regardless of where they work.

Consequences of renal technology - dilemmas and opportunities

Renal technology has the capacity to prolong life. However, medical interventions have not necessarily been able to address the underlying disease process, but rather have added to the suffering in terms of undesirable side effects (Arora et al., 1999; Bazzi et al., 1995). For example, long-term chronic problems associated with dialysis treatment include renal anaemia, destructive bone disease and cardio-vascular complications. Bevan (1998, p. 731) adds that renal nurses have also contributed to this problem because their "expertise has undoubtedly attributed to the success of dialysis and helped many a person through the mire of their chronic illness". Consequences of renal care treatment programs have created an additional demand for renal nurses to acquire additional specialised skills. With this added responsibility there was an assumption that renal nurses had clinical autonomy and therefore, accountability.

Autonomous practitioners?

Renal nurses have been described as autonomous practitioners (Bevan, 1998; Bonner, 2001; McKenzie, 1981; Schardin, 1995). Two decades earlier, McKenzie identified the unique privilege of renal nurses who worked in "fulfilling" teams; "no other area of the profession can offer more" (McKenzie, 1981, p. 22). These sentiments of fulfillment are shared by Hamilton (1997) who claims that renal nurses enjoy the high degrees of autonomy, and have contributed to the development of nursing. One reason for this perception of autonomy is that renal nursing frequently demands that nurses practice beyond traditional nursing domains, and into areas that are highly scientific and technical - areas that were once exclusive to the medical profession.

It is by virtue of their knowledge and commitment to renal nursing that renal nurses are positioned to take on the autonomous role, which in contrast medical residents and students seldom take interest since their rotations through various specialities is brief (Molzahn & Dossetor, 1988, p. 583).

Consequently, this leaves doubt as to whether renal nurses manage dialysis technology by choice or by accident, the related tasks and skills no longer of interest to doctors. For doctors, renal care is now about dialysis outcomes and prolonging life, rather than monitoring patients and the *doing* aspects of 'routine' care. Bevan (2000) associates the management of dialysis with 'control of life over death', which brings a sense of 'power', or authority, for the physician, a power position which could equally be extended to renal nurses in terms of specialty knowledge. Bevan (2000, p. 438) goes on to say that dialysis is nothing more than experimental: "an experiment in prolonging life and not knowing what will happen next". This contradicts President Nixon's previous claim that dialysis was "no longer experimental" (Hansen, 1996, p. 689), four decades on. In light of this, we might ask whether renal nurses are 'fulfilled' because of their autonomy and professional status, as McKenzie (1981) and Hamilton (1997) implied, or whether dialysis has a hidden side where power (authority and control) is generated and exercised via the use of specialised technology that creates a sense of empowerment or being in control. In order to understand these issues further, and for data analysis during this study, Giddens' (1984) meaning of power and control were adopted.

Giddens' concept of power and control

Power is understood, by Giddens, as the means getting things done and, as such, is implied in human action, and achieved by access to, and application of, social structures (the rules and resources), which wield modalities of social control. Control, is the capability that some individuals and groups have of influencing the circumstances of action for another (Giddens, 1984, p. 283), in which power struggles are introduced. It is during power struggles that the *dialectic of control* (Giddens, 1984) is operating, whereby autonomy is dependent on a person's or group's access, and use of resources that can either enable or constrain power and, thus, control. The 'dialectic' refers to the alternating or changing power during encounters (Giddens, 1984). In this sense, power is never merely a constraint but through a person's capability to 'do or act otherwise' (agency) change can be created, thus "constraints can also enable" (Giddens, 1984, p. 173). Renal nurses, for example, may acquire power through their practice enabled by 'knowing the rules' of renal practice and manage, or *control*, the resources required for dialysis.

Recognition of expertise can be related to this power position of knowing rules and managing resources, although this may not necessarily be because of what one knows, but rather how one acts.

Bonner's (2001, p. 313) Australian study, which addressed acquisition and exercise of nephrology nursing expertise, concluded that renal nurses had to be recognised by others in order to practice as an expert since this enabled these nurses to significantly extend "their scope of practice". Hence exercise their "virtuous" knowledge (Molzahn & Dossetor, 1988, p. 583). Bonner (2001, p. 313) refers to this as "blurring the boundaries", the nurses working between patient safety and welfare, yet still capable of getting the work done. As a result, perceptions of expertise appeared to surpass actual knowledge and experience, meaning that 'expert' nurses cannot always be assumed to practice at a safe and/or autonomous level. This may be one reason why recent nursing articles advocate for multidisciplinary teams and collaborative models in renal health care delivery so that nursing expertise is recognised and accountability addressed (Australian and New Zealand Society of Nephrology and the Australian Kidney Foundation, 2001; Dwight, 2002; Flynn & Speranza-Reid, 1999; Neyhart, 2000). Hence, the push for a multidisciplinary team approach may be more about increasing renal nurses' participation, rather than improving patient outcomes alone.

A collaborative renal practice model, according to Dwight (2002), has not been well defined even though the nephrologist is accustomed to working with Registered Nurses, Technicians, Social Workers and Dieticians. Without transparent definitions, assumptions may be made regarding the meaning of collaborative practice. The Queensland Nursing Council (QNC, 2001, p. 4) defines collaboration as "working in partnership". How partnership is defined can be ambiguous. Dwight (2002, p. 288) writes about a collaborative model in a renal unit in the United States of America:

The nephrologist is ultimately responsible for all aspects of patient care, but focuses primarily on the unique aspects of ESRD [end-stage renal disease] care....The roles and responsibilities of each team member are different, allowing each to function independently within their scope of practice.

In Dwight's study, the doctor adjusted the patient's ideal body weight and evaluated all laboratory results. In contrast, the nurse 'participates' in assessing the ideal body weight and monitors blood results. Consequently, the nephrologist is ultimately responsible. This leaves one to ask; where then does this place the nurse during collaborative decision-making and, what does "function independently" really signify? In light of this, the term 'partnership' can be misdefined depending on who is using it and for what purpose.

Kitson (2001) argues that the expansion of the nurses' role as autonomous practitioners is not necessarily embraced by everyone and is considered by some as a threat to nurses' ability to care. Despite these concerns, Advanced Nurse Practitioners (ANP) are well established in North America. There, the nurse is expected to have at least a Masters degree in their specialty area (Casey, 2002). This position within the United Kingdom, as within Australia, is less clearly defined. The role is largely determined by the individual nurse's level of experience "developed in an informal, unstructured manner" (National Review of Nursing Education, 2001, p. 4) rather than by educational standards and qualifications (Cox, 2000). Many Australian nurses, including renal nurses, fit into the criteria of ANP, yet are not officially recognised or rewarded. This contributes to concerns regarding litigation, exploitation and inadequate education. In many isolated areas of Australia nurses play a crucial, and sometimes solo, role in the delivery of health care (Wooldridge, 2001). There are expectations on nurses to make decisions, which often extend beyond professional boundaries, but this does not necessarily equate to autonomous practice. This can leave nurses feeling insecure, and undervalued, when their scope of practice and decision-making ability and capacity are not rewarded, acknowledged, or supported. Bevan (1998) is adamant that renal nurses must no longer talk about what it is they do, rather they need to make practice explicit and accountable by documenting what it is they do.

Standards of practice

During 1999, the development of the *Competency Standards for the Australian Advanced Practitioner Nephrology Nurse* was presented and published by the Renal Society of Australasia (1999). Six domains of practice were identified including clinical problem solving, teamwork and empowerment. They provide a useful source of information to provide a "strong message of accountability" (Lumby, 1999, p. 2). This infers that there is an expectation that within this 'autonomous position', the advanced practitioner is accountable for their practice and an advocate for consumers. However, without the resources to maintain and provide nurses' competency, this may be an unreasonable expectation. Furthermore, renal nurses, regardless of their experience, remain under the 'direction' of renal physician(s), which has the potential of further constraining their actual capacity. Should a nurse feel constrained this may result in covert decision-making practices. Without a doubt, "a more orderly and collaborative approach to specialisation" as stated by Stewart (1999, p. 3), is one approach to "empower the nurses by adding breadth and depth to what is understood". However, when nurses' competency levels are not officially recognised, or supported, this challenges the notion of nurses becoming empowered (e.g. being in control of the decisions they make) within their advanced nursing role, when in fact, their specialised skills and knowledge cannot be applied in practice, or at least, not until approved.

Significance of clinical decision-making for renal nurses

The Queensland Nursing Council (QNC) recognises that "nursing practice is largely determined by the context in which it takes place" (QNC, 2001, p. 2). The context is a crucial factor when addressing nurses' decision-making. When there are no doctors available with nephrology knowledge and experience, someone has to make decisions, and this is often the experienced nurse working within the renal context. Yet again how prepared nurses are to make these decisions and accept the responsibility, and what organisational support is available, is not always apparent.

The extra demands placed upon renal nurses in regional and remote centres put them in both a precarious and exciting position, as more decision-making is bestowed upon them, either enthusiastically or reluctantly, in order to provide services to many areas. Either way, knowledge and skills required to meet these demands are paramount to maintaining accountability within the profession and for the delivery of safe quality care. This care should be based on recent evidence and evaluation of new products as they come onto the market. New studies further contribute to the renal literature, adding to an already complex situation, making the decision of what is best-practice a contentious issue.

The role of nurses as carers is more than providing routine technological skills of dialysis; it incorporates a sound knowledge base so that quality decision-making can occur within a humanistic framework (Bevan, 1998; 2000). Moreover, the power or capacity to apply knowledge, skills and care with the aim of improving patient outcomes must no longer be ignored. Therefore, this study has great significance for renal nursing as it attempted to identify factors that controlled nurses' decision-making. Although the study was focused on renal nurses' decision-making within the health care system, it can provide insight for any person making decisions. Regardless of who we are, where we are and what we do, we all make decisions. It is the process of how these decisions are made that is of importance and what the outcomes of these decisions mean in every day practice.

The highs and lows of critical research approach

Critical theory, embedded within the methodology of ethnography, has been adopted in order to address the research questions and explore the phenomenon of nurses' decision-making. This approach, according to Thomas (1993, p. 2) "is a type of reflection that examines culture, knowledge and action". Critical ethnography has the potential and purpose to empower people and transform political and social realities; and, therefore, can be considered a form of social activism (Carspecken, 1996). When the oppressive social structures constraining nurses' practice are identified, nurses are positioned to challenge, and possibly, change them. Hidden assumptions, discourses, ideologies and constructions created by the nurses can become exposed through interaction and dialogue (Giddens, 1984). Browne (2000) suggests that if assumptions and accepted norms of social conduct are not questioned and critiqued as part of research methodology, then only part of the phenomenon may be revealed.

Questions about power relationships are also addressed, such as who has power, how power is used, what purposes it serves, or appear to serve. For example, making a decision requires the power to make a choice. For this reason, decision-making was selected as the vehicle to illuminate the concept of power and control in the nurses' day-to-day practice within the renal unit. It aimed at addressing which nurses perceived themselves as 'being in control' when making decisions, who 'was in control', and what this actually meant in practice. While analysing the data, structuration theory was identified as a relevant tool to address these power issues during social encounters. According to Giddens (1984) agents, or the nurses, can be both autonomous and dependent at the same time during any encounter. Therefore Giddens' concept of autonomy is not a singular concept; rather it is tied to an opposite element of dependence. It is through the continual fluctuating tension of autonomy-dependence that control manifests itself, expressed by Giddens as the 'dialectic of control' (Layder, 1994).

Structuration theory

Over the last four decades, Giddens, with his many published books and articles, has contributed to the understanding of social theory and practice. Although Giddens has produced more recent works (Giddens, 1990, 1991a, 1991b, 1992, 1996) it is his published work, The Constitution of Society (Giddens, 1984), which lays down the principles of structuration theory, some of which were adopted for analysis purposes in this study. Giddens' earlier work was specifically selected since structuration theory, allegedly, gives no precedence to either agency (deterministic features of an individual) or structure (deterministic features of society) and provided one book where Giddens addresses these matters collectively. The theory has been described as 'complex' and 'abstract' by many authors (e.g. Bryant & Jary, 1991; Craib, 1992; Giddens & Pierson, 1998; Haralambos, van Krieken, Smith, & Holborn, 1996). However, the theory provides a system for organising and categorising the data that enabled the broader social context of renal nursing to be explored where decisions were made as part of daily practice. For this reason, structuration theory was considered an applicable theoretical framework, although Giddens more recent works about modernity, self-reflexivity and globalisation, are drawn upon, primarily in chapter 7.

Layder (1994, p. 125) comments that structuration theory refers to a "wide range of topics and areas of interest", which researchers can draw from in parts or as a whole. For the purpose of this study, 'parts' of structuration theory were adopted,

representing the three finding chapters. A brief introduction to these 'parts' follows, although these concepts are further expanded in the methodological chapter (see chapter 3, pp. 81-88), and in the glossary list (see appendix 6).

For Giddens (1984, p. 9), *agency* refers not to the intentions people have in doing things but to their capability of doing those things in the first place (which is why agency implies power . . .). The term *agent* (Giddens, 1984) captures this idea that people (nurses) are 'agents of action'. Agency (Giddens, 1984, p. 375) is enabled and constrained by what we know, or *knowledgeability;* "Everything which actors know (believe) about the circumstances of their action and that of others . . .". This involves surveillance of self and others, referred to as *reflexivity;* a process that occurs at a conscious (*discursive*) and/or tacit (*practical*) level to expose the "habitual, taken-for-granted character of the vast bulk of the activities of day-to-day social life . . ." which Giddens (1984, p. 376) terms *routinisation* of practice. When nurses could discursively talk about what they did and why, the possibility for change was presented.

Particular emphasis, in this study, has been placed on Giddens' (1984) notion of the dialectic of control, a "... two-way character of the distributive aspect of power (power as control) (Giddens, 1984, p. 374), in which a person's exercise of autonomy and dependence is always in conflict (i.e. consensus and contradiction), enabling and constraining decision-making encounters. This means that even the subordinate (the dependent) can exert power over the powerful (the independent), for example, by managing, or manipulating, resources. Giddens refers to resources, and rules, as social structures that "... exists only as memory traces, [and forms] the organic basis of knowledgeability, and as instantiated in action" (Giddens, 1984, p. 377). Social structure - the rules and resources are produced and reproduced, establishing habitual, routinised practice yet always has the potential of being changed. Structure, therefore, is both the "medium and the outcome of conduct" (1984, p. 374), which Giddens calls the agency-structure duality. Duality occurs across time-space interactions known as contextuality; "The situated character of interaction in timespace, involving the setting of interaction, actors co-present and communication between them" (Giddens, 1984, p. 373). It is during time-space encounters that power relations arise and can manifest in different ways. The following passage from Giddens' book, *The Constitution of Society* (1984), captures these ideas further:

... we can express duality of structure in power relations in the following way. Resources (focused via signification and legitimation) are structured properties of social systems, drawn upon and reproduced by knowledgeable agents in the course of interaction. Power is not intrinsically connected to the achievement of sectional interests. In this conception the use of power characterizes not specific types of conduct but all action, and power is itself not a resource. Resources are media through which power is exercised, as a routine element of the instantiation of conduct in social reproduction. We should not conceive of the structures of domination built into social institutions as in some way grinding out 'docile bodies' who behave like the automata suggested by objectivist social science. Power within social systems which enjoy some continuity over time and space presumes regularized relations of autonomy and dependence between actors and collectivities in contexts of social interaction. But all forms of dependence offers some resources whereby those who are subordinate can influence the activities of their superiors. This is what I call the *dialectic of control* in social systems (Giddens, 1984, pp. 15-16).

Giddens understanding of the *dialectic of control* has been threaded throughout the three finding chapters that addressed:

- 1) contextuality the nurses' decision-making encounters across time-space;
- 2) *social structures* the rules and resources that the nurses drew from when making decisions; and
- 3) *knowledgeability* knowledge about contextuality and social structures that enabled and constrained the nurses' agency (capacity) when making decisions.

The nurses were understood to be knowledgeable agents in that they had the skills and *ability* to go on from day-to-day, yet, always had the *capability* of acting or doing 'otherwise'; thus, had the potential *capacity* to transform practice. It was with these definitions, presented by Giddens (1984), that ability, capability and capacity were understood so that the nurses' agency could be exercised.

Two other terms applied in this thesis that arise from the decision-making literature are satisficing and optimising (Simon, 1967). In this thesis, satisficing refers to nurses making choices based on minimal information, often because of limited knowledgeability, or what Simon terms *bounded rationality*, resulting in the potential

of decision bias and poor outcomes. Alternatively optimising incorporates looking for all possible options in order to make the 'best decision', although this too is theoretically 'bounded' since we cannot know everything. Giddens (1984) indirectly discusses this as the unintended and unacknowledged consequences of action.

Structure and outline of the thesis

The thesis is presented as eight chapters. Chapter two introduces the literature around the political nature of nurses' decision-making. It briefly describes prescriptive and descriptive decision-making theories that are closely linked to political aspects of individual and group decision-making within organisations. When reviewing the existing literature, one can become overawed by the breadth and depth of such theories and confused by the interchangeable terms to describe the same phenomena of decision-making (C. Thompson & D Dowding, 2002). Buckingham and Adams (2000a) suggest that there are many approaches a nurse researcher can take when studying decision-making that have evolved from these different perspectives and domains. Nonetheless, "it is their usefulness as a theory and how their findings inform decision-making in nursing practice that directs which approach is adopted" (Thomas, Wearing, & Bennett, 1991, p. 14). The political aspect of decision-making was adopted for this study to explore power and control within the decision process and, how the exercise of power manifested itself in the dialectical interplay between agency and structure (Giddens, 1984).

Chapters three and four address the methodology and methods of critical ethnography. Chapter three introduces the reader to aspects of critical theory and ethnography, and revisits structuration theory concepts in more detail. By understanding what nurses 'did' and what nurses 'said', practice could be defined, explored and challenged at either a theoretical or practical level, or both (O'Brien, 2000). A critical ethnographic approach enabled understanding to develop because of extensive observation and critical dialogue, exploring and challenging nursing practice. Carspecken's (1996) five-stage method of critical ethnography and Giddens' (1984) theory of structuration are then discussed in detail.

Giddens (1984) draws from ethnomethodology (Garfinkel, 1963) acknowledging people as being highly skilled (*knowledgeability*) about their environment and relationships across time-space (*contextuality*), drawing from rules and resources (*social structures*) available to them, necessary to make meaning of daily practice. For instance, the more knowledgeable a person seems to be about the context where she or he works, and about the rules and resources available, the more capacity they appear to have in exercising autonomy, and thus, control. For this reason, this is why these concepts have been employed as chapter headings (i.e. contextuality, social structures, knowledgeability).

In order to explore and understand routinisation of practice within the unit considerable time was spent 'in the field' as a participant observer and is a key element in ethnographic research. This was essential to explore and understand the power arrangements during decision-making encounters in the renal unit. The chapter ends addressing ethical issues such as participant selection, rigour of the study, and the role of the researcher and researched within a critical perspective.

Each of the next three chapters, i.e. five, six and seven, are a combination of the study's findings and relevant discussion. Keeping in line with Giddens' (1984) notion of the *double hermeneutic loop*, a 'critical' feature in structuration theory, I found it difficult to disconnect the findings chapters from the analysis. The double hermeneutic loop is a process of translation and interpretation achieved through participant-research dialogue (Giddens, 1984) producing (and reproducing) sociological knowledge that enters into, becomes part of, and helps to transform the very world that it seeks to explain and analyse (Giddens, 1996). Giddens (1984, p. 284) proposes that initial social practices the researcher observes are "second order perceptions that can become first order through dialogue with agents who are engaged within social life itself". I felt that by separating the nurses' voices from my (translation/findings), first order perceptions gained via dialogue own (interpretation/analysis/discussion) might have been lost, and therefore, analysis and discussion are presented concurrently.

Chapter five presents the findings in terms of contextuality (Giddens, 1984). Contextuality is a broad concept that addresses nurses' decision-making in respect to time-space, in particular, life-span time (novice-expert) and daily routines. Nursing encounters and decision-making are then explored, along with a discussion of how power differentials alternated during social interactions. Chapter six investigates decision-making in terms of social structures, which Giddens (1984) identifies as rules and resources. The data is presented in terms of how social structures have the potential of controlling the nurses' decision-making processes. Finally, chapter seven addresses decision-making from the concept of knowledgeability. Knowledgeability assumes that the nurses are very knowledgeable about the context where decisions are made, in particular, about day-to-day activities. Through the process of reflexivity, nurses had the potential of changing decision-making practices, if they so wished, their capacity, or agency, alternating between autonomy and dependence. Consequently, the dialectic of control was threaded throughout each of the chapters as part of the analytical process. Even though the three chapters tend to separate agency-structure (for analytical reasons), the agency-structure duality is always at play. Chapter 7 attempts to make this relationship more clear. The nurses go about their day drawing from structures (rules and resources) that influences or 'controls' agency. At the same time, their very agency reproduces these structures. This, according to Giddens (1984) is the recursive nature of life.

The final chapter, chapter eight, provides a summary and integration of the discussion findings, including researcher reflections, limitations of the study, and trustworthiness issues. Implications and recommendations for practice, research and education conclude the chapter.

CHAPTER TWO: THE DECISION-MAKING LITERATURE

Decision-making means power and where power resides in the clinical situation is worthy of study in its own right (Thomas, Wearing & Bennett, 1991, p. 2).

Introduction

Decision-making is an important part of nursing practice, although it cannot be assumed that all nurses participate in this activity equally. Many factors can influence this involvement. In order to understand who, or what, may control how decisions are made, a more comprehensive understanding of nurses' participation as decision makers is required, particularly when addressing 'autonomy', 'accountability', and 'responsibility' in terms of the decision process and outcomes.

Shackle (1961, p. 2) considers a decision as an incision in time: "A cut between past and future, an introduction of an essentially new strand into the emerging pattern of history". Carroll and Johnson (1990) refer to a decision as a process or journey where people make choices among alternatives. The 'choice' selected, represents Shackle's (1961) idea of incision, dividing the journey's past from the journey's future, drawing from past experience to assist in creating the future. The journey infers a passage of time that is dynamic and evolving as options are generated and regenerated across time-space dimensions. This process assumes the person, or persons, have the capacity or 'power' to make a choice. Therefore, even when a choice is not made, this is still considered a decision.

Decisions are not made in social isolation but rather are embedded in real world events and circumstances that can influence the decision maker in how a decision is made. The decision maker constitutes *his/her*-story through the choices they make, which, in turn introduces a new strand of action as part of "the emerging pattern of history" (Shackle, 1961, p. 2). Nursing is part of this historical and political journey that can result from individual and/or group interests that influence decision outcomes. Economical, social, cultural and behavioural attributes add to the intricacy of decision-*his/her*-story-making. Giddens (1984) addresses these attributes in terms

of social and structural circumstances that shape and reshape [nursing] action. It is from these different perspectives, which can intentionally or unintentionally control nurses' actions, that decision-making has been addressed.

This chapter explores decision-making within the context of nursing, with particular emphasis on enabling and constraining features of political action. 'Political' is used broadly here, concerned with how power is used in the decision process, by whom and serve what purpose. Decision-making, when explored via a political perspective, addresses control, power and domination that can be manifested along a conflictconsensus continuum, at both an individual and organisational level. Consensus, or agreement, is necessary to maintain the status quo, or the 'flow of conduct' (Giddens, 1984), while conflict, or disagreement, facilitates new ideas, thoughts and reasons, therefore can provide potential opportunities and change. How conflict is managed and controlled highlights how people exercise power, what their resources of power are and, how they have the capacity to influence decision-making processes and outcomes. In other words, who gets what, when and how (Hodgson, 2001; Lesswell, 1950). This chapter provides a brief, but essential, introduction to theoretical concepts of nurses' decision-making, highlighting the crevices that require further exploration. The political nature of the health care organisation is discussed highlighting how it can enable and constrain nurses' practice and development when making decisions.

The evolution of nurses' decision-making research

There is an abundance of nursing literature related to decision-making (Benner, Stannard, & Hooper, 1996; Gerdtz & Bucknall, 2001; Grundstein-Amado, 1993; Hammond, Kelly, Schneider, & Vancini, 1967; Offredy, 1998; Thompson et al., 2001). Transparency in how decisions are made, implemented and evaluated has been a driving force behind much of the research aimed at assisting nurses in 'improving' decisions in order to benefit clinical outcomes.

Decision-making has been of interest to many disciplines including behavioural, economic and political science (Jabes, 1982). Choice theory (choosing an action from alternatives) was established primarily in economics and mathematics, whilst psychology focused on cognitive and behavioural aspects of decision-making such as problem solving and judgment (Simon et al., 1986). Nursing research and practice draws from these different decision-making models, even though "there is a tendency for separate disciplines to view their own decision-making processes as unique" (Buckingham & Adams, 2000a, p. 981). This makes the task of applying the range of decision-making theories to nursing practice difficult because of the diversity in terminology and theoretical concepts (Buckingham & Adams, 2000b). This 'unique view' within nursing itself further complicates the scene, as there are many collective meanings that refer to decision-making, or elements of it. These include clinical decision-making, clinical reasoning, clinical judgment, diagnostic reasoning, and clinical inference (Szaflarski, 2000; C. Thompson & D Dowding, 2002).

The quality of decision-making has been identified as an essential and integral aspect of clinical practice and is intimately linked with quality of patient care (Oliver & Butler, 2004; Orme & Maggs, 1993; Thomas, Wearing, & Bennett, 1991). Research into nurses' decision-making became established in the 1960s, combining studies focused on analytical decision-making and inferences made by nurses (Hammond, 1964; K.. Hammond, K. Kelly, R. Schneider, & M. Vancini, 1966; K. Hammond, K. Kelly, R. Schneider, & M. Vancini, 1966; Hammond, Kelly, Schneider et al., 1967; Kelly, 1964). Even though the studies were described as "methodically weak" and the findings "inconclusive", they promoted further research on the decision process within nursing (Corcoran-Perry, Narayan, & Lewis, 1999, p. 79).

Theoretical approaches to decision-making

Several writers have commented on the difficulties of studying decision-making, arguing that although decision-making theories have been presented as stages, in real life, decision-making is almost a simultaneous act (Carroll & Johnson, 1990; Fonteyn & Ritter, 2000; Manias & Street, 2001a). The theories can be categorised as either 'descriptive'- how individuals *actually* make decisions, or 'prescriptive'- how decisions *ought* to be made in order to improve outcomes (Anderson, 1995; C Thompson & D Dowding, 2002).

Prescriptive and normative decision-making models

Clinical guidelines (i.e. The CARI Guidelines - refer to glossary - appendix 6), algorithms (i.e. rHuEPO Hypo-responsiveness Flowchart, Advanced Cardiac Life Support [ACLS]), and computer decision packages are some prescriptive tools available to nurses when making decisions. Webber-Jones (1999, p. 30) comments on how these have been criticised as "cookbook medicine", yet adds that their popularity increases, particularly in areas where there are few doctors. As a result, computerized decision support technology is on the increase (O' Cathain, Sampson, Munro, Thomas, & Nicholl, 2004; Reece Jones & Maguire, 2000). The combination of nurses' clinical judgment and software recommendations presents decision-making as a dual process with the aim of reaching consensus (O' Cathain, Sampson, Munro et al., 2004).

The 'normative model' is another style of decision-making discussed by Thompson and Dowding (2002b) in their book, Clinical decision-making and judgement for nurses. Normative decision-making is similar to prescriptive theory, although does not look at how a decision *ought* to be made, but rather concentrates on how outcomes *should* be judged. Both prescriptive and normative approaches generally adopt a rationalist, analytical approach to decision-making, where numerical or probability values are assigned to potential outcomes (Greenwood, 1998). Rationalist decision models include decision theory, decision analysis, and expected utility theory, all that provide structural frameworks to assist the decision maker in selecting the 'best' choices. Decision analysis tries to improve decision outcomes when uncertainty is present (Greenwood, 1998). The decision is broken down into smaller parts and may be presented as a decision tree (Dowie, 1996; Knight, 1996), each branch allocated a probability value. This approach is considered appropriate in assisting nurses' decision-making when time is available to collect the necessary information and calculate probability outcomes in order to reduce error and potential bias (Lanza & Bantly, 1991; Letourneau & Jensen, 1998).

Offredy (1998) explains that there are limitations with any decision model. For example, incorrect probabilities may be assigned to a decision tree, which may itself be structured incorrectly and misinformed. Melberg (1999) questions how much

information needs to be collected in order to allocate decision probabilities in the first place to inform the decision maker. Earlier studies have also challenged rationalistic assumptions that people actually apply logic and are aware of all the possible alternatives and outcomes (Melberg, 1999; Simon, 1967). Kahneman and Tversky (1972), for instance, argued that people are not statistical thinkers but rather work on the side of 'conservatism', unwilling to change their initial decision in light of new information. Simon (1967) previously termed this as 'satisficing', rather than 'optimising' decision options, proposing that people tend to make choices based on minimal information without searching for all possible options. This works by drawing from previous experience, judged against societal, including work, expectations so that the choice made is 'good enough' since *all* cannot be known (Simon, 1960). Decision-making based on 'rules', 'mutual knowledge' and 'acceptable practice' reflects the context of the 'real world' of human interaction that can be unpredictable and limited by knowledge (Giddens, 1984), which in turn, can increase uncertainty and risk (Orme & Maggs, 1993).

This approach to decision-making mirrors how decisions are '*actually*' made (descriptive decision-making), so questions the applicability of the scientific rational approach associated with prescriptive theory. The '*ought*' of decision-making fails to acknowledge the context of nursing that is embedded within social interaction and changeability. Girot (2000, p. 288) comments that

professional judgment in the decision-making process cannot be prescribed, as practitioners cope with the uncertainties and challenges of everyday clinical practice in a very complex and individual way.

In view of this, descriptive theory has been considered a more appropriate approach when addressing nurses' decision-making.

Descriptive decision-making models

Descriptive theory attempts to reveal nurses' every day practice, as it describes how people *actually* make decisions and solve problems and has been the most prominent perspective applied in nursing research (Harbison, 2001). Greenwood (1998) indicates that it is a phenomenological approach to reasoning that is predominantly utilised in descriptive theories based on personal experiences and hunches, adopting

an intuitive style. Two leading descriptive decision models that have been demonstrated in nursing research studies are 'information processing' (Baumann & Bourbonnais, 1982; Fowler, 1997; Tanner, Padrick, Westfall, & Putzier, 1987) and 'skills acquisition' (Benner, 1984; Benner, Stannard, & Hooper, 1996).

Information processing

The seminal work of Newell and Simon (1972), evolving from earlier psychological research, provides the basis for information processing theory, which describes the mental activities of reasoning in how a person receives, stores and processes information. For nurses, this clinical reasoning provides the basis for identifying options and evaluating them accordingly so that the best-option or decision is made. For example, it assumes that a nurse processes the information collected, decides what is relevant or irrelevant data, appraises the significance of the data and then plans appropriate treatment that is considered the 'best-option'. The nursing process is an example of an information processing tool that acknowledges "nurses as thinkers as well as doers" in clinical practice (Corcoran-Perry, Narayan, & Lewis, 1999, p. 79). Pursuing the original belief that nurses made rational linear decisions, as mirrored in the steps of the nursing process, further studies revealed that this was not always the case, rather it followed a cyclic pattern that combined both analytical and intuitive reasoning (Corcoran-Perry, Narayan, & Lewis, 1999). Knowledge is necessary to "inform the reasoning process", which in turn, informs the decision maker (Higgs & Titchen, 2000, p. 23). However, nurses' knowledge has been contested within the literature in relation to what knowledge is and what role it plays in the decision process depending on its source and legitimacy (Johnson & Webber, 2001).

Nursing knowledge that informs decisions

Aristotle distinguished between theoretical (theory), practical (action) and craft or skill (technological) knowledge (Hager, 2000), all of which play important roles within nursing knowledge and development. In addition, Jevons (1976) proposes that knowledge is 'bilateral' and combines Karl Popper's concepts of realism with Thomas Kuhn's relativisim principles. This combination corresponds to objective and subjective perspectives of knowing. Realism is based on how nature actually

presents itself as real, providing foundations of scientific knowledge, although Feyerabend (1970) claims that even this natural understanding of the world is "our own creation" (cited in Jevons, 1976, p. 29). A relativist approach to knowledge is assumed to be socially constructed in response to time, place and circumstances. These competing, yet complementary perspectives, have enabled the development of nurses' knowledge, contributing to nursing theory, practice, and research (Schultz & Meleis, 1988). O'Connell (2000, p. 73) argues that "nursing's ways of knowing and knowledge base are complex, abstract and sometimes difficult to define . . . influenced by many factors". Despite these difficulties, Robinson (1992) claims that it is the relationship between nursing knowledge and social interaction in day-to-day practice that is important. This implies that knowledge is situated within the context of social interaction and structures from which nursing draws from to make sense of practice. Without constantly reflecting in and on action (Polanyi, 1958), and linking what nurses 'know' and 'do' to broader social aspects, there is always the risk of being misinformed resulting in "faulty judgment and reasoning" (Mullally, 2002, p. xi).

Bounded rationality

As well as theoretical debates regarding how nursing has come to be informed, people are thought to not have the ability to process information and solve problems objectively and rationally, further constraining knowledge. Simon (1960; 1967) terms this 'human bounded rationality'. The complexity of the world, our limited analytical abilities, the different interests posed by individual and group preferences, beliefs and values, and how people make choices add to the list of imposed limitations of 'human bounded rationality' within the decision process (Simon, Dantzig, Hogarth et al., 1986). These constraints on knowledge are not static but rather dependent upon the context where decision-making occurs (Pugh & Hickson, 1989). One approach in managing bounded rationality, offered by Lindblom (1959; 1990), is *incremental decision-making*, where large complex decisions are broken down into smaller sequences, through a process of 'muddling through'. Each sequence involves making small adjustments or decisions, where each person is assigned a part of the total process drawing from their specialised knowledge (Lindblom, 1959). Palmer and Short (2000, p. 29) propose that this method is often

desirable in large organisations since it causes "minimal disruption to political bureaucratic processes". Change occurs, but is fragmented hiding its progression, while minimising disruption. Institutional rules of thumb or *heuristics* (Buckingham & Adams, 2000b; Cioffi, 1997) are generated through experience, providing shortcuts or 'tricks of the trade' that are repeatedly applied, drawn from implicit or tacit knowledge (Polanyi, 1958). Barnard (1995, p. 79) describes tacit knowledge as the "experience acquired without consciousness of the experience". These unwritten, and often unspoken, rules are drawn from experience as acquired skills and have become important strategies in expert decision-making and intuitive judgment (Polanyi, 1958). However, information derived from such rules may be ill founded and constrain optimisation of better outcomes (Thompson, 2003).

Skills acquisition and the role of intuition

Novicevic, Hench and Wren (2002, p. 998) write that

In Barnard's view, intuition is the invisible glue that bonds the various forms of knowledge together (i.e. thus integrating thought and action) in the knowledge discovery process (i.e. thus facilitating innovation).

Nursing research since the 1980s has studied the nature of intuition and its application to clinical practice and decision-making (Benner & Tanner, 1987; Hams, 2000; Kosowski & Roberts, 2003; Lamond & Thompson, 2000; Rew, 2000). This relationship between intuition and clinical practice is introduced in the seminal works of Benner (1984) that introduces five skill-stages a nurse passes through; '*From novice to expert*'. Intuitive knowledge, or "understanding without rationale" (Benner & Tanner, 1987, p. 23), is gained from tacit experiences or 'knowing how' rather than scientific theoretical knowledge of 'knowing that' as first described by Ryle (1963). "Know-how", according to Hager (2000, p. 281) is a "type of knowing what to do in practice that is evident from people's various intentional actions", usually learned on the job. This type of knowing does not always need explaining or justifying, demonstrating an intuitive knowledge mode.

Metaphorically intuition has been described as 'gut feelings', 'I just know', 'it felt right', 'a sixth sense', 'inspiration', 'a stroke of genius', and 'common sense', (Brokensha, 2002; Hams, 2000; Kosowski & Roberts, 2003; Ruth-Sahd, 2003).

Brokensha (2002, p. 14) groups intuition into four main areas: mystical, when no rational explanation can be provided; spurious or acts of illogical reasoning yet able to rationalise errors of judgement; inferential where visual and verbal cues result into sensory overload at a subliminal level; and finally; holism or unconscious modelling of the world, "influenced by gaps, redundancies and hidden connections in the data". Regardless of these types, Barnard (1995) emphasises the central role intuition plays in decision-making behaviour, even if the decision maker rationalises their decision after-the-fact. Simon (1987) argues that Barnard was too optimistic in his definition and use of intuition, which himself once thought was a 'mystery', only to later suggest intuition involved pattern recognition at a subconscious level. Therefore, intuition is not without rationale, but rather cannot be discursively expressed since it is part of a person's subconscious (Agan, 1987; Giddens, 1984). In other words, everyday actions become routine, performed at a semi-automatic or practical level that may not always be described (Giddens, 1984).

Intuition has been considered in terms of feminine qualities (Truman, 2002) and cultural determination (Norenzayan, Smith, Kim, & Nisbett, 2002). Truman (2002), for instance, urges a more feminine approach to managerial decision-making within health care, advocating creativity and intuition, skills that have traditionally been exploited by women. On the other hand, Norenzayan and colleagues (2002) propose that culture, rather than gender, favours one reasoning mode over another; the West advocating analytical reasoning, while the *East* fosters intuitive skills. Either way both approaches have the potential for error of judgment in decision-making. Despite feminine or cultural traits, the debate as to what intuition is, and how it may be applied, has caused nurses to be covert in their use of it (King & Appleton, 1997; King & Clark, 2002; Kosowski & Roberts, 2003), particularly when a rationale cannot be given to support nurses' reasoning. Rodgers (1991) warns that a lack of justification and explanation can have serious consequences for the development of nursing. Moreover, Beyea and Nicoll (2000, p. 410) acknowledge that expertise and intuition are not infallible since "even experts make mistakes". Therefore, intuition, which informs practice, requires public recognition and appraisal. One area where intuition is well documented is in relation to novice-expert decision-making.

Novice-expert decision-making

Benner, Stannard and Hooper (1996) advocate that prior experience and familiarity of a situation makes decision-making easier for nurses, since time spent in the clinical setting allows information to be stored that are 'indexed' in the memory, and later retrieved in response to recognition of patient cues. Kahneman and Tversky (1972) initially termed this, 'representativeness', which, according to Offredy (1998), can be both analytical, where data are lumped together, or intuitive, where the whole situation is grasped. Representativeness is commonly referred to in the nursing literature as *pattern matching;* the nurse matching a current event intuitively with thousands of stored past cases to get a *feel* of the situation (Benner, 1984; Offredy, 1998). This is supported in numerous studies that show how experienced nurses, with their increased knowledge and skills, accumulate past cases that enable pattern matching (Offredy, 1998; Polge, 1995). Furthermore, knowing and acting in a familiar context with predictable routine tasks, team members and expected outcomes, facilitates the expert to make quick decisions with some predictability and efficiency (Rasmussen, 1993).

Novices, in contrast, tend to be taught, and apply, slower decision-making techniques of how they *ought* to make decisions representing normative/prescriptive models (Rasmussen, 1993). King and Appleton (1997) believe that novices possess intuition, but have not quite conquered its full potential in the clinical setting. Once in the work domain, away from learning institutions, the novice can observe and experience intuitive decision-making alongside their mentors. Mastering intuitive skills over time gives an appearance of efficient and automatic decision-making. The context may also reinforce the novice's perception that intuition is a powerful knowledge source that informs decision-making. Learned routines facilitate this perception and provide security for all nurses, regardless of their experience, reducing anxiety and stress when decisions have to be made (Dunn, 1994; Greenwood, 1993; Martin, 1998). Nonetheless, expert nurses still have knowledge to draw on should routine decisions be inappropriate at any given time. In comparison, novices tend to follow rules of thumb modeled by their senior nurses (Cioffi, 1997; Greenwood, Sullivan, Spence, & McDonald, 2000) reinforcing prescriptive frameworks. Rasmussen (1993) questions whether intuitive expertise is more about learning routines,

statistical rules and pattern recognition than some internal mystical phenomenon. This becomes evident when experts face unfamiliarity, making predictable rules less clear so that the expert can no longer respond automatically to the problem. In this case, the nurse tends to revert back to analytical processes that are slower and often deliberate, simulating novice decision-making processes (Benner & Tanner, 1987). During these moments, decision-making may appear to be less efficient, but not necessarily less effective, in terms of outcomes. This is because pattern recognition, or familiarity, can misinform the decision maker, leading to decision bias, especially when choices are made with minimal reflection (Paul & Heaslip, 1995; Thompson, 2003). This, in turn, can result in satisficing decision behaviour (Simon, 1960; 1967).

Intuition, analytical or both?

Statistical rules, pattern matching and predictability all form part of daily routines (Giddens, 1984). Renal nurses are no exception; their practice is reliant on known routines that provide a sense of safety as they go about their day. At the same time, familiarity, rules, and routines serve the organisation's goals of meeting patient demand within limited resources. Routine practice reduces the number of conscious decisions nurses have to make, providing prescriptive frameworks that are assumed to save time. However, King and Clark (2002) note that both intuitive and analytical elements of nurses' decision-making should be recognised since the context, level of expertise and time availability, are only a few variables that require flexibility in reasoning approaches. This decision-making flexibility is represented as the 'Cognitive Continuum Model' (Hamm, 1988; Hammond, 1978).

The Cognitive Continuum Model places analytic and intuitive decision-making methods at the ends of a continuum, postulating that it is somewhere in-between these two points that nurses' decision-making usually falls (Harbison, 2001; Thompson, 1999). This corresponds with Rasmussen's (1993) explanation about *statistical intuition*, which also combines analytical and intuitive abilities. One model presented by Rasmussen (1993) that demonstrates this decision model is *queuing theory*, whereby a person conducts many decision tasks based on time and priority. When time is available and the decision urgency low, a more analytical approach tends to be adopted in nursing, unlike moments of urgency, where time is

constrained, resulting in automatic, intuitive reactions (Gerdtz & Bucknall, 2001; Harbison, 2001).

Queuing theory

According to queuing theory, multiple information is monitored and prioritised for its urgency, drawing from three levels of cognition: skill-based control; rule-based behaviour and knowledge-base (Rasmussen, 1983, 1993). Skill-based control reflects an intuitive process where the person interacts with the environment subconsciously generating movement patterns assimilating mastery and harmony that require little energy or pre-thought; several tasks often emerging as one. Sequenced subroutines or procedures form rule-based behaviour as 'know-how' rules that are learned via role modeling and communication. Options are provided from which a choice has to be made, naturally selecting the easiest option (conservatism), therefore, draws on minimal cues to assist decision choices (satisficing). Routines are necessary so that the person learns how to act and survive in the context. When rules are not known, a higher cognitive level of knowledge-base is utilised as declarative or theoretical knowledge (know-that) that is implemented through trial and error and finally transformed into procedural knowledge (Rasmussen, 1993, p. 166-167). For example, a novice nurse responding to several alarms on the haemodialysis machines has limited knowledge, rules or skills to prioritise or queue the alarms' relevance. Over time, theoretical knowledge is assumingly acquired and applied as procedural knowledge, while rules and skills are learned as part of routine practice. As a result, the person becomes advanced in practice, integrating the three cognitive levels so that the alarms are automatically prioritised, or queued, in terms of urgency.

These three cognitive levels (Rasmussen, 1983; 1993) are attuned to Giddens (1984, p.7) three conscious levels of knowledgeability: the unconscious, practical and discursive, whereby rules, skills and knowledge are collectively embedded at each conscious level, drawn from knowingly or unknowingly as people go about their day. Even though action may be unknown at an automatic, subconscious level, Aroskar (1987, p. 268) recommends that all decisions should be reflective and deliberate. Giddens (1984) terms this 'reflexive monitoring' and is an essential part of the three conscious levels of knowledgeability. One reason for reflexive monitoring, proposed

by Thompson (2002, p. 33), is that individuals are generally overconfident when assessing the correctness of their knowledge, which "often occurs in situations when we have least knowledge".

Not unlike rationalistic decision-making models, phenomenological models also have limitations, particularly in terms of decision bias (Offredy, 1998). Pattern matching can be matched to the wrong cues formulating an incorrect diagnosis. Similarly, information processing may focus on insignificant cues at the cost of more important ones, or the cues themselves may be interpreted incorrectly. Finally, intuition, the 'gut feelings' or hunches, may be related to something else, including a symptom of faulty memory and interpretation. This decision-making behaviour, once again, represents Simon's (1967) notion of satisficing. When people make choices based on the information presented, without further exploration in order to maximise all possible options, decision bias and poor outcomes can be a consequence, although such consequences can remain unintended or unacknowledged because of bounded rationality.

Personal performance in decision-making: nature versus nurture?

Some people are better at making decisions than others. Tranel (1997) believes this may be genetically indicated since scientists have identified the frontal lobe of the brain situated above the eyes (ventromedial prefrontal cortex), as the decision-making centre. This may assist memory recall and pattern matching, hypothesising that emotions and decision-making are somehow linked, although much remains unclear (Tranel, 1997). With this 'new' insight it may only be a matter of time before decision-making becomes medicalised; the decision models replaced by scientific, medical technology to enhance one's personal performance. A less physiological approach to personal performance is introduced by Brookes and Thomas (1997) who found in their simulated study that no two nurses viewed a situation the same, suggesting an intrapersonal perspective to decision-making where 'self' is a central component. In other words, 'self' guides the decision process. How the self interacts with the 'context' and 'others' is part of the decision journey, since professional values and norms become components of the political self in the decision-making area. Brookes and Thomas (1997) make an important point here,

and is an area of decision-making that would benefit from further research. Beliefs, emotions and attitudes can alter how a nurse collects data and makes inferences that inform prejudgments. 'Prejudging' (Paul & Heaslip, 1995) can create established 'patterns' or routines of behaviour that predominate how decisions are made, yet this may not always be acknowledged (Giddens, 1984). Emotions, for instance, are part of who we are and what we know that can presuppose the decision options available that can enable or constrain both the decision process and outcomes.

Emotions and decision-making

Arnaud and LeBon (2000) and Sieler (2000) comment on how emotions have often been overlooked in the decision-making literature. Whether decisions to be made are work related, or personal choices, emotions come into play. Nursing is no exception. Emotions such as guilt and regret, possibly resulting from faulty judgment and decision errors (Mullally, 2002), can have detrimental consequences for both patient outcomes and the decision maker. Raiffa suggests that fault often lies "not with the decision-making process but in the mind of the decision maker" (cited in Anderson, 2002, para. 3), resulting in sabotage of decisions. Anderson (2002) terms sabotage as 'decision-making traps' that include routine application of heuristics, anchouring (Kahneman & Tversky, 1972) and over-familiarity; concepts that have previously been mentioned. One reason why traps are maintained is because of a sense of safety when making decisions and following known and established ways. This, in turn, creates trust, security and satisfaction when making decisions (Giddens, 1984). For example, Giddens (1991a) depicts anxiety as being essentially generated by the emotion fear that is created within a person's internalised subconscious thoughts rather than something caused externally. Knowing daily routines and rituals can be understood as a "coping mechanism" to deal with emotions and provide a sense of safety and certainty (Giddens, 1991, p. 46). This, however, may favour satisficing decision behaviour rather than a person optimising all possible options because this may involve risk and unfamiliarity. Despite this, decision-making errors do occur which tend to receive more critical attention (Swales, ud), when compared to supposedly 'good' outcomes. In light of this, Anderson (2002) recommends that the decision maker should not become emotionally attached to a decision to be made, but rather review how the decision is being made. For nurses, this can be a time

consuming exercise as they step out of routines and familiarity that provide structures assumed to save time within demanding work constraints. However, emotional attachment can lead to satisficing decision-making behaviour (Simon, 1967), possibly serving nursing, before patient needs.

Sieler (2000) writes that emotions, including moods, are part of everyday life regardless of where we are. Moods, according to Sieler (2000) are long-term effects of emotions such as anxiety or resentment, unlike emotions, that are responses to specific events as they arise. A person's mood, therefore, can control how a person has an emotional response when making decisions. Sieler (2000, para. 4) adds that "moods and emotions are both predispositions for action". As a result, the way people communicate and interact in the workplace will affect how decisions are made, who makes them and how they are then implemented and evaluated. This may explain why people, who are assumed to be logical thinkers within the prescriptive decision-making model, do not always transfer these qualities in practice and appear to make illogical decisions. This may also provide a reason why the nursing decision-making literature tends to focus on how decisions are *actually* made at a cognitive rather than social level, given that emotions, moods and actions are intricately linked and difficult to study, not unlike decision-making per se (Fonteyn & Ritter, 2000).

Fear, caused by the unknown, making mistakes or humiliation, for example, is a powerful emotion that can motivate decision-making behaviour in both positive and negative ways. Consequently if the unknown or uncertainty is to be avoided, stepping outside one's comfort zone (Gellerman, 1993) is not always possible or encouraged. Sieler (2000) proposes an emotional learning approach in workplace training that challenges analytical processes by acknowledging the role of emotions and self. This is pertinent when trying to understanding workplace decision-making cultures. Emotional learning focuses on the 'location of control' that is not directed externally from the person but focused within (Sieler, 2000). Rotter and colleagues wrote about 'locus of control', which mirrors Sieler's (2000) 'location of control', in that if a person thinks they can control external pressures, control becomes internal to them (Rotter, Chance & Phares 1972 cited in Maylor, 2001, p. 168). However, this

location, or locus, of control requires time and energy, further adding to the nurses' workload.

Ethical concerns for nurses making, or not making, decisions

The process of *nursing work* (Lawler, 1997) is increasingly demanding as nursing roles expand, workloads increase, and the challenges of technology require more specialised skills. However, such *work* cannot be ignored if the nursing profession is to be legally and ethically accountable for the decisions they make. Vaux (1974) presents ethical insight as a three-directional decision-making model looking at 'what has been' (retrospective), 'what is now' (introspective) and 'what it may be' (prospective) in order to generate informed options so that the best possible outcome can be chosen. Selecting the most 'apparent' option (satisficing) without assessing the situation comprehensively and critically (optimising) promotes decision-making that serves tradition, routines and rituals of nursing rather than best-practice principles (Walsh & Ford, 1989).

Miller (1992) acknowledges critical thinking as part of routine nursing that is integral to decision-making. Despite this, increased knowledge and critical reflection do not necessarily imply increased participation for nurses in the 'decision process' or improved patient outcomes (Gordon, 1980; Hardcastle, 2002; Holzemier & McLaughlin, 1988). Simon (1967) suggests that decision-making is part of the decision process that includes decision implementation and evaluation. Nursing research has tended to focus on decision-making that describes what nurses do (descriptive) rather than evaluate decision outcomes. One reason for this may be because the relationship between nurses' clinical decision-making and its impact on patient outcomes is usually inferred (Manias & Street, 2001a) making it a difficult aspect to study (Fonteyn & Ritter, 2000). Outcomes are invariably complex, influenced not only by nursing practice but treatment provided by other health care professionals (van Niekerk & Martin, 2002), the patient (Jenks, 1993; Radwin, 1995), the context, and support systems (Bucknall, 2000; Chase, 1995).

Allmark (cited in Harbison, 2001, p. 127) defines nursing as a "moral enterprise" and argues that although nurses have the capacity to undertake activities, such as

decision-making, it should not be assumed that this always contributes to quality care. Cioffi and Markham (1997, p. 265) share these same sentiments adding that "competency in clinical decision-making is the very least a patient should expect from a nurse legally and ethically". Both clinical and non-clinical decisions contribute to the arena for ethical decision-making. Ethical guidelines provide direction for the nursing profession, while social norms provide expectations that are enforced both within the profession and from society in general (Holmes & Meehan, 1998). Eisenberg's (1979) study of doctor-patient relationship illustrated how extraneous variables such as personality, gender, age and social class can affect clinical judgment. This was further supported by Clark, Potter and McKinlay (1991) who confirmed how social characteristics can bias health professionals' prescribing practices, including decision-making.

These findings can be transferred to the context of nursing since nurses interact with other health professionals, clients and families. However, whether nurses actually have the capacity to prescribe practice within a multidisciplinary setting must not be confused with a nurse's ability to make decisions. Ability in this sense does not equate with one's power or capacity to make and implement decisions, rather this capacity can be constrained by external factors beyond individual or group control. These concerns have not gone unnoticed. For example, nurse scholars have recognised the lack of research development beyond the rationalistic and phenomenological decision-making models (Berkwits, 1998; Padgett, 2000). Increased knowledge of how decisions are *actually* made or how they *ought* to be made does not guarantee empowerment in the decision-making arena (Padgett, 2000). Therefore, the social context, where decisions are made, is as important as studying decision-making cognitive models per se. When issues such as power, authority, professionalism, conflict and personalities become part of collaborative decision-making, prescriptive and descriptive patterns of behaviour can become obsolete. Furthermore, decision-making is a natural social activity happening within any context or organisation; making rational and intuitive decision theory only part of a larger labyrinth that embraces political and social interaction.

The context of decision-making

The importance of the context in decision-making has been identified by Crow, Chase and Lamond (1995) and Bonner (2001), which they refer to as 'specificdomain knowledge'. The context *where* decisions take place and *with whom* are important aspects, so that variables are recognised and made relevant to nursing research findings. Decision-making research that has been conducted in the natural setting at a descriptive level may only provide a partial picture and has been a major criticism to Benner's (1984) earlier work. Wells and Banaszak-Holl (2000, p. 639) argue that economic decision theories have dominated health care strategy within the United States of America at the expense of sociological frameworks that can address: how decision-makers' preferences are determined; who the decision-makers are; and how decision-makers' plans are translated into organisational action. For example, an international study that compared public health nurses' decision-making showed that decision-making was influenced by public health policy rather than the patients' individual needs or the nature of the nursing task (Lauri et al., 2001). An earlier study, conducted by Wells (1995), explored discharge decision-making in relation to socio-political and economical context. The findings highlighted how these elements influenced the decision process, rather than patient clinical profiles, suggesting that social structures cannot be separated from social action because both may constrain practice.

Bonner's (2001) Australian study noted how expertise recognition was an important element in gaining and maintaining the capacity to make decisions. This infers that the context where a person is 'positioned' (Giddens, 1984) as a decision maker is as important as one's knowledge and ability to make decisions in the first place. Other controlling aspects that position a person include resource availability, such as timespace and nurse-skill mix and; accepted practice rules and norms that direct decisionmaking practices (Giddens, 1984). For example, a dominant person, or group, can deliberately control the amount of time available for decision-making forcing a quick, premature decision to be made with little discussion. Alternatively, when time is available, group processes can coerce how decisions are agreed to, giving a perception of consensus that reinforces the confidence that the decision followed democratic principles, agreed by all (Browne, 1993). What this indicates is that nurses should reflect on potential factors in their daily practice that may influence the decision process and question if they are actually making 'autonomous' decisions. Acknowledging the extent nurses contribute in the decision process and the quality of input in terms of patient outcomes is difficult to identify, since many variables are involved such as power, beliefs, norms and knowledge. More so, it is important that nurses recognise 'self' (Brookes & Thomas, 1997) in the decision journey and how they perceive themselves as part of collaborative decision-making. Jenks' (1997) research, for example, highlights how nurses' perception of successful decision-making outcomes can be highly dependent upon the quality of interpersonal and collaborative relationships with patients, peer, nursing staff, and physicians. When social interaction is part of the decision process, real world politics frequently take precedence over normal decision-making processes (Hofling, Brotzman, Dalrymple, Graves, & Pierce, 1966). Belcher (2000, p. 226) defines politics as "a process in solving conflict between rival interests and the allocation of resources", emphasising the role of power. Therefore, the combination of 'world' and 'self 'politics in decision-making requires an essential link between the context, social interaction and broader issues, in particular, organisational decision-making where nurses' decision-making takes place. The links between the world and self may provide a combined approach that informs the decision maker in an already complex position.

Australian decision-making studies

Several decision-making studies conducted within Australia have addressed these wider issues, some of which have already been referred to in this chapter (Considine, Ung, & Thomas, 2000; Gerdtz & Bucknall, 1999; 2001; Greenwood, Sullivan, Spence et al., 2000; Manias & Street, 2001a, 2001b; Taylor, 2000). A study presented by Beckingham (1992) at the Australian Nurses' Association conference addressed reasons why nurses resigned (ex-nurses whose registration had lapsed; n = 116) or thought about resigning (nurses' currently registered; n = 329). Fifteen percent of the ex-nurses identified 'being powerless in decision-making' as the reason why they were not currently working. This figure was higher (42 %) for nurses currently working as a reason to consider resigning. Poor communication (38 %), lack of support (48 %) and interpersonal relationships (40 %) were other factors

identified by this group as reasons for leaving. A decade on, exclusion from decisionmaking appears to continue for many nurses.

Research conducted in other specialty areas can assist in understanding decisionmaking within the context of nephrology nursing. Manias and Street (2001a) addressed the social context of multidisciplinary decision-making within a critical care setting and found that nurses experienced communication barriers during ward rounds when trying to participate in decision-making activities. In contrast, the doctors drew from the nurses' information to supplement their own. Therefore, it cannot be assumed that nurses working in a specialty area have greater participation in the decision process compared to generalist nurses. Inexperienced doctors may rely more on specialty nurses for their advanced knowledge and skills, but this may not equate to equal participation. Manias and Street (2001a, p. 138) emphasise the need for other studies to be conducted in a variety of clinical settings, and acknowledged the "interplay of knowledge and decision-making" to gain further understanding from a critical perspective that addresses power and social interaction.

Gerdtz and Bucknall (2001, p. 558) also draw attention to the context as "being highly specific to nurses' decision-making influenced by a range of patient, nurses and environmental factors". By observing triage nurses' decision-making practices within a Melbourne emergency department, the researchers focused on what nurses did rather than what nurses said to the researchers. Therefore, interviews were not conducted since the researchers did not want to hear what the nurses thought they should say (Gerdtz & Bucknall, 2001). This had the intent of separating the actual or descriptive aspects of decision-making, from the ought or prescriptive side of practice. However, when inconsistencies between what nurses 'say' and 'do' arise, this may not necessarily be an issue determined by the nurses themselves, but rather controlled by other constraining aspects that may not always be acknowledged. The absence of dialogue with participants may not reveal these constraints, as understood by the nurses themselves, rather the etic or external observer's perspective is presented (Carspecken, 1996). Despite the methodological design, Gerdtz and Bucknall (2001) found that nurses used limited physiological data when deciding patient acuity; while discrepancies were evident between triage duration, nurse ability, patient and environmental variables. This would suggest that subjective judgments tend to over ride objective data during the initial decision-making phase. How this may bias or misinform a decision and whose interests are actually being served is not so clear.

Another Australian study addressed ethical and clinical decision-making of neonatal nurses (Spence, 1998). The findings revealed that the nurses were more likely to be involved in clinical rather than ethical decision-making. The nurses did not always perceive ethical issues as their responsibility. Instead such decisions remained within the family-patient-doctor interaction. What was significant in this study was the nurses' absence at the discussion table and their lack of participation when such decisions were being made. Where this positions a nurse in terms of being a patient advocate is questionable. Furthermore, when nurses are not part of decision-making, they cannot contribute to patient outcomes. Political and ethical decision-making may mean that nurses have to actively choose between personal and professional ideals in order to be heard and be part of the decision process. This requires setting professional goals that relate to consumer needs, even though these priorities may clash with other professional and organisational goals (Des Jardin, 2001b).

A correlational study, that has recently been conducted within Australia, investigated contributing factors to medical and surgical nurses' clinical decision-making (Hoffman, Donoghue, & Duffield, 2004). The relationship between education, experience, occupational orientation [professional values and ideologies nurses ascribe to], area of practice, level of appointment, and age was estimated by the nurse participants who predicted the weight of each variable on their decision-making. Although the writers identify several potential biases in the research design the findings are still of importance. An unexpected finding was that experience and education were not significantly related to decision-making in comparison to occupational orientation and level of appointment within the work organisation. This contradicts previous studies where emphasis has been placed on experience (Benner, 1984; King & Clark, 2002; Watson, 1994) and education (Considine, Ung, & Thomas, 2001; Pardue, 1987; Prescott, Dennis, & Jacox, 1987), although findings remain inconclusive. In addition, medical nurses were reported to make more

decisions compared to the surgical nurses (Hoffman, Donoghue, & Duffield, 2004). This may be explained by the nature of medical wards where patients tend to have chronic type illnesses compared with acute surgical patients, which, in turn, may have influenced the number of hours doctors were present in each area, although this information was not included in the article. The authors conclude that more qualitative approaches to decision-making are required, "by eliciting from nurses factors they believe to be influencing their decision-making participation" (Hoffman, Donoghue, & Duffield, 2004, p. 61).

Australian studies that have explored renal nurses' decision-making up to date are minimal. Bonner's thesis (2001) addressed renal nurses' level of clinical expertise and skills acquisition, which incorporated elements of decision-making. The study exposed the different levels of nurses' decision-making that correlated with experience, skills and knowledge, drawing from decision-making rules applied in daily practice that provided an important source of information. The expert, according to Bonner (2001), knew when the rules could be bent or broken to enhance efficiency and care for their clients by 'blurring the boundaries' of practice. She concludes that the nephrology nurse must be recognised by others as having expertise, which, in turn, enables the nurse to extend their scope of 'normal' practice. Additional characteristics that facilitated expert decision-making included being trusted by the staff and patients, and being a role model and teacher. In Hoffman et al.'s (2004, p. 60) study the official level of appointment appeared to increase the nurses' decision-making frequency, even though "this level of appointment was not in relation to age or experience". In view of this, despite younger and less experienced nurses holding high levels of appointment within the health care organisation, if they are not perceived by others as having the expertise, as Bonner's (2001) study suggests, this may actually constrain a nurse's decision-making capacity. Alternatively, the position itself may facilitate decision-making participation for some, based on power and authority rather than knowledge and ability. Knowing which is which is not always so evident.

The literature review presented so far is by no means exhaustive, but aims to introduce decision-making theories and concepts, emphasising the labyrinth of complexity when addressing decision-making in its totality. To present every possible aspect of decision-making is, of course, not possible. Researchers have to "insert themselves at a certain level in their work" in order to manage it and make sense of it (Giddens, 1984, p. 327). Therefore, it is at this point of insertion that the literature review takes a turn to address broader political aspects of decision-making, and what this might mean for nursing within the health care organisation.

The health care system as an organisation

An organisation enables society to pursue goals that could not be achieved by individuals alone (Ivancevich & Matteson, 2002). The health care system is an example of an organisation, composed of many groups or institutions, such as Nursing, Medicine, Social Workers, and Dieticians, each with their specific roles and tasks, yet, interdependent on one another. Established professional practices are assumed to direct each group's behaviour, governing how they should act and what is expected of them. Thus, organisational control is generally understood "in terms of influence exerted on subordinates to seek their compliance with organisational goals" (Malhotra, 2001, p. 326). However, Giddens (1984) concept of agency, exercised via the dialectic of control, proposes that even subordinates can influence the behaviour of superiors so that people always have a choice to be compliant or defiant, thus, they have a degree of control. It is predominantly institutional structures that control how people behave and think one way or the other.

Giddens (1984) refers to established patterns of behaviour, which are produced and reproduced across time and space as 'institutions'. It is this definition that 'institution' is understood in this thesis. Thus, organisations serve the purpose of organising or "structuring society by coordinating the activities of human beings, or the goods they produce, in a stable way across time and space" (Giddens, 2001, p. 348). As the modern world becomes more complex, control and leadership become necessary, facilitated by rules that direct social practice, yet flexible enough to respond to change. Weber (1947) refers to this as bureaucracy.

Bureaucracy - a tool of power and control

Bureaucracy is a rule conducted from a desk or bureau (Giddens, 2001). Rules, according to Davies (1995, p. 52) "are the key feature of bureaucracy controlling and regulating behaviour as a functional consequence for society". Documentation is also controlled in how it is produced, implemented and stored, serving governing and political structures. Bureaucratic control, according to Weber (cited in Albrow, 1970, pp. 39-40) is the main source of power, bestowed upon a person because of their assumed personal 'administrative' qualities rather than economic status, and rewarded with legitimate authority. Within this structural arrangement power resides at the top. Therefore, a person with legitimate authority is understood to 'act with authority' (Peters, 1967) having the power to enforce bureaucratic rules. Rules guide 'rational principles' that can alienate workers within the organisation since rules are not to be questioned, but rather followed. When rules become taken-for-granted or violated, work practices may lead to resource inefficiency (Worsley, 1974). The bureaucracy is organised in such a way as to generate fear through sanctions should rules be breached. This, in turn, is assumed to facilitate order and efficiency that serves organisational rather than individual needs. For that reason, sanctions may only produce a perception of compliance and agreement throughout the levels of authority. Formality and distance are promoted, necessary for rational decisionmaking leaving little space for intimacy and the exercise of emotions (Davies, 1995). When workers produce unexpected outcomes that do not meet the requirement of the organisation, bureaucratic rules are reinforced (Blau, 1963). Barnhart (1994) refers to institutional power as formalised power making it appear abstract and unattached to any one person. It is the endeavour of critical research studies to closely examine the intangible aspects of power, particularly, 'unattached power' generated during social interactions.

Mintzberg (1979) distinguishes five types of bureaucratic organisations: simple structure; machine bureaucracy; professional bureaucracy; clerical bureaucracy; divisional form and adhocracy. How decisions are made within these different organisational types varies. For instance, medicine has been associated with professional bureaucracy that has significant power, the authority distributed along a formal chain of command, directing those beneath them. Nursing has often been at a

lower level, part of this hierarchy, receiving and executing 'doctors' orders'. This functioning structure may have further contributed to nursing as a clerical bureaucracy, in which senior managerial nurses made decisions that subordinates carried out. The current climate of nursing that strives for professional status adopts professional bureaucratic principles, which include autonomy, accountability and responsibility. Beshears (2002) suggests that Mintzberg's fifth category of 'adhocracy' may be a truer reflection of today's health care organisation, where highly specialised teams share the decision-making according to the nature of decisions to be made and the availability of information and resources. Alternatively, Kling and Zmuidzinas (2002) suggest that within larger organisations there is a combination of Mintzberg's (1979) five bureaucratic types. Regardless of how an organisation is classified, hierarchical power structures are a dominant feature associated with any bureaucratic organisation.

Bureaucracy and power

Theories of power can be arranged along an ends-means continuum (Beech, 1997). The means represents how power is exercised, while the ends is the outcome resulting from that power, although most power theories deal with ends and means as one process (Ebert & Mitchell, 1975). Mills (1956) explains that power can be *exercised* over others, directly or indirectly, individually or collectively. Therefore power is understood as domination. This exercise of power over another is referred to by del Bueno (1987, p. 1495) as ability:

Power is neither good or bad, acceptable or not acceptable, moral or immoral. Rather power is the ability to get others to do what you want and also to avoid doing what is personally undesirable.

This definition of power draws a parallel with structuration theory (Giddens, 1984) but also includes how people relate to one another across time and space and their access and use to resources. Parsons addressed how institutions (people or structures) accumulate and use power as if power were a commodity drawing from social, economical, and political traditions (Bacharach & Lawler, 1981). Giddens (1984) shares Parsons' idea that both the actor and structures are integral aspects in power analysis, but views them as mutually dependent. In view of this, power is understood by Giddens not as a commodity, but rather as a resource generated through social

action, therefore, it is always relative. Layder (1994, p. 137) describes this type of power:

My power over you is to some extent dependent upon the power you have over me - and this means the wider context has to be taken into account.

Consequently, both people and structures produce and reproduce power, which, in turn, has a 'transformative capacity', and is a central feature of agency (Giddens, 1984). For that reason, Giddens claims that people are never powerless, but rather there are alterations in the balance of power over time (Layder, 1994). Barrett (1991) refers to this changing power as contingent and fluid. Giddens (1984, p.16) terms this alteration of power, *the dialectic of control*, signified by autonomy-dependency, a tension that is always fluctuating from one moment to the next. For example, a leader of a group is, to some degree, dependent on the group members to follow the leader's instructions (Ebert & Mitchell, 1975). Hence, even the autonomous are dependent within a hierarchical system (Tannenbaum, 1968).

del Bueno (1987, p. 1495-1496) supports Giddens' idea that people [nurses] are never helpless; "In truth nurses are never powerless . . . regardless of her (his) position in an organisation or group, . . . [nurses] have the power to make choices. . . [they] can assist or resist". In view of this, power is an inherent human feature, but this may depend on whose perspective if the oppressed have to gain power through 'scratching and clinging' to whatever they can (Barrett, 1991). How oppression and resistance are understood, therefore, depends on who is defining them (Salaman, 1979). In contrast, when subordinates feel they have command over their actions within authoritative structures, this produces and maintains a sense of control. This was a relevant finding in Tannenbaum's (1968, p. 147-148) research that showed people are more interested in the control they themselves have, rather than how much others may have. If control is not perceived, then coercive measures may be applied as a way to generate power through negative means.

Lukes (1974) proposes three dimensions of power; the first dimension shares a more traditional view of power, understood in terms of observable and known power structures that deal with conflict overtly at some level; the second dimension is similar to the first but the exercise of power is not always observable and open; and

finally, the third dimension of power is less explicit, possibly embedded in social and institutional structures so difficult to identify. It is only through deliberate reflection and critique of levels one and two that social forces and institutional practices can be exposed for what they really are, exposing prevailing ideologies that shape interests and preferences of those who are in control, thus, have the power. Giddens (1984) challenges Lukes' third power dimension partially supporting Bachrach and Baratz's argument that power has only two dimensions or 'faces':

The capability of actors to enact decisions which they favour on one hand and the 'mobilization of bias' that is built into institutions on the other (Bachrach & Baratz cited in Giddens, 1984, p. 15).

Giddens' (1984, p. 15) agreement is only 'partial' because Bachrach and Baratz's (1962) two faces of power imitates a "zero-sum conception of power". Zero-sum power philosophy views power as a fixed amount, one person's gain means another person's loss (Beck, 1982). Therefore people work within the confines of bureaucratic rules and power distribution. In contrast, power, for Giddens (1984), is not exercised over people but through the control of resources, the power moving along the dialectic of control, representing a structure-agency duality; agency forever producing and reproducing the structures which, in turn, direct action during interaction. This creates a perception of power expanding rather than fixed. However, this leaves one to question how achievable this may actually be since, in reality, people like to hold onto what power they think they may have, therefore, reinforces a zero-sum approach, which may not always be intended or acknowledged. In other words, can collectivities share and exercise power equally? Giddens (1984) proposes that established patterns of institutional behaviour may take greater importance in directing actions than moral thoughts; therefore, decisionmaking may then be tightly controlled by a select few. For this reason, it cannot be argued "that some people have more power than others is one of the most palpable facts of human existence" (Dahl, 1957, p. 202).

Power and decision-making

Lesswell (1950) explored decision-making as a way to understand power. Power, according to Lasswell (1950), was a give-and-take affair and aligns closely with Giddens' (1984) concept of the dialectic of control based on an autonomy-

dependency continuum. March (1988) also identified power as a key element in the context of decision-making presented as the 'influence' or effect that one person has in the decision process, possibly making decisions for others; society accepting that some people will rule and others will follow. Pareto (1963) implies that the select few making decisions on behalf of others can be by force or fraud, assisted by the interplay of human emotions and nature. Weber (1947) isolates power and authority as two separate entities; Power is the ability to force people to obey, regardless of their resistance, while authority comes with official recognition, subordinates accepting the legitimate position of the superior (Pugh & Hickson, 1989). Authority, with its ascribed rules of legitimate power, is mirrored within the bureaucratic health care organisation, where officials are circumscribed specific duties and obligations. As a result, how power is distributed in an organisation contributes to how that organisation is structured (Bacharach & Lawler, 1981).

When examining the relationship between power and decision-making within organisations, Tannenbaum (1968) proposed a power-decision continuum that is influenced by leadership, group forces and the context. The more authority used by the leader the more autocratic the decision process, reflecting a zero-sum power philosophy. The leader makes the decision and announces it, or may influence the decision outcome by coercive, manipulative strategies because of their official position, giving a sense of false unity. As the continuum moves towards group collaboration, less authority assumes to be used representing a democratic approach, each person contributing, until, consensus is reached. Conflict is acknowledged and valued, or at least tolerated. When conflict is not welcomed, personal hostility is created, resulting in destructive consequences.

French and Raven (1959) identified a typology of five power bases that can be applied in decision-making: reward, coercive, referent, expert, and associate power. Nursing's relationship with the medical authority within the health care organisation may be allied with associate power, yet, this does not necessarily place nurses at an equal footing in practice, along side their medical colleagues. The association may itself be the constraining feature in this relationship. *Reward* power utilises incentives such as monetary gain, a box of chocolates, or verbal affirmation to

influence another person's behaviour. Nurses apply reward power, as well as punishment, particularly during nurse-patient and nurse-doctor encounters. The punishment portion corresponds with *coercive* power, which can be overt or covert, incorporating both positive and negative strategies, depending on who is applying them and for what purpose. The renal nurses' verbal use of persuasion to do extra time on the dialysis machine is one such example, the patient then rewarded with positive appraisal and encouragement. *Referent* power, or charisma, is based on personal characteristics that act like a magnet over others who want to follow and please, symbolising a pied piper analogy. Finally, *expert* power is derived from the possession of knowledge and skills that others may, or may not, have. This becomes problematic as nurses aim for professional status with its own body of knowledge and expertise, competing with other professional institutions in respect to allocation of resources and control of practice.

When dominant institutional practices prevail, as medicine has, medical ideologies will directly, or indirectly, govern who makes decisions, how decisions are made and who has overall authority and control during decision-making interactions. Such established institutions, which are part of the larger health care organisation, may work in favour of one group before another. This privileged position can offer a means of creating-recreating power and control that further accentuates their overall authority and control. When dominant ideas are accepted and the attitudes, values and beliefs reproduced, the cycle-recycle of the domination-oppression continues (Roberts, 1983). It is therefore important that oppressed groups understand what oppression is; its historical and socio-political nature and what this means for nurses within their domain of practice and decision-making. Street (1992) emphasises that understanding the power of 'ideology' as a tool of dominance and control is an important factor, which is also necessary when explaining the political aspect of nurses' decision-making.

Professional ideology and control

A profession is a collection of professional ideology, or 'ideology of expertise' (Willis, 1989) that maintains control within the decision process. Lye (1997, para. 1) introduces ideology in terms of how the culture is "structured in ways that enable the

group holding power [i.e. medicine] to have maximum control with minimum of conflict". Adopting his analogy of the cookie cutter representing ideology, it is medicine (the dominant group) that has held the cookie cutter controlling and determining the shape, taste and size of the cookie (the health care system), based on biomedical philosophy that dictates medical and nursing practice. In other words, ideology is a tool of dominance to control social practice (nursing practice) and infers a power component.

According to Freidson (1970), professionals ensure their position of dominance within society on the basis of regulation and legislation which governs what they 'profess', what sanctions apply if these rules are breached, and who can join the selective group. Specialised knowledge, on which professional ideologies are founded, defines each professional group. Davies (1995, p. 56) proposes that bureaucracy and profession may seem "diametrically opposed; the professional is assumed to be committed to the substance of professional practice, exercising expertise and skills that govern decision-making, rather than constrained by bureaucratic rules and habitual practices".

The decision process for professionals, thus, is complex, and cannot be confined to the application of organisational rules alone. However, Davies (1995) indicates that the same historical processes have created and maintained both profession and bureaucracy. This usually involved professional men imposing work divisions and control of subordinates. This results in the persistence of different authoritative levels; for instance, between different health care providers (Allen, 1991). Through a process of social indoctrination this belief becomes reinforced, maintaining certain group's legitimacy and control.

Men's self-granted position may have been made possible and sustained by economic means (i.e. ownership of wealth, property and production processes) founded on the ruling-class model (Giddens, 2001). Marx suggests that the power men have had over women only came about as class divisions, which the feminists argue was solely biologically founded creating a 'sexual division of labour' (Game & Pringle, 1983; Lawler, 1997). This control was promoted by means of a patriarchal

system; a system designed and governed by men, in which men's power is predetermined on a belief that "males are inherently superior to females" (Allen, 1991, p. 253). As a consequence, women become "private property" of men, a process further facilitated via the institution of marriage (Giddens, 2001, p. 670). The unequal power distribution and class division has been extended into the health care setting, where medicine controls nursing (Davies, 1995; Tonuma & Winbolt, 2000). This state of affair has not always been and feminists have questioned medicine's newly gained control. According to Hegell (1989, p. 229), "nurses once held powerful positions in the community, making important decisions, until medicine became established as a profession". The establishment of medicine, in turn, maintained men's' superiority because of women's lack of foresight and blind acceptance of medicine's self-granted authority (Morrison, 1982). However, Morrison (1982) adds that this situation is slowly changing, whereby women are now being acknowledged for their own accomplishments and contributions to men's success, including nursing's contribution in providing health care.

Autonomy has been proposed as the key element to professionalism and medical dominance, although Coburn (1992 cited in Germov, 2000a, p. 237) challenges this supposition in that medical autonomy is "overly static". This motionless notion of medical autonomy may be further explained by Davies (1995, p. 60) in that the "medical profession requires considerable input from others" (i.e. Nursing, Allied Health Care Providers, Clerical) to maintain their 'autonomy'. She describes this as a 'fleeting doctor-patient encounter' where decisions are made quickly; decisions frequently informed by subordinates. Such encounters continue to serve the medical professional at the cost to those who have made the encounter possible in the first place. Nevertheless, nurses are being recognised as working within highly technical areas that necessitates right of entry to specialised knowledge and skills. This has created co-dependency between the organisation, in particular, between doctors and nurses. This has also required nursing to encroach on what were once exclusive medical domains. Whether this was nursing's deliberate goal, or made permissible by medical authorities, or via consequences of globalisation and modernisation (Giddens, 1990), is not so apparent. However, when competing ideologies exist with regard to health care delivery and resource allocation, this can continue to divide

health care professional sectors, often, at the expense to nursing. Chase's (1995) ethnographic study, for instance, describes the social context where decisions are made finding that although nurses and doctors share a similar hierarchical structure that fosters effective communication pathways, they have different values, attitudes and goals that, at times, create conflict. This can further impede on how work structures are organised, possibly serving different purposes unfairly (Beech, 1997).

Hegemonic structures at play

Crotty (1998) postulates that ideology and power are two elements called into question in critical theory that must be explored to understand social interaction. People learn to think and act in ways defined for them, therefore, defines how people think and act in the decision process. This 'defining aspect' can be achieved through dominant groups circumscribing social action and cultural leadership over others (Stillo, 1999). Gramsci refers to this process as 'hegemony' (Dictionary of the English Language, 2000).

Hegemony is a practice that shapes understanding or ideas about our social world (Stillo, 1999); therefore, people can be part of their own domination. Brooker (1999, p. 120) writes that "hegemony, therefore, seeks to articulate and renew the prevailing 'common sense' mentality in society as a whole". Nursing, for instance, has been directed by medicine's 'common sense' that nurses may unknowingly contribute to despite a conscious effort to challenge such structures. Giddens (1979) proposes that hegemony is achieved through unwritten, and often unspoken, rules, which are then reinforced through social action. Nevertheless, Giddens (1984) adds that social action is not static or a passive process where structures determine action alone. Rather action creates structures, which, in turn, creates action as a duality. For that reason, ideas, motives and interests can work against hegemonic structures presenting the possibility for change and new ways of thinking (Connell, 1977). Such moments challenge common sense that requires coercive rather than consensus to regain order (Giddens, 1984). For example, several renal nurses produced new lines of authority that worked against traditional doctor-nurse relationships as they told junior doctors what to do, thus appear to dispute the common sense rule of doctors instructing nurses. Nonetheless, many nurses still recognised the nephrologist's

official authority within the renal unit, and health care organisation, reinforcing generally the common sense rule about medicine's authority and power to direct.

Hegemonic structures can also be found within nursing itself since trusted ideas and beliefs are already embedded into nursing history, instituted by a handful of nurse leaders, who establish patterns of common sense behaviour about how nursing is or ought to be. Decisions made, for nurses, by nurses, can both enable and constrain the progression of nursing not necessarily serving nursing's interests as a whole, but rather as a discrete mode of control (Holmes & Warelow, 1997). Thus, there is no need for coercion or mechanisms of control since nurses do not question or see the need to question what has become taken-for-granted and common sense. Reflective practice, as discussed by Gilbert (2001), is as an educational nursing method that has become accepted and unchallenged, promising emancipation and empowerment, yet, she warns that it may serve as a tool for professional surveillance and confessional practices. These can have harmful effects on both nursing practice and education (Foster & Greenwood, 1998). For example, nursing strives for reflective practice, collaborative decision-making and autonomous practice; the language becoming part of the 'nursing culture' often unquestioned, while inspired and motivated by dominant nurses. One cannot assume this represents the larger group. This makes nursing power, generated via ideology and hegemonic processes, difficult to define since the power is routinely hidden and embedded in mutually accepted and 'agreed' (assumption) nursing practices. When these practices are questioned, and consensus ambivalent, the potential for conflict arises with the possibility of change (Giddens, 1984). What impact this has on the decision process depends on an individual's or group's capacity in managing the conflict, revealing elements of power. Once power is recognised as part of an institution it becomes important to consider the extent to which power, and the exercise of power, is distributed and how it is disposed (Worsley 1964 cited in Thompson, 1982, p. 251).

Nursing's power

The definition of power within the nursing literature is not clearly visible, often presented as acquiescent words that have less threatening meanings such as, 'politics', 'influence', 'authority' and 'leadership', yet can still cause concern

(Heller, Drenth, Koopman, & Rus, 1988). Several writers have commented about nurses feeling uncomfortable with the concept of power, particularly, personal power, although as a group nurses recognise the importance of collective power (Ferguson, 1985; Hodgson, 2001; King & Koliner, 1999). One reason why nurses may have exercised power in a more passive, and possibly illusive way, is that the [nurturing] "image of nurses and their ethical principles would be in conflict if involved in the political arena" (Des Jardin, 2001a, p. 614). In other words, nurses may be wary of the mistrust associated with politicians, inferring that one cannot be both ethical and political. Des Jardin (2001a, p. 615) remarks that this may be a difficult endeavour since "political-ethical conflicts can mean choosing between the job, patient and personal ideals". Nonetheless, patient advocacy that provides a voice for consumers is a valued nursing role (Thompson, Melia, & Boyd, 2000), and is very political. Without a voice, thus, authority, nurses cannot be advocates; rather this becomes a token gesture. Therefore, nurses need to be aware of their political power, or least their potential, including when making decisions with, or for, consumers. Des Jardin (2001a) further believes that women are troubled about conflicts in relationships, possibly compromising their position in order to achieve consensus. This may result in ineffective consumer and nurse advocacy. Avoiding issues can serve consensus, giving an appearance of agreement, which, in turn, can maintain oppressive structures. Nurses' avoidance from the decision-making arena has contributed to what Spender (1990) generally terms the 'silence of women'. Nurses' exclusion from 'legitimate' and 'valued' medical knowledge, in the past, has played a role in their silence, inadvertently or deliberately contributing to consumers becoming part of the patriarchal health care system, reinforcing hegemonic structures.

Knowledge, power and nursing

Foucault analysed modern organisations according to the relationship between ideology, power and discourse (Edwards, 2002). Discourse can be defined in many ways, for many things. Germov (2000b, p. 17) defines discourse as "a domain of language-use that is characterised by common ways of talking and thinking about an issue (for example, the discourse of medicine, madness, or sexuality)". In a Foucauldian sense (1980), a discourse is more than just language, but includes

practices that restrict who can speak and how we think. Foucault (1980) suggests that power/knowledge relations occur from within different webs of discourses. For this reason, discourses assist with the analysis of person-society interaction. Medical discourse, for example, gives emphasis to illness and treatment that are entrenched within a power/knowledge nexus. Those who do not have access to, or application of, specialised knowledge remain bounded in terms of power and contribution. However, "Our ways of knowing and being in the world are not simply governed by one discourse; we are influenced by many competing discourses" (Heggen & Wellard, 2004, p. 295). Akin to Giddens (1984), Foucault views power not as a commodity but something that is distributed and directed throughout society. "Legislation, politics and regulation" enable this distribution and direction (Maloney, 1996, p. 45), the power resembling a capillary "extending in all directions and operating at all levels in any given situation – including the nursing practice setting" (Cheek, 1998, p. 87). Cheek adds "that it is the relations of domination, the effect of a capillary network of power, that shape understandings . . ." (1998, p. 87). Thus, power is assumed to be continuously formed and reformed to advantage a particular person or group at a particular time (Manias & Street, 2000b). However, Giddens differs from Foucault in that power is exercised not as webs of discourse but rather via the dialectical interplay between agency and structures. Hence, a person who has power at one time may not at another (Giddens, 1984). Power alternates between levels of autonomy (e.g. directing others), and dependency (e.g. being directed), the power alternating from one time-space encounter to the next, along the *dialectic of* control of autonomy-dependency.

Nurses, too, use a power/knowledge discourse to enable their authoritative positions during encounters. Laypersons, including doctors who are unfamiliar with renal proficiency, have minimal power as they are constrained by the parameters of medical and technological knowledge (Grbich, 1999). Therefore, knowledge and information are key aspects of power in organisations as Clegg (1989, p. 221) points out: "Subordinates are often ignorant of power in terms of strategy construction; the negotiation of routine procedures, rules, agendas, protocol and assessing resources of the antagonist". In addition, they might be unaware of other powerless groups with whom they could create alliances.

Doering (1992) acknowledges that the development of nursing knowledge has predominantly been influenced by the medical domain, operating from what Street (1992) terms a 'superior, legitimate' knowledge base when compared to other health professions. However, Lather (1986) believes that nurses are gradually reclaiming their position as knowledgeable contributors to health care, although she warns that nurses must be careful to not disown caring knowledge at the cost of scientific knowledge as this is where nurses power resides. Benner (1984, p. 207) asserts that "defining power or nursing exclusively in traditional masculine and feminine terms is a mistake", suggesting that nurses do not adopt dominant forms of power or coercion, often enacted as power games, but rather nurses need to recognise how their power resides in caring. Power becomes "transformative or world changing power" (Benner, 1984, p. 210).

In the same way, Street (1989; 1992) refers to nursing care as nurturance/knowledge (i.e. emotional support, opportunity and autonomy) that addresses the expertlayperson power knowledge gap, adapting Foucault's original concept of the power/knowledge nexus. This fresh perspective creates the prospect of producing "New knowledge that has an enlightenment, empowerment and emancipation nature to it" (Street, 1992, p. 263). This move towards nurturance/knowledge/power discourse can inform decision makers, including patients and nurses, representing, or at least attempting, a collaborative process.

A collective knowledge base is assumed to serve nurses to make informed decisions as a collaborative process. Boyle (1984) comments on how expertise can increase this nursing knowledge/power base. However, recent studies suggest that this does not actually occur as nurses' hold on to what power they might have, or perceive they have, restricting others. This was a particular issue highlighted by Bates (1998), with respect to temporary nurses employed on a casual or contractual basis, where information was not made readily available. This empowered some nurses more than others, echoing a zero-sum concept of power. Similarly, Bowler and Mallik's (1998) British study identified expert critical care nurses who were reluctant to empower junior staff in these extended roles, particularly during decision-making. This is not unique since oppressed groups can often be oppressors (Roberts, 1983), thus, nurses control nurses. This control can result in horizontal and vertical conflict (Marquis & Huston, 1996).

For this reason, when nurses' decision-making is investigated it cannot be as a single phenomenon, but rather how decision-making and the decision maker are positioned within organisational structures and interactions (Buckingham & Adam, 2000a). Organisational decision-making theory addresses institutional frameworks within which decisions are made. This can address how the organisation shapes and controls the people working within them, or how individuals and groups themselves control decision behaviours within the organisation and how this may impact on outcomes. Collaborative teamwork is one such example of group or shared decision-making.

Collaborative decision-making

Since the 1990s, the notion of collaborative decision-making has emerged as a proposed means of enhancing nurses' clinical decision-making and patient outcomes. The introduction of multidisciplinary practice guidelines is one attempt to "promote therapeutic effectiveness and cost efficiency" (Higgins, 1999, p. 1435) within collaborative teams. The idea of collaboration to enhance clinical outcomes is mirrored within the Australian health care system, for example, Caring for Australians with Renal Impairment (CARI) guidelines (Australian and New Zealand Society of Nephrology and the Australian Kidney Foundation, 2001). However, renal nurses have voiced their concern in terms of lack of involvement as collaborators (including consumer involvement), and being equal participants, particularly when the CARI guidelines were initially designed a few years ago. Furthermore, despite the belief of collaboration, to date, there has been little research conducted in regards to multi or interdisciplinary decision-making. Those conducted to date have shown that the doctor-nurse relationship can be beneficial for patient outcomes in terms of identifying problems, initiating and evaluating treatments promptly, and facilitate communication pathways (Knaus, Draper, Wagner, & Zimmermann, 1986; Snelgrove & Hughes, 2000). Buckingham and Adams (2000a) stress that as nurses' roles expand, nurses must explore what collaboration actually means for decisionmaking, particularly, when professional boundaries merge.

Interpersonal relationships cannot be underestimated as an important factor in nurses' clinical decision-making, where nurses often acquire information from their colleagues (Thompson, McCaughan, Cullum et al., 2001). Access to information is the minimum condition to enable a nurse to enter the decision process. The level of access to information has been described by Heller and colleagues (1988, p. 33-34) as the "influence-power continuum" (IPC). Level one indicates no or minimal information, up to level six where complete information is available making control possible in the decision process. However, it may not always be possible for the same people to form the decision-making group, resulting in 'fluid participation' (Heller, Drenth, Koopman et al., 1988). This changes the composition of the group and information known. Nor does this mean that each subsequent decision made can be as effective, or as informed, as the last (Pugh & Hickson, 1989). Consequently different nurses collaborate with the medical team at different times fragmenting continuity of care and decision-making. Street's (1989; 1992) referral to the 'temporariness' of nurses' work can be equated to fluid participation. This can constrain certain nurses' capacity as decision makers, in particular, for agency/casual and part-time nurses, who come and go (Street, 1992). However, it may not necessarily be the amount of time a nurse spends in the unit, but rather how individual nurses contribute in terms of professional competency and personal charisma. In light of this, social influences on both the transient and permanent group can hinder or assist decision-making. Several studies have written about these factors in relation to a group's or team's size, composition, structure, and coherence (Asch, 1955; Janis, 1972).

Group and team decision-making theory

Orasanu and Salas (1993) distinguish between teams and groups. A group has interchangeable members, representing ad hoc decision-making, not unlike the fluid participation analogy. On the other hand, a team, according to Orasanu and Salas (1993), has specific tasks, roles and abilities that develop over time, facilitating interdependent individuals to achieve a common work goal. One team approach, presented by Orasanu and Salas (1993), is the 'shared mental model'. Knowledge is organised and shared as part of the cultural-professional norms, the rules understood to aid the 'team' to function and act in predictable ways. For instance, a shared

mental rule is the 'majority vote' wins. Who produces and maintains the rules and norms is not always evident, and can be taken-for-granted. Team members monitor one another's performance (surveillance) and provide feedback, implying an element of power that may be conducive or destructive.

Another team decision-making model is the 'team mind model' (Klein & Thorsden, 1989 cited in Orasanu & Salas, 1993, p. 335). This model draws an analogy between a team and individual mind. What was highlighted from this research was that experts performed like individuals within the team, yet, individual and team goals could be mismatched, creating moments of conflict. If individual minds, that constitute the collective team mind, have a perception that they are valued, and are able to contribute, the maintenance of the group prevails; team orientated behaviour is promoted. When a self-orientated behaviour presents, the individual is often satisfying their personal needs before the collective needs of the team or group. Hidden agendas are an example of self-orientated behaviour, which, according to Giddens (1984), may be known or unknown to both the individual and group.

An influential writer on group dynamics was Janis (1972) who introduced the concept of 'groupthink', where individual rational judgments are suspended in favour of group coherence and solidarity. However, group coherence does not always mean improved group outcomes since, according to Ivancevich and Matteson (2002), the best decision may not be selected or coercive tactics are applied to influence choices made. Withholding information, for instance, can be used as a form of social control or coercive tactic (Brooten, 1984; Pettigrew, 1973). When groupthink is maintained, goals and values may not be challenged giving an appearance of agreement and solidarity (Giddens, 1984; Janis, 1972). This can be particularly problematic in multidisciplinary teams where dominating hierarchies prevail, either deliberately or inadvertently, depending on who, or what, is perceived as holding the power. The medical institution, for instance, is legitimately, and socially, understood as being more knowledgeable, therefore, have more decision-making authority. When such assumptions as this are accepted and unquestioned hegemonic structures persist. This is even more evident when sectional interests have to compete for resources, each group with their own interests in mind.

Not all organisational decision-making models are so apparently ordered; rather they function in an ad hoc and chaotic fashion. The 'garbage can model' (Cohen, March, & Olsen, 1972), captures this disorder, described by Beech (1997) as "organised anarchies". Cohen and colleagues (1972) symbolically present the garbage can as a place where a variety of problems, including potential solutions, are dumped. Consequently, the decision outcome is an interplay between problems, solutions, participants and choices, yet, all relatively independent of one another. Timing of when these 'relatively independent' aspects coincide, makes it possible for participants to match solutions to the problems, therefore match problems to choices (Pugh & Hickson, 1989). This works against prescriptive decision models of rationality and logic, but rather reflects an 'ad hoc' approach. Beech (1997, p. 129) adds that the "garbage can model almost says nothing about decision processes per se", yet, amidst the chaos, the organisation continues to meet demands and survive. March (1988) believes that people should be playful inside the garbage cans as this facilitates creativity of new goals and courses of action, with deliberate consequences in mind. This is similar to Simon's (1967) concept of optimisation, searching for all possible options, unlike satisficing, where choices are made to satisfy current demands. Optimisation, or playfulness, requires time, good leadership and a degree of risk-taking.

A grounded theory study of nursing leadership conducted in Western Australia (Irurita, 1992) identified how nurse leaders use a social process of 'optimising', in which nurses make best of a situation within their work constraints. This occurs as a 3-stage process: surviving, investing, and transforming. Surviving could correspond with Simon's (1967) concept of satisficing, in which the nurses satisfice as a matter of survival. In contrast, investment assumes information seeking and risk-taking behaviours resulting in optimising outcomes with the possibility of creating change. When nurses failed to optimise, Irurita (1992) described this as floundering. Thus, satisficing and/or floundering may provide a sense of safety and routine, but can also create doubt and uncertainty if optimal outcomes are not achieved, or at least, aimed for.

Uncertainty and risk

Several authors have addressed how organisations and groups must live and cope with uncertainty and risk (Balsa, Seiler, McGuire, & Bloche, 2003; Gigerenzer, 2002; Pugh & Hickson, 1989; Spender, 2003). Regulations and rules attempt to reduce unpredictability making practice more reliable and manageable. In other words, risks are managed. Giddens (1999d) generally recognises society as a 'risk society' whereby science and technology dominate and transform traditional ways producing new sources of risks and uncertainty. He terms these risks as 'manufactured risks' (Giddens, 1999b; Fitzgerald, ud). Manufactured risks are evident in any renal dialysis context since treatment is invasive, in that one procedure (e.g. dialysis) can lead to new risks and problems (e.g. blood loss, infection, electrolyte imbalance). These unintended consequences of treatment cause uncertainty in terms of patient outcomes. However, unintended consequences must be acknowledged first, before they can be managed (Giddens, 1984).

Decision-making within any part of the health care organisation shares these elements of uncertainty (McCaughan, 2002). Such decisions are predominantly informed by nurses' experience rather than other information sources (Thompson, McCaughan, Cullum et al., 2001). Thompson et al. (2001) identify several reasons why this may transpire such as limited computer resources, time and insufficient skills. When barriers to research knowledge are apparent, as suggested by Thompson et al. (2001), nurses' participation as decision makers can be constrained and remain uncertain about what options are available. Crozier, as indicated by Pugh and Hickson (1989, p. 141), write that people who have the skills to manage and cope with uncertainty (i.e. Nurses, Doctors) have power over others who are dependent upon them for their choices. Knowledge can facilitate how decisions are made and present choices that may reduce uncertainty and risk. However, when a person is uncertain, the decision is generally moved along the line of authority, minimising individual risk and overall responsibility. As a result, uninformed nurses can remain reliant on others who have, or at least have access, to knowledge, reinforcing a cycle of dependency. Alternatively, suboptimal decisions may be made, yet, not acknowledge as such.

Groups have been found to take more risks in decision-making than individuals alone, which Beech (1997) refers to as the 'risky shift' phenomenon. One reason for this is that the responsibility of blame is shared within the group, even though superiors may have overall control. Furthermore, a 'safety in numbers' mentality generates collective overconfidence (Beech, 1997). This may infer that group decision-making involves increased risk-taking as they collectively 'play', formulating the most favourable outcome. Individuals are socialised into the rules and norms of decision-making, including what risks they can get away with (March, 1988). This can lead to conservative decision-making when sole decisions are made, following norms and accepted decision rules. This indoctrination process is learned on the job, the individual adopting, or adapting, to shared goals and values that may be in conflict with personal beliefs distorting their own perceptions and judgment (Ivancevich & Matteson, 2002). This is necessary if one is to become part of the group or team (Simon, Dantzig, Hogarth et al., 1986). As a consequence, collective and collaborative decision-making does not necessarily facilitate diversity of opinion, but may actually oppress it since established ideas and interests can take over.

Because of institutional rules and power structures, nurses may underestimate or undervalue their decision-making capacity; the doctors or senior nurses making the decisions (Knight, 1996). This taken-for-granted progression, when not challenged, continues the line of decision-making command. Power, therefore, is exercised via one's authority because of the position one holds (Weber, 1947), or because of what a person is assumed to know. This belief is further conveyed during routines and interaction (Giddens, 1984).

Routinisation within an institution, consistent with Silverman (1970), removes the power associated with uncertainty through the use of written rules such as policies that stipulate 'standard' steps in dealing with a problem. Workers may break away from routines as a form of resistance against prescribed bureaucracy as a mode in maintaining control (Jermier, Knights, & Nord, 1994; Pugh & Hickson, 1989). In nursing, this breaking away may reflect the invisible nature of nursing care, rather than a form of resistance since many aspects of nursing care cannot be captured by

policies, procedures and routine activities (Glass, 2000; Poynton, 1993). However, when practice remains invisible, professional development can be delayed (Thompson, 2003). Additionally, invisibility of nurses in the decision process has the possibility of preventing their full potential, while contributions made to outcomes, remain unacknowledged. Consequently, routines may reduce risk and uncertainty but can also impede what nurses do, or are seen to be doing, or ought to be doing. This might lead to further resistance.

Resistance

Collinson (1994) refers to two types of conflict or strategies of resistance: 'resistance through distance', where workers distance themselves from their work and management's efforts to become a team member, and 'resistance through persistence' where workers actively engage in face-to-face meetings and negotiations. Crozier (1984, p. 138) has written extensively about 'power games' in organisations and is a well-known concept in nursing (Snelgrove & Hughes, 2000; Stein, 1967; Stein, Watts, & Howell, 1990). This involves channels of powerrelationships, often between workers, to enable reciprocal co-operation, which, in turn, generates degrees of freedom from bureaucratic constraints, drawing a comparison to the dialectic of control (Giddens, 1984). Strategies of interpersonal skills and communication are mastered, which Goffman (1959) terms 'face work', that are necessary to *fit in with*, or appear to fit in with, the norms or rules of society. Any deviation from these norms causes a person to 'lose face' and can be marginalised (Giddens, 1984). Social interaction, therefore, becomes a game. Some are better at playing the game than others; thus, use their dialectic of control to their advantage.

Nurses have become creative at playing interactive games with patients and doctors, breaching conventional rules to maintain a sense of control. Stein's (1967) research illustrated the doctor-nurse game. For example, the nurse makes suggestions regarding patient care, which are framed in such a way as not to threaten or undermine the doctor's authority. However, these covert tactics question if nurses are actually part of multidisciplinary and collaborative decision-making (Porter, 1991).

More recent nursing studies appear promising in that decision-making across the disciplines is becoming more of a joint venture, particularly, when expert nurses work alongside inexperienced doctors (Charles, Gafni, & Whelan, 2000; Manias & Street, 2001a; Snelgrove & Hughes, 2000). Advancements in specialised medical technology have been proposed as one reason why this gap seems to be closing. In a renal unit, for example, the nurses are accredited for their technical dialysis knowledge, the doctors trusting their judgment. Nonetheless, this appears less obvious when non-technical decisions are to be made (i.e. renal anaemia management), where nurses have been noted to 'play the game' in order to influence the decision choices and outcomes (Hardcastle, 2002). Consequently, in spite of nurses gaining professional status it cannot be assumed to facilitate nurses' involvement in decision-making as previously discussed in chapter one (see pp. 10-14). Furthermore, how one defines and attains 'professional status' can vary from context to context.

Nursing's professional accountability and responsibility in practice

The professionalisation of nursing gains public recognition that is governed and regulated by means of legislation with the intention of enabling autonomy in practice (Wicks, 2000). Australian nursing regulation is located in a variety of State Registration Acts, which set out professional criteria and nursing standards (Chiarella, 1995). Therefore, it is crucial that nurses establish standards for themselves as a collective, prescribing what responsibility and accountability means within their profession (Percival, 1995). Despite accountability being a primary consequence of professional nurse autonomy, nurses often remain powerless within the structures they work in (Maas, 1997). Lewis and Urmston (2000), and Bowler and Mallik (1998), comment on how the Scope of Professional Practice, administered by the United Kingdom Central Council (UKCC 1992), has significantly altered the interpretation of nurses' roles, that places emphasis on individual professional accountability and clinical decision-making. Whether these are actually achieved is less persuasive. In light of this, it has been suggested that nurses' professional performance, and the outcomes of the decisions they make, should be "linked to employment pathways" within the National Health Service (C Thompson & D Dowding, 2002, p. 6). This can have serious implications if nurses

continue to play a secondary role to medicine when providing health care. When institutional constraints limit nurses' full participation, this, in turn, limits how decision outcomes can be linked to professional performance. Furthermore, not all nurses want professional status and the associated responsibilities (Des Jardin, 2001b). For example, an Australian study conducted in Queensland, indicated that many nurses wanted to maintain existing hierarchies, with 41 percent supporting medical control of nursing; in particular generalist rather than specialists nurses were in least agreement for nursing to become a profession (Millen 1989 cited in George & Davis, 2001, p. 232). Such sentiments two decades on are believed to continue. Possible fear of sanctions and litigation, organisational constraints preventing independent practice, and the perceived gulf between tertiary and traditional nurse education may be a few contributing aspects that curb nurses professional interests. If so, these cannot be ignored but rather addressed in terms of practice and decision-making per se.

Nurses do not make decisions separate from institutional structures and professional groups; rather they are part of the past, present and future health care institution. Nurses and doctors, including all health care providers and support services, have an affiliation that is reciprocal. Therefore, accountability and responsibility for patient care must be acknowledged within this reciprocal relationship. If this interdependency is not recognised, autonomy, or at least the notion of 'autonomous practice' within nursing cannot be fully exercised. This makes autonomy, thus professionalism, a difficult mission when confined within bureaucratic structures. This questions nurses' accountability and responsibility when they cannot be in control of their professional practice and development.

If nurse autonomy is to be attainable, the nursing curriculum must recognise decision-making as a political, as well as a professional, venture (Wade, 1999). Zonderman (1994, p. 12) asserts that "there is no single task that nurses do more often than make decisions, yet, many clinicians feel inadequately prepared to address and resolve ethical issues". Lack of preparation and educational support contribute to this existing situation. The knowledge that informs nurses' decisions has been described as primarily tacit, practical knowledge, embedded within feminine

qualities of caring, nurturing and commonality, unlike medicine's scientific and rational knowledge that has tended to prevail within the health care system (Davies, 1995). Educational support is not only in terms of practical skills and theory, but incorporates how nurses are positioned as a decision-maker within the larger organisation. Even when nurses do not contribute to decision-making, either intentionally or unintentionally, this is a decision which nurses may be held accountable for. Therefore, how nurses position themselves in the decision arena influences what decisions they make, on whose behalf and for what purpose.

Summary

This chapter has addressed the role power plays when decisions are being made. Like any social phenomenon within today's modern world, nurses' involvement as decision makers within health care is evolving. Transformations create new knowledge, new understanding and new opportunities so that ideologies are readjusted and renegotiated (Giddens, 1984), and hopefully form new alliances. As a result "nurses are now moving into areas of decision-making that were previously the exclusive domain of physicians or clinicians" (Thomas, Wearing & Bennett, 1991, p. 2). This can make decision-making delightful and dangerous presenting an assortment of conflict and consequence, success and failure, consensus and coercion. Regardless of how these combinations manifest and present, nurses must closely review how decisions are made, by whom and for what purpose, if they are to be accountable and responsible professionals. However, extending nursing roles that have increased liability, does not equate with nurses being more autonomous and in control.

With this in mind, this study was conceived and has been conducted. A critical approach to the study was aimed at revealing taken-for-granted decision-making practices within the context of a renal unit, although the findings could be transferable to any decision-making context. Investigating the politics of decision-making had the intent of exposing how nurses create, implement and maintain power, what their resources of power are, and what capacity they have to control decision processes and outcomes. Asking how power enables and constrains individual and group agency within organisational structures must also be

understood, so that once recognised, the information can be applied to enhance patient outcomes and professional development. Finally, nurses need to ask what functions (structure) and intentions (agency) they *actually* ascribe to when decisions are to be made - complementary or subservient ? Shackle (1961) defined a decision as an *incision*. Nurses need to know whose hands are making the figurative incisions that create the past, maintain the present and direct the future. One approach that may facilitate further insight is through Giddens' (1984) structuration theory that pays particular attention to a person's or group's agency via their 'dialectic of control', which is enabled and constrained by social structures.

CHAPTER THREE: CRITICAL ETHNOGRAPHY AND GIDDENS' THEORETICAL FRAMEWORK OF STRUCTURATION

To see what is inside a kaleidoscope, we turn it around and look through it from different angles until there is a clear view of patterns made up of many segments (Barrett, 1992, p. 11).

Introduction

The purpose of this chapter is to introduce critical theory, critical ethnography and structuration theory. There are several critical theory approaches researchers can adopt in attempting to understand the diversity of human nature and society. The approach utilised in this study was the methodology of critical ethnography, using Giddens' theory of structuration as an interpretive framework. While structuration theory provides a theoretical framework, it is not considered a methodology or method in itself (Giddens, 1989; Morrow & Brown, 1994; Rose, 1998) and presents no specific steps of 'how to' go about the research process. For this reason, Carspecken's (1996) five stages of critical ethnography have been adopted as the method. This requires data collection and analysis to be undertaken simultaneously. Habermas (1979, p. 25) notes that "how the data is gathered and selected can dramatically shape the potential of the project". Critical ethnography involves several phases of data collection, from deep thick descriptions, where nurses' decisionmaking takes place, to wider socio-historical aspects of the cultural organisation. Quantz (1992) argues that it is critical dialogue which provides the development of social insights in critical theory, rather than the application of methodological rules and methods. Therefore, Carspecken's five stages of critical ethnography were used to guide, rather than dictate, the research process, minimising the potential loss of social insight gained through critical dialogue with participants.

Ethnography

Denzin and Lincoln (1998) claim that ethnography has had many uses and meanings throughout history. Historically, ethnography was a tool developed and applied in anthropology which assumed that each culture had ordered events, material life and ideas that could be logically represented (Solomon, 2000). This positioned the

researcher as an objective observer, placing the data in a scientific or positivist paradigm (Fetterman, 1998). However, while rationalist scholars postulated that knowledge was measurable, the Enlightenment thinkers maintained that sensory experience and interactions with the world were as important (Solomon, 2000). This presented an interpretive research approach that provided deep, rich descriptions of social experience within the natural context. In view of this, either approach can be adopted or elements of both (Carspecken, 1996).

Fetterman (1998, p. 1) defines ethnography as "the science or art of describing a group or culture", raising questions about social organisation, cultural rules and regulations. Therefore, according to this definition, ethnography provides a means of trying to understand another way of life from another person's worldview (Spradley, 1979). Bastian and Mallet (1994, p. 280) point out that culture can have many connotations but generally refers to "beliefs, knowledge, attitudes and values that determine social behaviour". These elements are believed to be shared and understood by the group, although Brodkey (1987, p. 25) argues that it is only an assumption that individuals "see themselves in terms of a group (or groups) to which they belong (or wish to belong)".

The ethnographer spends time in the natural context, operating both as the data collection tool and the interpreter of meaning (Fetterman, 1998). The methodology of ethnography and its associated methods have been criticised over the last few decades, with questions raised about validity and reliability (Hodgson, 2000). Issues surrounding trustworthiness have been addressed by Fetterman (1998, p.18) who comments "Anyone who has ever mistaken a blink for a wink is fully aware of the significance of cultural interpretation", adding that cultural interpretations require "nonjudgmental views of reality". Hammersley (1992, p. 13) asks if ethnography can actually capture and describe "how the world really is". Emerson, Fretz and Shaw (1995) further support Hammersley's concerns in that the researcher can select which voices to present, thereby, the ethnographer assumes "authorial omniscient characteristics" (Hammersley & Atkinson, 1994, p. 256). This can leave ethnography problematic since a nonjudgmental position assumes the researcher to be unbiased, aware of their personal and researcher value system and capable of acknowledging

and addressing power issues throughout the research study (Altheide & Johnson, 1998; Scheller, Crystal, & Lewellen, 1994). Despite these criticisms, interpretive research, including critical studies, concedes and embraces subjectivity rather than considering it as totally problematic. One method in addressing researcher subjectivity is by doing research *with*, and *for*, rather than *on* people (Reason, 1988). However, Manias and Street (2001c) emphasise that even collaborative research aimed at working with participants can never be infallible. One possible reason for this is that good intentions can have unintentional or unacknowledged consequences (Giddens, 1984). Therefore, issues of power and control should not be ignored but become part of the research journey.

Getting 'critical' in ethnography

Giddens (1984, p. 283) talks about any social practice as "the means of getting things done" and, as such, directly implies that power in human action intersects all aspects of cultural life. Research also implies the power of getting things done through action and interaction that cannot be ignored. Critical ethnography deliberately addresses these issues of power and control. The investigation extends beyond interpretative ethnography to consciously draw attention to the subtle and pervasive ways in which language, knowledge and culture shape interactions (Swartz, 1997), and unveil what Thomas (1993, p. vii) refers to as a "subversive worldview". Collaborative research, as earlier suggested by Manias and Street (2001c), makes it possible to identify and confront the subtle ways in which one person or group attempts to control another. Because of this, the researcher too must be aware of their potential power by constantly reflecting on what they do and say throughout the research process as critical theory within an ethnographic design attempts to do.

The development of critical theory

Critical theory originated over 70 years ago in Germany, and is associated with the Frankfurt School comprising of a group of philosophers and social scientists, including Max Horkheimer, Theodore Adorno, and Herbert Marcuse (Kellner, 1993). The purpose of the school, according to Stevens (1989, p. 4), was to present a Marxist-orientated research centre "based on critical Marxist self-understanding and Hegelian dialectics that stressed the principles of contradiction, change and

movement". The intention of linking social phenomena to wider socio-historical events was to expose prevailing systems and contradictions of domination, hidden assumptions, ideologies and discourses, so that social situations could be redefined. Lodh (1996) suggests that critical theory was introduced as a philosophical position, with the central task of freeing or 'emancipating' people by actively addressing patterns of power and domination. Critical questioning included exposing mainstream or 'positivist' research assumptions (i.e. the manipulation of variables and application of statistical tests), so that knowledge as an interested social and institutional practice could be better understood. This critique of positivism was further extended to interpretivism (Creswell, 2003; Lodh, 1996; Morrow & Brown, 1994).

Interpretive research attempts to make sense of the world, by the individual or group creating or constructing his or her own understanding and knowledge through interaction, drawing on what is already known and believed (Guba & Lincoln, 1985). Although interpretivism challenged positivist approaches, it still failed to address the political nature of society. For example, interpretive ethnographers are more interested in cultural meaning than social action, taking snapshots of cultural practices with no intention of changing them (Marcus & Fischer, 1986). Borrowing Morrow and Brown's words (1994, p. 59)

interpretivisim fails to address the social forces that act behind the backs of participants . . . the issue of power is ignored since external socioeconomic structures and causality are excluded.

Thus, when salient political elements within society that may reinforce a person's belief or shape reality are not exposed, 'false consciousness' may be produced (Freire, 1972). False consciousness is the adoption of false ideas that have been generated by a privileged or dominant group, at the expense of others. In response to this criticism, Denzin and Lincoln (1998) propose 'critical interpretivism' as a means to incorporate social critique, in which the critical researcher should adopt an action agenda for reform which may change the lives of the participants, intertwining politics and political agendas with inquiry (Creswell, 2003). Carspecken (1996, p. 3) calls such a researcher a "criticalist".

Following the Frankfurt school, several emergent forms of critical inquiry evolved breaking from the original Marxist philosophy, including feminist theory, radical discourse, and critical social science. These interpretations of critical theory, according to Kincheloe and McLaren (1998, p. 260), create confusion with regard to what critical theory actually is and is often "misunderstood" because of its ability to disrupt and challenge the "status quo", producing "undeniably dangerous knowledge". Street (1992) supports this misunderstanding along with other writers (Kellner, 1993; Morrow & Brown, 1994; Stevens, 1989). Regardless of which emergent school of critical theory a researcher adopts, there are several common assumptions that should be acknowledged during a critical research approach, as proposed by Kincheloe and McLaren (1998, p. 263):

That all thought is fundamentally mediated in power relations that are social and historically constituted; that facts can never be isolated from the domain of values or removed from some form of ideological inscription; that the relationship between concept and object and between signifier and signified is never stable or fixed and is often mediated by the social relations of capitalist production and consumption; that language is central to the formation of subjectivity (conscious and unconscious awareness); that certain groups in any society are privileged over others, and although the reasons for this privileging may vary widely, the oppression that characterizes contemporary societies is most forcefully reproduced when subordinates accept their social status as natural, necessary or inevitable; that oppression has many faces and that focusing on only one at the expense of others (e.g. class oppression versus racism) often elides the interconnections among them; and finally, that mainstream research practices are generally, although most often unwittingly, implicated in the reproduction of system of class, race and gender oppression.

Carspecken (1996, p. 5) groups these assumptions into two main categories: 1) the value orientation of critical researchers, and 2) principles of critical epistemology (theory of knowledge).

Why critical theory?

Critical theory's venture is to address the relationship between theory and practice by increasing understanding of self and others in relation to social, political and economic structures that produce and distribute knowledge. Knowledge within a critical epistemology is often equated to cultural knowledge, the 'knowing how' of knowledge rather than the 'knowing that' (Polanyi, 1958). Giddens (1984) refers to

these different types of knowing as knowledgeability. Knowledge and understanding, in turn shape society, which may be distorted to serve one particular person or group over another through the process of hegemony or cultural reproduction (Carr & Kemmis, 1994). Hegemony is described as the predominant influence, as of a state, region, or group, over another or others (Dictionary of the English Language, 2000), although people can become part of their own domination through this process. Giddens (1979) proposes that this is achieved through written, and often unspoken, rules, which in turn are reinforced through generally accepted social action. Thus, agents are not passive recipients or 'cultural dopes' (Garfinkel, 1963), but rather they are active participants in this shaping process (Giddens, 1984). If, and when, social action is reflected upon, by reflexive monitoring (Giddens, 1984), dominant ideologies, that can distort reality, may be exposed and contested so that change might occur. Such distortions can be found in nursing.

Making sense of nursing from a social and institutional perspective within a critical framework is, therefore, considered an emancipatory or liberating methodological approach, aimed beyond what nursing *is*, and toward how nursing has *come to be* what it is (Simon & Dippo, 1986). Mill, Allen and Morrow (2001, p. 121) comment that "the emphasis on action and change that is seen in critical theory has the potential to strengthen the connection between theory and practice in nursing", and considered as necessary when exploring nursing within the social context. A wide range of nursing studies have recently been conducted using a critical theoretical position (e.g. Maloney, 1996; Manias & Street, 2001c; Reutter, Neufeld, & Harrison, 1995; Stevens & Hall, 1992; Street, 1992; Titchen & Binnie, 1995; Wells, 1995). Wells (1995, p. 52) summarises the role critical theory plays in nursing:

Critical theory thus offers a research perspective that may help uncover the nature of enabling and/or restrictive practices, and thereby create a space for potential change and, ultimately, a better quality of care for patients.

Critical theory's worldview

Critical research adopts a particular worldview centred on value-based assumptions. Assumptions are made about how the world is understood (epistemology) and related to (ontology), producing multi-perspectives in terms of meaning and interpretation depending on who is 'looking', and who is 'doing' the research (Lodh, 1996). This "methodological uniqueness", according to Morrow and Brown (1994, p. 228), is associated with two terms: reflexivity and dialectic and are important aspects that can facilitate trustworthiness of the study (Wainwright, 1997). Rigour, or trustworthiness, is discussed in the following method's chapter.

Reflexivity

Reflexivity becomes a predominant technique when 'doing' critical research that recognises the complex inter-connections between society, history, organisations, theory and practice (Lodh, 1996). As previously mentioned, 'doing' research is value-laden since the researcher is the instrument or tool who collects and interprets the data through their personal lens of reality (Creswell, 2003), or one's personal kaleidoscope (Barrett, 1992). Therefore, the critical principle of self-reflection attempts to expose hidden assumptions and position the researcher in terms of their worldview and values. Giddens (1984, p. xxiii) believes that agents are capable of rational reflection that enables social practice to be revised in light of new information, yet "operates only partly at a discursive level". Reflexivity of self, and others, has the potential of transforming action as agents have the capacity to decide to act otherwise, therefore, places structuration theory within a critical theoretical framework. Freire (1972, p. 28) speaks about this deliberate conscious process as praxis; purposeful "reflection and action upon the world in order to transform it". Similarly, Schön (1983) writes about reflection 'in' and 'on' practice as a method of making practical tacit knowledge in practice, more discursive. Reflection in practice emulates the 'here and now' of practice (practical knowing how), unlike reflection on 'past' practice, often revealing theory about 'knowing that'.

Dialectic

Morrow and Brown's (1994) second 'methodological uniqueness' is the dialectic. Dialectic is "the science of arguing well" (Augustine (trans. J. Marchand), ud, para. 1). Hence, dialectic creates argument that further generates new understanding as knowledge. Therefore, dialogue is an important critical endeavour aimed at increasing researcher-researchee awareness (Korth, 2002), which requires a partnership approach that is empowering so that the "voice of participants become a united voice for reform and change" (Creswell, 2003, p. 10). Morrow and Brown (1994, p. 59), in contrast, claim that "the notion of something as dialectical is slippery and usually not very precise". Carr and Kemmis's (1994, p. 33) explanation of 'dialectic' is a process of searching and discovering contradictions which "demands reflection back and forth between elements such as part and whole, knowledge and action, process and product, subject and object, being and becoming, structure and function". As contradictions are revealed, new constructive thinking and action evolve, informing practice. In other words, power roles, sectional interests and hegemonic structures are exposed which may explain how society is shaped and have the potential to be changed. It is through dialogue or the speaking about meanings and experience that creates 'potential' for change, deliberately challenging imbalances in power, control and oppression (Kincheloe & McLaren, 1998). However, transformation of practice does not necessarily mean change has to occur, but rather attempts to illuminate the phenomenon of interest by transforming understanding (Carr & Kemmis, 1994). Giddens (1984) shares Carr and Kemmis's recognition that change is not guaranteed and may be constrained or, perhaps, not even desired.

The double hermeneutic loop - a dialectic approach

A dialectical approach is a 'critical' feature in structuration theory. Giddens terms the dialectic the *double hermeneutic* that "spirals or *loops* in and out of everyday knowledge" (Morrow & Brown 1994, p. 243). Sociological knowledge enters into, becomes part of, and helps to transform the very world that it seeks to explain and analyse (Giddens, 1996). Giddens (1984, p. 284) proposes that initial social practices the researcher observes are "second order perceptions that can become first order through dialogue with agents who are engaged within social life itself". Giddens modifies Gadamer's concept of hermeneutic inquiry that fuses two frames of meaning or horizons (Kilminster, 1991). This fusion is achieved through the dialogic process of translation and interpretation, which Giddens (1984) calls the *double hermeneutic loop*.

Carspecken (1996, p. 154) stresses that dialogue between the researcher-researched are "rarely naturalistic", since the participant speaks from deliberate reflective

thought, while the skilled researcher prompts reflexivity through interview techniques. Therefore, sociology has a critical agenda since both social agents and researchers are self-reflexive and, together through interaction (dialogue) create the double hermeneutic.

Critical ethnography

Critical ethnography adopts the same methods as applied in ethnography, although the purpose is different since it has an 'emancipatory' interest. This means that the research is not only descriptive or interpretative, but the researcher and participants are actively engaged in critical dialogue with the intent of exposing personal, cultural, and political aspects of social action (Brodkey, 1987). Kincheloe and McLaren (1998, p. 266) comment that "critical ethnography continues to redefine itself through its alliances with recent theoretical currents". The theoretical current selected in this study to guide the ethnographic inquiry, from a critical perspective, was Giddens' theory of structuration, which addresses the notion of social practice through the reciprocal relationship of agency and structure when attempting to understand nurses' decision-making.

Giddens (1984, p. 284) writes that "all social research has a necessary cultural ethnographic or 'anthropological' aspect to it", since meaning in the field is already constituted. The condition of entry for the researcher to this 'constituted' field is that they become familiar with what agents *already know* and *have to know*, to go on in daily life. Kushner and Morrow (2003, p. 41) support this concept of critical ethnography as an "every day experience", necessary to illustrate how social life is organised. Like ethnography, a critical ethnographer requires prolonged periods of time in the context of the 'field' focusing on meaning where socio-cultural phenomena are observed with the aim of making the hidden unhidden (Colon, Taylor, & Willis, 2000). For that reason, "ethnographic research must be deliberately and consciously political" (Quantz, 1992, p. 448).

The participants in critical ethnography are purposefully selected because of what the researcher may think they know, with the aim of gaining rich and meaningful data (Carspecken, 1996). This process, in the present study, was intended to reveal

common cultural understanding of nurses' decision-making within the unit, with particular attention to political aspects that controlled the decision process. Participants' experiences may not necessarily represent shared understanding, but rather reflect dominant ideologies including structural features of inequalities based on class, gender and ethnicity (Layder, 1994). This requires the research process to be located within a historical-structural framework that identifies the reasons for inequality and unequal power relations among social groups (Ulichny, 1997). Exploration of subtle and pervasive ways that shape both the participants' and researcher's understanding is essential if research is to have the possibility of transforming social practice, if and when considered necessary by the participants to expose researcher bias in terms of what data are collected, how the data are analysed and how those data are presented.

Conditions associated with critical ethnography

Simon and Dippo (1986, p. 197) identify three conditions that must be met to consider critical ethnography as 'critical' that coincide with Kincheloe and McLaren's (1998, p. 263) common assumptions of critical theory. First, critical ethnography must define data and analytic procedures consistent with the project, addressing the social practices operating in groups and determining meaning and action. Mainstream research practices may unknowingly reproduce system of class, race and gender oppression by not isolating facts from the domain of values or ideological inscription, which requires questioning of how values or ideas have come to be. Because oppression has many faces, Simon and Dippo (1986) suggest that focusing on one type of domination without acknowledging the wider socio-political interconnections may limit a fuller understanding of action and meaning.

Second, the research must have an emancipatory interest in helping people understand their own actions within the historical and social context, and be prepared to challenge and transform the conditions of oppressive and inequitable moral and social practice (Simon & Dippo, 1986). Acknowledging that all thought is fundamentally mediated in power relations that are social and historically constituted, inequalities between certain groups in any society can be revealed and reasons sought for their privileged position. By helping people understand their position in society, they then have the possibility to question and reflect on this position with the potential to change, reinforcing critical ethnography's emancipatory intent. This reflects Giddens (1984) notion of the double hermeneutic, in which new understanding is generated during researcher-participant[s] dialogue and interaction, emphasising Freire's (1972) thought that, through communication, people liberate each other.

Habermas's theory of communicative action addresses emancipatory dialogue, which he once termed the 'ideal speech situation' (Crotty, 1998). This is something that should be aimed for when addressing the *what could be* aspect of critical research, although in reality this may never be achieved. Acknowledging why this is not achieved may itself reveal inequalities in power relations and structures and what processes continue the production and reproduction of such inequalities (Giddens, 1984). Promoting reflection on collective social practices has the intent of determining meaning, enabling people to understand their own actions, and the socio-historical context that shapes their practice (Colon, Taylor, & Willis, 2000). Thus, critical research has the potential of being empowering (people give and take power - i.e. dialectic of control), and emancipatory (aiming for something better, fairer and more equal). Consequently, critical ethnography shares the 'danger of being disruptive' since it is about giving opportunity for silent voices to be heard (Freire, 1972) and involves the interplay of power-knowledge relations in local and specific settings (Fay, 1987; Habermas, 1972; Street, 1992; Ulichny, 1997).

Finally, Simon and Dippo's (1986) third condition is that the critical ethnographer is required to concede that their personal worldview is also constituted and regulated through historical relations of power and existing material conditions. This involves not only recognising researcher subjectivity within the research, but rather becoming aware, through self-reflective practice, of the historical and cultural influences that shape their own beliefs, worldviews and values (Campbell, 1999; Hammersley & Atkinson, 1994; Manias & Street, 2001c). Language, according Kincheloe and McLaren (1998) is central to the formation of subjectivity (conscious and unconscious awareness), therefore, "language is a form of power" (Thomas, 1993, p.

45). Dialogue is an important tool in gaining an understanding of subjectivity, accepting that the affiliation between concept and object, and between signifier and signified, is never stable or fixed (Giddens, 1984).

Carspecken (1996) supports previous writers' concept of critical theory and the role of the critical ethnographer. The researcher must proclaim their own worldview as being constituted and regulated through historical relations of power and existing material conditions. Critical ethnography, according to Grundy (1987, p. 19), places the researcher within "the natural context to examine asymmetrical power relations", and so has a political orientation towards addressing imbalances. Giddens (1984) would disagree with the claim that power relations are 'asymmetrical', but rather power is constantly created and recreated at different moments in time-space during interaction. The focus of power is in relation to control - who has control over whom or what - expressed as the dialectic of control. When power is deliberately spoken about, there is the risk of the status quo becoming unstable, challenging trusted and often unquestioned practices. This has the possibility of producing a perception of danger that is threatening to one's sense of "ontological security" (Giddens 1984, p. 375). This leaves the researcher, such as myself, to question personal motives when conducting this type of research since it may have moral and ethical consequences. Indeed, it may do harm rather than good (Giddens, 1984). Carspecken (1996, p.207) summarises this point:

Remember that, morally social research will either hurt or help people: it rarely has purely neutral effects with respect to human welfare. Making your research project as democratic as possible, from start to finish, is the best way to help rather than harm.

Structuration theory's 'weakness' as a critical theory

Structuration theory does not necessarily reflect Simon and Dippo's (1984) emancipatory intent to 'free and transform people'. However, sociology has argued for an alternative future utilising a critical perspective to study not only 'what is', but 'what might be' (Simon & Dippo, 1986; Ulichny, 1997), and this is something that Giddens advocates in his work, consistent with his critical theoretical perspective (Cohen, 1998). Giddens (1990) combines facts about 'what is', or *life politics*, with the ethics of 'what might be', or *emancipatory politics*, in order to question how we

should live our lives. Life politics in the renal unit, for instance, deals with day-today concerns, yet there is an assumption that emancipatory politics is always at play, the nurses seeking new and better ways to improve decision outcomes (Cohen, 1998). Therefore, any sociological approach to understanding society, according to Giddens (1984), is inherently 'critical' in so far as it has the potential to challenge current stable and continuous conditions. The interconnectedness between reflexivity and language provides social meanings and are central issues in structuration theory, necessary for the "illumination of concrete process of social life" (Giddens 1984, p. xvii). Once social life is illuminated, the generation of new meaning, hence the potential for change, is created. Consequently, emancipation in structuration theory is understood as a 'potential' rather than an 'actual' outcome of critical research. It is for this reason that Giddens' concept of critical theory differs from the Frankfurt school position and, therefore, has been criticised as being 'weak' (Morrow & Brown, 1994). Structuration theory promotes social life as a more flexible and openended account of historical change (Morrow & Brown, 1994). Despite this, structuration theory explores elements associated with critical theory, such as power, control, authority, dominance, reflexivity, dialectic and transformative capacity.

Structuration theory - redefining agency and structure

Giddens (1979, p. 55) explains agency as the agent's reflexive capacity to monitor his or her's "continuous flow of conduct" during social activity, while social structures, rules and resources, are created and recreated through this conduct that can enable or constrain a person's degree of agency. Whether the agent produces social life through voluntary action or agency, or whether it is the social structures of social rules and processes that operate independently of the agent that determines agency, is a longstanding debate in social theory (Seidman, 1998). Giddens (1984) attempts to address the competing dualisms of hermeneutics/phenomenology, associated with agency, and structuralist/ functionalists, associated with structuralism, as a *duality*; "a reciprocal relationship where neither structure nor action can exist independently" (Giddens, 1984, p. 25). Giddens tries to remain uncommitted to either epistemological perspective in his rejection of the positivism and subjectivism divide (dualism) although, according to Bryant and Jary (1991, p. 1) it is to social *ontology* that his work on structuration theory is principally devoted. Giddens (1991b) comments that structuration theory is only one part of his writings as a whole, and is the part concerned with developing an ontological framework for the study of human social activities that has been adopted in this study:

By 'ontology' here, I mean a conceptual investigation of the nature of human actions, social institutions and the interrelationships between action and institutions (Giddens, 1991b, p. 201).

From this perspective, social practices are more than random individual acts or social forces, but rather both represent the same thing, like two sides of the same coin (Layder, 1994). This duality concept is illustrated in Figure 3.1 below.



Figure 3.1. Theory of structuration: Agency-structure duality (adapted from Kaspersen, 1995, p. 33).

Structuration, for Giddens (1984, pp. 25-26), refers to ways in which social systems (macro) are produced and reproduced in social interaction (micro) as a duality. Interaction infers that people are relatively free to act as they will. Structuration theory attempts to address both the 'micro' and 'macro' aspects of nurses' decision-making. In this study, for instance, nurses' decision-making focused on the micro aspects of society of how the nurses themselves had the capacity to make decisions and transform nursing practices through their voluntary actions and knowledge of 'how to go about in the world'. Simultaneously, nurses' decision-making was addressed in terms of wider societal implications at the macro level.

An eclectic theory

In attempting to provide an account of duality, Giddens incorporates several sociological theories, redefining terms and their associations that he presents as separate concepts purely for analysis reasons. However, this eclectic approach has been subject to much debate (e.g. Held & Thompson, 1989; Johnson, Dandekar, &

Ashworth, 1984; Mouzelis, 1991). Major sources of criticism include Giddens' assumption that agents have the capacity to act freely and are knowledgeable about social institutions (Clegg, 1989, 1994). Maloney (1996) supports Giddens' ideas in that structuration theory values agents' understanding about their social world, and identifies ways in which they contribute to the production and reproduction of structures through ordinary day-to-day life. In contrast, Murgatroyd (1989, p. 152) argues that Giddens excludes gender dimensions in terms of power encounters during social relations, so only tells "half the story". In defense, Gauntlett (2002) explains that gender, like any other socially constructed phenomenon, including culture, is constituted through language and social rules. Should people break with these normative rules, agents can respond aggressively to this breach of 'shared' understanding of 'normal behaviour'. Giddens (1991b, p. 215-216) personally addresses this criticism, at a later time, arguing that "masculinity and femininity are not simply given, but repeatedly reconstituted and reformed in the context of power differentials". This implies that gender is socially produced and reproduced by how structure, action and power are constituted. Gauntlett (2002) further praises Giddens' duality position since old-school 'classical' sociology and contemporary awareness of changes in society are combined.

Consequently, an anthology of theoretical ideas has been produced from both schools of thought. The eclectic collection of theorists incorporated by Giddens in structuration theory includes Goffman (1959; 1961), Garfinkel (1963), Foucault (1979), Marx (1970), Weber (1947), Bhaskar (1979); Durkheim (1982), Freud (1969), Wittgenstein (1972), Hägerstrand (1975), Bourdieu (1980), and Habermas (1970; 1972). This cocktail contributes to the complexity of Giddens' works and makes them, at times, difficult to follow and challenging for the researcher. Despite this, structuration theory provided an approach to explore nurses' decision-making, sensitising the researcher to concepts related to agency and structures as a duality, and the question of addressing how nurses produce (create) and reproduce (recreate and maintain) the structures (rules and resources) through their actions, and thereby, constrain and enable the decision process.

Selected structuration concepts used in this study

Layder (1994, p.125) explains that structuration theory refers to a "wide range of topics and interests" from which the researcher can draw from as either parts or a whole. In this study, three 'parts' or concepts from structuration theory were selected for analysis purposes, which I believed would assist with answering the research questions. These parts then provided title headings for each of the finding chapters. These are briefly introduced here and, are then further explored within their subsequent chapters. Finally, 'the dialectic of control' (Giddens, 1984), which has been threaded throughout each of the finding chapters, is discussed.

Contextuality

Contextuality is a broad concept used by Giddens that incorporates several aspects, including time-space, locale, encounters and routines. Time, space and repetition are fundamental to structuration theory, closely intertwined and explored in terms of social interaction (Giddens, 1979). Time intersects with space, influencing how space and time are utilised, creating locales where recursive patterns of interaction maintain cycles of social activity (Giddens, 1984). For example, in the renal unit the first hour of the day was generally a time for preparing the haemodialysis machines and involved nurse-nurse interaction, unlike an hour later, when time-space was focused on nurse-patient interaction as the patients arrived to commence dialysis. Consequently, time-space is centred around the nurse or person who is 'positioned' during an encounter and is continually transforming. Stability of time-space in the context, expressed as routines, provided a sense of trust and safety in that the nurses knew their position within the work setting, and expected code of conduct governed by rules. By following rules and acknowledging authoritative positioning, common goals could be achieved, such as providing dialysis care and making decisions.

Social structures: rules and resources

Structures, according to Giddens (1984, p. 377), "exist only as memory traces" that are recursively instantiated in day-to-day practice, expressed as "rules-resource sets" that can be enabling and constraining. Consequently, structures are patterned across time and space, and are not independent of us but rather created through social interaction (Giddens, 1984). Structures support decision-making by controlling how decisions are made, by whom and for what purpose. Poole, Seibold and McPhee (1985), for example, modified structuration theory to specifically focus on group complexities and communication networks, addressing computerised group decision support systems within workplaces. Their findings showed that human choices created groups and social structures by how the group members acted and by what they said. This supports Giddens' (1984) idea that social structures are figuratively brought to life as a 'virtual order' through action. In other words, structures exist because of what people do and how they think about action, which emerges from practice itself, providing a "social ontology about being in the world" (Giddens, 1984, p. xx). Revealing social ontology is attempted by exploring practical tacit knowledge so that new understanding is created.

Rose (1998) writes about how Giddens divides social structures into three sections for analytical convenience; *structures of signification* are the rules of language necessary for communication; *structures of legitimation* are normative rules that the agents follow and draw on to justify their personal actions, and actions of others; and *structures of domination* represented through allocative and authoritative resources agents draw on to exercise power.

Structures of signification provided language rules so that meaning could be generated. Meanings provided rules of social conduct and resources of authority that could enable and constrain communication. Thus, language assisted in the constitution of social life. For example, the routine act of washing and lubricating the haemodialysis machines on a Saturday shift followed institutional social structures. The nurses recreated the rule (*rule of signification* - give meaning to the rule) by routinely enacting the rule, which, in turn, reinforced the rule as being 'rightful' (*rule of domination* - institutional rule). However, had the nurses deliberately rejected this task (*reflexivity and agency*), questioning the rule's authority and meaning, an alternative approach may have been presented, potentially changing practice. However, fear of sanctions (*rules of legitimation*) may have limited the nurses' behaviour, leading them to choose not to exercise their agency, therefore, maintaining stability by continuing the 'routine' task. Alternatively, this routine task may never be questioned, rather accepted as a normative practice that

"just is". Furthermore, Giddens (1984) emphasises that there is always the possibility of any social structure naturally changing across time-space.

Knowledgeability

Structuration theory assumes that human beings are knowledgeable agents who know a great deal about the conditions and consequences of what they do in their day-today activities and have the ability to change and transform social practice through agency. Agency is not the intention people have to act, but rather their capacity for acting in the first place, implying "power to do" (Giddens, 1984, p. 9). Giddens claims that every social agent knows a great deal about the conditions of reproduction in society, of which he or she is a member, yet at the same time there is a great deal that they do not know about the conditions and consequences of their activities but which nevertheless influence their course (Giddens, 1984). Giddens proposes that all humans are inherently reflexive but this process can become automatic, constituting practical knowledge (Giddens, 1984). It is the recursive (produced/reproduced) nature of practical knowledge that Giddens is particularly concerned with:

the knowledge is embedded in the routines (whatever is done habitually) in the day-to-day activities that stretches across time-space and it is this repetitiveness that grounds the recursive nature of social life (the duality of structure) that is produced and reproduced (Giddens, 1984, p. xxiii).

Orlikowski (1992; 2001) employed structuration theory in several studies which addressed how people interact with workplace technology. Her findings predominantly showed that people within the context of business apply technology to reinforce social practice (recursive nature of social life) rather than transform practice. Several reasons were identified for people 'doing much of the same thing' under such circumstances, including peoples' choice, influences within their context, political pressures, career structures and constraints beyond their control. Orlikowski (2001) concluded that most people are unaware of their institutional contexts, accepting reality as a given, rather than thinking it can be changed, or having the motivation and energy to do so.

Therefore, structuration theory has the aim of observing practice and speaking about practice, with the intent of increasing peoples' awareness about their world. This

may then create possibilities for changing the way things are, hopefully for the better (Giddens, 1984). Structuration theory addresses how people create the systems and social structures that then, in turn, shape them (Gauntlett, 2002). By acknowledging how these structures are created and recreated, the potential to transform them is presented. Thus, nurses' decision-making is explored here in relation to both social interaction and social systems in the world, producing what Giddens (1984) terms a recursive (produced/reproduced) relationship between the generation of social structures (rules and resources) and action itself. Adopting Giddens' concept of contextuality, social structures and knowledgeability in this study, facilitated the exploration of nurses' decision-making within the renal unit. The nurses' practical knowledge was examined and routine practice analysed in terms of space-time and social interaction. Social practice, according to Giddens (1984), does not exist in isolation; rather, during interaction people automatically draw upon social structures. Therefore, the nurses required contextual knowledge and ability (*knowledgeability*) when making decisions that, over time, once learnt became routine, taken-for-granted nursing practice (contextuality). The exercise of control, in terms of alternating autonomy and dependence during decision-making encounters, was assisted by the nurses' knowledgeability of social structures and contextuality. As previously mentioned, Giddens (1984) calls this control, through which power can be exercised at an individual and collective level, the *dialectic of control*.

The dialectic of control

Giddens (1984, p. 16) does not depict structures of domination as creating 'docile bodies', but rather these structures are produced and reproduced by the agents themselves through interaction. Power is viewed as having a transformative capacity, defined in terms of intent or will. Power has the capacity to achieve desired and intended outcomes, which can work for the 'authoritative' and 'subordinated' through the dialectic of control (Layder, 1994). Giddens (1984, p. 15-16) says:

... all forms of dependence offer some resources whereby those who are subordinated can influence the activities of their superiors. This is what I call the dialectic of control in social systems (Giddens, 1984, p.15-16).

Social exchange theory, an approach which addresses dependence aspects of power, integral to any "part of any social relationship" (Bacharach & Lawler, 1981, p. 18),

implies that interdependence is the norm, whereby human experiences rarely occur in isolation. Autonomy and dependence vary across time-space and during interaction, thereby representing a power-dependence theory (Blau, 1963). This theory assumes that the greater a person's autonomy, the greater their power, while the more dependent a person is, the more powerful the other person becomes. This notion is similar to Giddens' concept of autonomy-dependence, which represents alternating dimensions of power as 'dialectic' (Layder, 1994). Knowing the rules and accessing the resources may be considered as privileging one person over another, depending on how the structures are used during interaction. For example, even a dependent person can access social structures, and therefore, has the capacity to act differently and control the actions of another person (Kaspersen, 1995), as repeatedly shown in Maloney's (1996) thesis. Hence, a nurse referring a decision to another nurse may appear a dependent act, but making the choice to defer in the first place could be considered an autonomous act.

In his book, critical ethnography, Carspecken (1996, p. 128) comments on Giddens' (1979) convincing argument that "power accompanies all action" since all actions can make a difference. In addition, he writes, "agents are not forced to act, instead, are influenced by cultural conditions (norms and social conduct), or resource/constraints (law and economics) to act in broadly predictable ways" (Carspecken, 1996, p. 37), yet always have the "potential to act otherwise" [agency] (Carspecken, 1996, p. 128). Continuity of social structures, including power, presumes that consensus is agreed in terms of who is autonomous, hence, who has control, and who is dependent within the context of social interaction.

Conclusion

This chapter has introduced concepts of critical ethnography as the methodology adopted in this study. Principles of critical theory and ethnography were discussed. This was followed by an exposition of Giddens' (1984) structuration theory, which is used as the theoretical framework for the analysis of those data and provided chapter themes for the study. Structuration theory assumes that social actions create social structures, which in turn creates social actions via the process of duality. This then produces and reproduces social practice that usually survives over time as recursive patterns and routine practices. It is with this understanding that structuration theory informed this study providing a tool to examine day-to-day habitual actions of knowledgeable agents. The critical aspects of structuration theory address how the nurses use time-space during encounters, drawing from social structures as knowledgeable agents. Therefore, since the nurses constitute structures through their action, there is an assumption that they have the ability, and capacity, to change them. Reflexivity, an inherent feature of all agents, assists in making social practice clearer and explaining why nurses act as they do, bringing knowledge from the tacit practical level, to a level that can be discursively examined. Finally, the dialectic of control was introduced as a theme that has been threaded throughout each finding chapter to further illuminate decision-making from a political perspective.

CHAPTER FOUR: THE STUDY'S RESEARCH METHODS

We see the term [ethnography] as referring primarily to a particular method or set of methods. In its most characteristic form it involves the ethnographer participating, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions – in fact collecting whatever data are available to throw light on the issues that are the focus of the research question (Hammersley & Atkinson, 1995, p. 1).

Introduction

The methods of ethnography, embedded within a critical theoretical framework, were applied in this study to identify aspects of control on nurses' decision-making within the unit. The research, contextual and exploratory, required a flexible method to capture the interaction between social action and structures. Therefore, ethnographic methods of fieldwork, participant-observation, interviews, self-reflection, and documentation review provided an abundance of data that were collected over an 11-month period. This chapter introduces the context of the study location, followed by simultaneous introduction of the research design and issues of rigour. Carspecken's (1996) five-stages of critical ethnography loosely directed the data collection, while concepts from structuration theory guided the analysis. Finally, ethical concerns are presented.

The research setting

The study was conducted in a renal unit located within an Australian hospital in Queensland that serves regional, rural and remote regions. Twenty-six nurses, employed either full or part time, provided both peritoneal and haemodialysis care. The nurses, (for explanation of positions/roles refer to glossary- appendix 6), included one Enrolled Nurse (EN), sixteen Registered Nurses (RN), seven Clinical Nurses (CN) and two Nurse Managers - the Nurse Practice Co-ordinator (NPC = Nurse Unit Manager) and the Clinical Nurse Consultant (CNC = Clinical Nurse Specialist). With the exception of seven of the nurses, all the nurses worked within the unit for the total 11-month duration. The exceptions were the Nurse Practice Co-ordinator who arrived mid-way during the study, two first year graduate Nurses who

were on five-month rotations, two experienced Nurses who stayed for less than three months, and the Enrolled and Clinical Nurses who predominantly worked in the satellite unit. This relatively small turnover of nurses assisted in the recruitment and retention of long-term participants.

Several casual or relief nurses periodically worked in the unit, although they were not included as participants in the study. Renal technicians were also available to maintain and service the dialysis equipment when necessary, but had no direct role in providing patient treatment or care. Since the nephrologist was a visiting medical officer, his time had to be distributed between all renal services provided by the regional health service district. For this reason, pre-dialysis and post-renal transplant clinics were not conducted within the unit. Therefore, this study focused predominantly on decision-making emerging from the peritoneal and haemodialysis hospital renal setting, although all aspects of decision-making involving the nurses were of interest.

Time spent in the renal unit, observing and interviewing the nurses, was varied, ranging from two to twenty hours per week depending on the research stage. Even though the patients, families and other health care professionals were not included as participants, they were acknowledged indirectly through the nurse participants' data.

Approximately 60 percent of the patients were Indigenous Australians, many of whom lived in rural and remote areas. The distance from renal health care services required patients to relocate, causing prolonged separation from family. As a result, it was not unusual for patients to present to the unit in an acute state, having received minimal pre-dialysis care. Just over 100 patients attended the renal unit during the study period for either peritoneal or haemodialysis. During 2002, an average of 15 haemodialysis sessions per day (n = 4680) were conducted. The nurse/patient ratio was aimed at one nurse to three or four patients determined by the patients' level of acuity. However, for the experienced nurses this ratio could be as high as one nurse to five patients depending on the nurse skill mix available.

The renal unit is modern, creating an aesthetic sense of openness and assurance. The main haemodialysis area houses ten dialysis machines that are arranged along three walls that face towards the centre of the room. When an acute patient requires haemodialysis, a chair is removed to make space for the bed. A further two machines are accommodated in single rooms, one for isolation dialysis and the other for home dialysis training. Adjoining the main haemodialysis unit is peritoneal dialysis, through which the nurses rotate. Patients receiving peritoneal dialysis are either learning to manage their treatment independently or are temporarily in-patients requiring treatment for associated medical problems such as anaemia, hypertension, fluid overload or infection. In contrast, most of the haemodialysis patients are receiving dialysis three times per week, four to five hours at a time. Most patients rely on the nurses to deliver their treatment including the setting up of machines and vene-puncture of fistulas (cannulation and placement of the needles into the arm). Although there are several satellite units located in the community for less dependent patients, availability of machines limit the number of patients who can attend them. Even though the nurses considered at least half of the patients as long-term and stable, these patients remained within the acute hospital setting; a situation that continued throughout the study period, although plans were being established with the aim of providing extra community places.

The research design and rigour of the study

Peacock (1986) once described fieldwork as a process, the researcher seeking truth from the *natives* [participants] in their natural context by 'looking and listening'. How 'truth' is defined is a difficult endeavour since the researcher doing the 'looking and listening' has a preconceived view about the world. One approach in addressing this issue is to present a credible account of what is seen and heard, and assess the rigour of the study. The aim of maintaining rigour is to "minimise error, while maximising accuracy, ensuring that successive steps in a project have been set out clearly and undertaken with scrupulous detail so that they can be judged" (Roberts & Taylor, 1998, p. 172).

Several writers have criticised naturalistic decision-making studies for lacking rigourous design (Hammond, Kelly, Schneider et al., 1966a; Orasanu & Salas, 1993).

Even so, how a study is judged in terms of rigour has been a highly debated topic within both quantitative and qualitative research (Appleton, 1995; Guba & Lincoln, 1981; Morse, Barrett, Mayan, Olson, & Spiers, 2002; Wainwright, 1997). Chenail (1997) appears less concerned with rigour during a study, proposing that the research should be conducted first, so that one can see what is going on:

Qualitative research projects that become too tidy too soon are probably the ones the researchers never gave phenomena a fair chance to show their richness in variety or in which researchers are more interested in "truthifying" their theories than falsifying them (Chenail, 1997, para. 8).

Several qualitative researchers (Creswell, 2003; Denzin & Lincoln, 1998; Koch, 1994; Sandelowski, 2000) argue that the quantitative criteria of validity and reliability to judge a study cannot be applied to qualitative research, rather the researcher must show that the data are trustworthy, well founded and credible. Morse and colleagues (2002, para. 6), in contrast, defend the positivist terms of validity and reliability, as they see this as necessary to avoid further confusion of "unrecognizable" terms that have been applied in qualitative research. Verification, according to Morse et al. (2002, para.16) is the "process of checking, confirming, making sure, and being certain". However, modification of positivist's terms within an interpretive paradigm can further add to this confusion since multiple interpretations, thus, realities cannot be verified in terms of measurable degrees of certainty. Despite this, Morse et al. (2002) refer to 'verification' tactics that are applied throughout the research process to ensure rigour (constructive process), rather than make evaluative judgments at the end of the study (evaluative process), where threats to rigour may not be recognised until too late. Creswell (2003) refutes their argument in that issues of trustworthiness, by establishing credibility, are conducted throughout the stages of qualitative research and not just at the end. Wainwright (1997, para. 65) supports this argument:

The importation of positivist criteria of validity into the qualitative research process is not only unjustified on the grounds of scientificity, it is also grossly inappropriate for the type of knowledge produced by such a perspective. The aim of the qualitative researcher is not to produce a representative and unbiased measurement of the views of a population, but to deepen his or her understanding of a social phenomenon by conducting an in-depth and sensitive analysis of the articulated consciousness of actors involved in that phenomenon. These sentiments are reflected within this critical ethnographic study that applies the techniques of dialogue and reflexivity to facilitate trustworthiness as both a constructive and evaluative process. Critical ethnography's aim is not to accept subjective beliefs at face value, but rather examine such beliefs critically in the context of broader historical and structural analysis (Wainwright, 1997). This requires a "constant inter-weaving of inductive and deductive logic" and between "ethnographic observations made and social critique to re-conceptualise validity in terms of reflexive practice" (Wainwright, 1997, paras. 29-30). For this reason, ideas presented by Morse et al. (2002) have been adopted in this study but within a critical interpretive framework. The two contrasting perspectives of validity and reliability recommended by Morse et al. (2002) and trustworthiness proposed by Guba and Lincoln (1981; 1985) are presented in a table format in Appendix 1.

Germain (1993, p. 262-263), like Morse and colleagues (2002), also applied the terms validity and reliability when assessing trustworthiness in a qualitative ethnographic study. Validity, for Germain (1993), infers how accurately the instrument (researcher) captures the observed reality and how that reality is then reported. Taft (1988), however, preferred the term 'credibility' as an appropriate measure of validity in ethnographic research. Giddens (1984, p. 339) describes credibility criteria as:

hermeneutic in character, used to indicate how the grasping of actors' reasons illuminates what exactly they are doing in light of those reasons . . [w]ho expresses them, in what circumstances, in what discursive style (literal description, metaphor, irony, etc) and with what motives....

In other words, the researcher needs to constantly ask if the participants selected are credible in what they say, and do, at both a practical (tacit) and discursive level, and if not, why not? Inconsistencies, according to Giddens (1984), should not be seen as a weakness, but rather acknowledged for their potential moments in illuminating a topic as it is. Furthermore, the researcher needs to ask how dependable they are as researchers in collecting and analysing the data, reflecting for potential biases and premature conclusions. Germain (1993) refers to this as reliability, which addresses the consistency of data sources and methods of data collection. However, when adopting Giddens' theoretical perspective, any validation process is problematic

since reality, truth, and knowledge are constantly being structured and restructured, produced and reproduced. Consequently, what appears credible today is not necessarily going to be credible tomorrow. Carspecken (1996, p. 84) refers to this as a "sense of truth" gained through social consensus. Therefore, "truth claims are always fallible even when universal consent seems to have been attained" (Carspecken, 1996, p. 84).

There is no one established test of rigour in qualitative research (Koch, 1994; Maggs-Rapport, 2001; Roberts & Taylor, 1998). The researcher should select appropriate means of assessing rigour that reflect the methodological assumptions of the study. Several verification strategies were adopted throughout the study to at least substantiate 'snap-shots' of the nurses' decision-making, combining both construct and evaluative procedures to judge the validity, reliability and overall trustworthiness of the study with the intention of 'minimising error, while maximising accuracy' (Roberts & Taylor, 1998). Rigour of the study in terms of validity or credibility was predominantly achieved by addressing the role of the researcher and participants, investigator responsiveness, participant selection, prolonged observation, and saturation of the data. Reliability (dependability) was established by verification strategies such as simultaneous data collection and analysis, triangulation of data, and member checking. These selected tactics are discussed below, and simultaneously interwoven with the study design since neither rigour nor design should be addressed as two separate entities (Creswell, 2003).

The role of the researcher and participants

Two key areas addressed in promoting a critical approach within the study were the participants' involvement in the study and their voice in the analysis and findings. Street (1989, p. 190) addressed her assumptions that nurses wanted a degree of involvement in terms of her study:

My group work expectations were a product of my own middle-class personal and professional history and this realisation challenged me to justify the necessity of the group work focus for the research. Although I still believe that the research would have been more effective had I acted as a facilitator and recorder of change processes during group work, I also recognised that the group would need to be a decision entered into freely by the research participants. Despite these difficulties Street continued to advocate for collaborative research designs (Street, 1989, 1992). With this in mind, the nurses in this study were invited to contribute and assist within the research as participants rather than as equal contributors or collaborators as proposed by Street. McGuire and colleagues (2000) advocate for participant 'involvement', concluding that integrating the study into the clinical setting and involving clinicians in the research can increase rigour and establish credibility.

The very nature of structuration is that patterns of action and interaction are recursive, although they have the capacity to be changed (Giddens, 1984). When a change does occur, it is important to recognise if this is because of the researcher-participant interaction or something that has occurred naturally. Giddens (1984) emphasises that truth claims can be fallible often based on beliefs, opinions, common sense and mutual knowledge, produced and maintained through consensus and interaction, although conflict and disagreements should also be acknowledged and explored to reveal aspects of social action and structures that can constrain or enable such claims. Giddens refers to this as the 'messiness' of social life (Cohen, 1998). It was essential that as the researcher I did not take 'valid' and 'mutually agreed' knowledge unquestioningly, since shared understandings could express the outsider's (etic) perspective at the cost of the insider's (emic) point of view. Carspecken's (1996) five-stage methods initially positions the researcher in the etic, or outsider, position to establish a primary record, which is later used as a cross-reference when gaining insider's or emic perspectives.

Insider or outsider?

In ethnographic terms, the etic perspective involved me, as an outsider, 'looking in' at nursing practices. In contrast, the emic perspective is an insider's view, or the nurses' view. Sometimes, I felt like an insider and part of the group since I had recently worked as a nurse clinician in the unit. However, I could not presume to be an insider, even though this was my perception. At other times, the nurses themselves positioned me outside the group, particularly while I undertook the research. Sometimes, however, I consciously chose to be an outsider for analysis

purposes. This positioning contributed to my decision to resign as a nurse working in the unit to minimise role confusion. This confusion of where I was positioned (i.e. insider/outsider) is not unique, and several writers have discussed the difficulties in separating the role of nurse and researcher (Bonner, 2001; Carolan, 2003; Gerrish, 1997; Pellatt, 2003). Where a person is positioned is not only isolated to researchers but is also problematic for participants themselves. A participant nurse, for instance, could actually be an 'outsider', although perceiving themselves as being 'in'. This shifting etic/emic positioning reflected the dynamic and changing processes involved during social interaction, which in turn reproduced the structures, the rules and resources that enable or constrained where one was positioned at any particular place and time. Despite these positional ambiguities, Hammersley and Atkinson (1995) remind us that researchers are part of the social scene they are studying and must be acknowledged as such. Morse et al. (2002) acknowledge that in critical theory, the researcher's experience becomes part of this dynamic and changing data. Sharing etic/emic experiences with the nurse participants helped to facilitate trustworthiness during data analysis, mirroring Giddens' (1984, p. 374) concept of the double hermeneutic; "the intersect of two frames of meaning". That is, the nurses' frame of meaning and my own. Communicative structures during the nurses' encounters were therefore explored in terms of power since agreement could have derived principally because of power relationships. This exploration was further extended to myself given that I had the potential of accidentally creating uneven power relationships as I knowingly, or unknowingly, exercised my dialectic of control.

Investigator responsiveness

Field notes helped to capture practice and dialogue which, in turn, created my own understanding and, at times, produced new meaning. Burns and Grove (2001) stress how qualitative researchers must be flexible not only in their research design, but how they view the world, ready to change their perspectives as new aspects of the world are unveiled. Therefore, the researcher needs to be open to new ideas. As a result, critical research has an emancipatory intent not only for the researched but also the researcher (Carspecken, 1996; Street, 1992).

Appropriate sampling: participant selection

"Ethnographers rely on their judgment to select the most appropriate members of the subculture or unit based on the research question" (Fetterman, 1998, p. 33). Participants in the present study were purposefully selected, which was not a difficult task since the nurses already knew me as a researcher and a colleague. Participation was an individual nurse's choice, and ranged from being observed working 'on the floor' to prolonged periods of researcher-participant interaction. Twenty-three nurses, working in the main renal unit when the initial four-week observation stage commenced, consented as *participants*. This stage involved prolonged observation focused on nursing practice, and unit culture as a whole. Field notes, rather than audiotape, summarised spontaneous conversations that arose regarding decision-making, which were later used for formulating questions and validating data.

Eleven of the 23 nurses became *informants*, a traditional anthropological term (Fetterman, 1998, p. 48), initially associated with work conducted during colonial times (Fetterman, 1998, p. 62). This meant that I purposefully selected consenting nurses with the aim of obtaining specific information. Additionally, four self-selected nurses became *key participants*. This degree of involvement required prolonged periods of researcher-participant observation, several interviews and reflective conversations. The different levels of participant involvement are presented in table 4.1.

Level of participant involvement			
1	Participants (n=23)	Observation, documented conversations as field notes	
2	Informants (n=11) Researcher selected	Observation, interview (1-2 hours), clarification of issues	
3	Key Participants (n=4) Self-selected	Prolonged periods of observation, several formal & informal interviews, discussion, analysis feedback.	

Table 4.1: Level of nurse participant involvement

All the interviews (key participants and informants), were audiotaped, transcribed, and returned to each particular nurse for validation and clarification. Although the key participants (Rebecca, Emma, Alice and Sarah) were invited to take a more active role in the overall research design, none of them took this opportunity; rather they participated in less active ways by sharing information and providing feedback

on the findings. Therefore, concurrent data collection and analysis was my sole responsibility attempting to provide mutual interaction between what was known and what needed to be known (Morse, Barrett, Mayan et al., 2002).

Simultaneous data collection and analysis: Carspecken's five stages

Two lists of research questions and specific items for study were developed through a brainstorming process as a preliminary step (Carspecken 1996, p. 29). The first list identified issues that could have been investigated, while the second list identified what information was required to address the questions or issues, and are presented in table 4.2 below.

Potential interests to be investigated	What information needs to be	
	collected to address these interests	
Who makes the decisions in the unit	Social routines and rituals in the unit	
What sort of decisions are made	Aims and goals of the unit	
How are decisions implemented and evaluated	Knowledge and surveillance of outcomes	
What forces are behind decision-making procedures	Rules- written and unwritten	
What influence do interrelationships have in decision-	Relationships, communication and power networks	
making		
What relationships exist between the unit and hospital	The culture of decision-making	
locales		
How do broader social structures and institutions impact	Socio-political, economical and historical aspects of	
on decision-making	nurses' decision-making in Australia	
What factors constrain and enable decision-making	Factors that enable and constrain decision processes	
What decisions do nurses identify as nurse decisions	Professional practice and scope of practice	
What role does trust play in decision-making	Personal and shared understanding	
How do economics influence decision-making	Allocation and application of resources	
How is autonomy perceived in nurses' decision-making	Subjective experiences of the nurses	
How do personal and group values, beliefs and norms	Individual versus group dynamics	
influence decision-making		

Table 4. 2: Brainstorming potential issues for preliminary research plan

Carspecken (1996) recommends that it may be possible to address all such questions at some point in one study as they intersect, as they do in this study. At the same time the list had to be flexible as the study progressed, responding in light of new data (Morse, Barrett, Mayan et al., 2002). For example, questions arose regarding how nurses used their personal power to avoid making a decision, a power expressed as 'charm' or 'playfulness'. Carspecken (1996) introduces five non-linear stages of simultaneous data collection and analysis, which can be aligned to Giddens' (1984, p. 28) concepts of social and system integration and are presented as table 4.3 below.

 Table 4.3: Carspecken's 5 stages of critical ethnography aligned with Giddens' social and system integration.

Stage	Description	Data collection or analysis	Structuration theory
Stage 1	Building a primary (etic) record - What is going on?	Fieldwork: non-participant observer, monological, unobtrusive, reflection	Social Integration
Stage 2	Researcher interpretation - etic perspective -	Preliminary reconstructive analysis	Social Integration
Stage 3	Dialogical (emic) data generation - Collaborative stage	Fieldwork - participant observer, interactive, interviews, reflection	Social Integration
Stage 4	Describes systems relations to broader context	Conducting systems analysis between locales/sites/cultures/	System Integration
Stage 5	Explains system relations	Links findings to existing macro-level theories	System Integration

Stages 1 to 3 can represent any ethnographic research design, while 4 and 5 specifically engage the elements of critical theory. Although Carspecken (1996) identified stages 4 and 5 as the 'critical' stages of ethnography, in this study critical theory principles were applied throughout the research study. Stages 1 to 3 addressed the nurses' decision-making during day-to-day encounters (i.e. time-space, presence/co-presence, authority), which Giddens (1984, p. 376) terms social integration. Stages 1 and 2 symbolised a 'monological' approach, where nursing practice was described from an etic perspective; "the perspective of an uninvolved observer" (Carspecken, 1996, p.42). Stage 3, in contrast, engaged a 'dialogical' approach to gain the insider's perspective (emic), adopting interactive data collection methods, including interviews. The data from stages 1, 2 and 3 were then linked to broader socio-political aspects of nurses' decision-making, drawing from previous literature as part of the overall analysis and represents stages 4 and 5. Carspecken (1996, p. 38) links these two final stages to Giddens' concept of system integration that is achieved when a system is created and human action is co-ordinated across time-space - "Reciprocity between actors or collectivities across extended time-space outside conditions of co-presence" (Giddens, 1984, p. 377).

How structuration theory was used in the study

Giddens (1984, p. 327) recommends that the researcher can 'be inserted' into a study at one of four levels:

- the hermeneutic elucidation of frames of meaning that is both exploratory and descriptive to highlight the nature of agents' knowledge and thereby their reasons for action, across a wide range of contexts;
- studying the context and form of practical consciousness (tacit, implicit knowledge) - expressing what is known discursively to illuminate practice and potentially transform practice;
- identification of the bounds of knowledge that incorporates unintended and unacknowledged conditions of action. Knowledge is bounded (constraining) but has the capacity to transform practice (enabling); and
- specification of institutional order that analyses the conditions of social and system integration via identification of the main institutional components of social systems.

Although all four levels can inform a research project, and are addressed in this study, it is predominantly the second level of 'researcher insertion' that is adopted in this study, focused on the context and form of tacit, everyday knowledge. Giddens (1984, p. 328) emphasises that "studying practical consciousness means investigating what is already known, but by definition it is normally illuminating to them if expressed discursively, in the meta-language of social science". However, researchers need to be aware of the context of inquiry, the meta-language of social science, and how it might influence the questions we ask during researcherparticipant encounters. Quantz (1992) comments that critical researchers need to listen to the dialogue, rather than follow methodological rules at the cost of losing meaningful and rich data. While Carspecken's (1996) stages were adopted, the study was flexible enough to pursue 'gut instinct' and curiosity. As the phenomenon unfolded, the data led to the next stage of data collection and analysis as a natural progression from what had just been 'said' or 'done' or 'learnt'. At times, the participants themselves would direct the next stage out of their own personal curiosity of 'wanting to know'. In this way, the critical design enabled a partnership

to form between the nurses and myself, in an attempt to illuminate decision-making practices.

Stage 1: Building a primary record- the etic perspective

Spradley (1979, p. 4) believed that ethnography starts with a conscious attitude of "almost complete ignorance". The purpose of stage 1 was to position the researcher from 'this ignorance' etic-outsider perspective by observing social practice in an unobtrusive and passive way. This requires an attitude of openness and acceptance. The rationale for this outsider perspective was to compare these findings with data that emerged in the subsequent stages. Cormack (1991) argues that it is almost impossible for such researcher passivity since the mere presence of the researcher begins to change the dynamics of social interaction, albeit curiosity, fear or disinterest and is known as the Hawthorne effect. Carspecken (1996, p. 52) proposes that passive observation, as in stage 1, reduces the Hawthorne effect, noting that it is not the researcher's presence that changes behaviour that is important, but rather acknowledging, "how behaviors have changed". In this study, I was not always able to remain passive since the nurses automatically engaged in dialogue, which was not discouraged.

The primary method of data collection involved field notes, journaling and researcher reflection, in which focused and dense records of daily routines, rituals and social interaction were constructed. Several decision-making locales were included since the nurses made decisions extending the renal unit context to include the meeting rooms, intensive care unit and the wards. Contrasting and comparing how decisions where made in these various contexts was assumed to provide a greater depth of understanding in relation to the nurses' decision-making.

Stage 2: Preliminary re-constructive analysis

Analysis of the data began with a description of the cultural context of the renal unit, identifying social interactions, routines, roles and power relations - the who, how, what, when and why of decision-making. The aim of this stage was to tease out themes, key issues and areas that required further exploration in the proceeding stages. The data was initially entered into the word database of the computer, coded

and categorised in order to see patterns and themes emerge. This was later guided by structuration theory concepts as part of the analysis. Over time, as more information was collected and organised, analysis became a 'cut and paste' affair, the floor providing a bird's eye view that enabled me to keep 'in touch' with the data.

Stage 3: Dialogical data generation

The main purpose of stage 3 was for dialogue between myself and the participants, engaging in the double hermeneutic loop (Giddens, 1984), which continued throughout all the remaining stages. Stage 3 was considered the main catalyst stage to potentially transform social practice through this partnership. The initial data collected in stage 1 were compared with the responses during discussions and interviews with the nurses in stage 3, illuminating practical knowledge through discursive means where explanations could be provided. As stated by Carspecken (1996, p. 42), "this takes conditions of action constructed by people at nondiscursive levels to one of awareness and reconstructs them linguistically". At this level the nurse had the capacity to act and do otherwise, thus, transform practice.

Stage 3 was conducted over several months ranging from one to six hours per day depending on daily routines, the nurses' rostered shifts, time availability and appropriateness. At the same time, stages 1 and 2 were revisited in light of new understandings generated through discussions. The interviews were, at times, structured to facilitate cross-checking of findings, observations and documentation review. At other times, they were open and flexible to encourage the nurses to describe their own experiences. Reviewing the medical records also helped with substantiating, negating or providing information when cross-checking, although, at times, the documentation was incomplete limiting this process.

The data was critically examined in terms of the context and positioning of each nurse, including the researcher, in order to address credibility criteria (Giddens, 1984). This did not mean that what a nurse said or did or, did not say or do, was doubted, rather inconsistencies were explored and linked to broader socio-political aspects within the unit. Secondly, content validity was used to verify whether the

meanings produced were collectively shared. Triangulation of the data assisted with this process.

Triangulation as a research strategy

Triangulation is the expansion of research methods that are applied to study the same phenomenon (e.g. decision-making) to provide diverse, rich data (Dootson, 1995; Kushner & Morrow, 2003; Lackey & Gates, 1997; Maggs-Rapport, 2000; Roberts & Taylor, 1998). Data triangulation, for example, assumes that if data is collected based on more than one observation, researcher bias is reduced. However, this assumption is more complex than this in that multiple data collection techniques create multiple interpretations. For instance, in this study, many nurses were asked about decisionmaking, at different times and in different contexts. Giddens (1984) recommends that the researcher look for moments of consensus and conflict during social encounters. Therefore, commonalities and differences were noted in order to gain a deeper understanding, although one interpretation or experience was no more 'truer' than the next. Denzin (1997) discusses three types of data triangulation: time, place and person, which correspond to Giddens' concept of contextuality. Maloney (1996, p. 79) achieved data triangulation by checking what was said at one time "with what was said at another, and what was said was checked against what was done", an approach adopted in this study. Triangulation of methods, or methodological triangulation (Dootson, 1995), was maintained by applying several approaches in collecting data such as observations, interviews, field notes, journaling and documentation review. Furthermore, during stage three of data collection, structuration theory provided a conceptual or theoretical framework to address the data from three competing perspectives – agency, structure, and the agency-structure duality, which assisted in gaining more understanding. This was at times a difficult task to achieve but enabled further questions to be asked of the participants in terms of decision-making from a structuration theory perspective.

Journaling and self-reflection

I too was a decision maker. Journaling was intended as an audit trail tool that captured decisions made along the way, identifying factors that constrained and enabled me as the researcher throughout the research journey. However, finding the time and motivation to write personal reflection, on top of field notes, was not always achievable. Koch (1994) shared this problem, yet saw the importance of capturing the data. Therefore, I sometimes captured my thoughts and feelings on audio-tapes that were later reviewed.

Pellatt (2003, p. 29) claims that "to increase the plausibility or rigour of ethnographic research it is suggested that researchers include a reflexive account in their report". Self-reflection was part of the journaling process that assisted in maintaining critical theory principles. The purpose of this was to expose my personal constructions of the world, my values, beliefs, strengths and weakness that all moulded the research journey and choices made (Mulhall, Le-May, & Alexander, 1999). Atkinson and Coffey (2002) explain that reflexivity is a term widely used as a research tactic yet poorly defined. Generally, reflexivity is an acknowledgement of the role and influence the researcher may have during the research process (Rice & Ezzy, 1999). Therefore, reflexivity becomes a conscious deliberate act whereby the researcher, as well as the research, is critically examined and accepted as part of the critical research design. Giddens (1984, xxiii) defines reflexivity slightly differently recognising that every person is inherently reflexive, yet "operates only partly at a discursive level". For the purpose of this study, I actively engaged in reflexivity at both a practical and discursive level, recognising that not all could be known or spoken about. Garson (2003) shares several critical ethnographic assumptions that I adopted as reflexive questions throughout the study, and which enabled my reflexivity at a discursive level:

- Do I assume to understand the decision-making culture?
- Are these cultural understandings from a shared or individual perspective?
- Are group interests being overestimated at the cost of individual interests?

Individual and group member checking

Carspecken and Apple (1992) advocate member checking as an important way to validate data. Carspecken (1996, p. 89) refers to stage 3 as an "elaborate member check" where researcher notes are returned to the corresponding participants for further discussion and feedback. Carspecken (1996) also recommends that participants are brought together for a group discussion from time to time as a

method for further 'revealing' dialogical data. In this study, this encouraged participants to comment on issues that they felt less inclined to discuss during an interview. My intention was never to conduct focus groups. Instead, as findings and ideas emerged, these were casually presented at the nurses' station or meeting room. This stimulated spontaneous responses from whoever happened to be present. I found this to be a quick and effective way of evaluating the notes I had written, while engaging in dialogue with the nurses. This feedback directed the research towards selecting informants and posing new questions. When disagreements arose in terms of the feedback these were recorded and analysed further. In contrast, agreement was assumed to give credibility to the interpretations, although did not necessarily mean these were 'right'. Carspecken (1996, p. 19) comments that mutual knowledge is gained through all kinds of truth claims, but it is the consent given by a group of people that validates the claim, although he cautions that "perception itself is structured communicatively".

Sharing stories and relating to the nurses' experiences were important tools that I applied to provide a sense of trust and respect, as well as participation. Intimacy enabled participant-researcher engagement to be taken beyond a clinical partnership to one of great depth and meaning that facilitated researcher integrity and sincerity (Fontana & Frey, 1998). This process was intended to continue until the data became saturated. Glaser and Strauss (1967) explain saturation as the point at which new data no longer reveal new findings, but rather add to existing themes. Consequently, data saturation was aimed for in this study, although not necessarily achieved, and is further discussed in the concluding chapter.

Stages 4 and 5: Conducting system analysis

Stages 4 and 5 required the data to be reviewed in broader socio-political terms, moving between etic and emic perspectives. Giddens (1984, p. 339) refers to this as 'validity criteria' that are concerned with "factual evidence and theoretical understanding". This process required reasoning to go back and forth, linking findings with participants' responses, constantly checking and rechecking the information, and in this way creating a solid foundation to build upon rather than

making "cognitive leaps" (Morse, Barrett, Mayan et al., 2002, para 25). During this time, stages 1 to 3 were revisited to gain further information and to clarify ideas.

Carspecken (1996) recommends that key participants within the research project play a role in analysis during stages 4 and 5. How achievable this is depends on the nature of the study, time availability to conduct participatory analysis, and the participants' understanding of the phenomenon of study. In this study, group work was not a viable option due to time constraints and work structures. However, opportunities arose when I was able to discuss issues and findings at a more abstract theoretical level with individual nurses.

Pulling the loose ends together

Denzin (1997) perceives ethnographic texts as messy because social practice is open ended rather than static. Different interpretations of the data can evolve and coexist together (Manias & Street, 2001c) making the research appear muddled. Qualitative studies can become muddled since the data is rich, while the complexities of naturalistic research and researcher perspectives sometimes make choices overwhelming (Chenail, 1997). Returning the analysis to the key participants had the intention of pulling the loose ends together to make sense of the data as a whole rather than as analytical pieces. This provided 'snap-shot' confirmations and a process of de-muddling, although as previously mentioned, this may also be limiting as ideas are constantly created and recreated (Giddens, 1984). Finally, the writing-up stage permitted the messiness to take a more structured form, with the intent of assisting the reader to transfer the findings into similar contexts (Kennedy, 1979).

Ethical considerations

"Ethnographers do not walk in a vacuum, they walk with people" (Fetterman, 1998, p. 129) and since people's lives and stories are exposed, conducting research in an ethical manner is essential. Ethical approval to conduct the study was granted by both the hospital and the university human research ethics committee. Additionally, permission to access the unit was approved by the 'gate keepers', the Director of Nursing, the Nurse Managers and the Director of the Renal Unit (visiting nephrologist). This permission was sought during the preliminary study (renal anaemia management), and was further extended to this study following an amended ethics submission. Couchman and Dawson (1995) recommend that the rights of an individual within a research study include: to do no harm; to be informed; to participate voluntarily, to maintain confidentiality; to remain anonymous; and to be treated with dignity and self-respect, all which have been respected in this study.

Although there were no physical risks associated with participating in the study, observing nurses' practice and asking critical questions regarding decision-making processes had the potential to cause distress and anxiety. Therefore, there was an element of risk-taking at a psycho-emotional level. This resulted in the Nurse Managers being nominated by the participants as support people should they have been required. The hospital also appointed a Research Monitor whose role was to ensure ethical safety of the participants and research conduct generally.

In addition, an information sheet with a photo of myself was placed near the entrance of the unit describing the research study and my university contact details. The purpose of this was to inform all visitors to the unit, including patients, families, and health care providers that a study was being conducted and by whom.

Informed consent

Participant autonomy demands that the participants are not coerced and are independent in making an informed choice (Holloway & Wheeler, 1996). The formal method for ensuring voluntary participation was through the use of informed consent. Since the research study was over a prolonged period and involved different levels of participation, three consent forms were designed. This served a dual purpose. First, the nurses became informed about each stage of the study, and second, potential participants learned about their expected roles and rights, including the right to withdraw at any time. The nurses were encouraged to discuss the form directly with me to clarify any issues or concerns. I was cautious when obtaining participant consent since the nurses knew me and may have felt under duress to participate. One approach in minimising this potential problem was to distribute the consent forms via the internal mail, personally addressed to each nurse, prior to

commencing fieldwork. This also provided time for the nurses, as a group, to raise their concerns with the Nurse Managers.

The initial consent form sought permission from each nurse to observe decisionmaking practices as a collective group (n = 23, see Appendix 2). Each consenting nurse was referred to as a *participant* (Appendix 3). The second form sought consent from selected *informants*, as part of stage 3 data collection and included a subgroup derived from the participant group (Appendix 4). This involved observation sessions and at least one interview. The third form was to gain multiple constant from each of the four *key participants* (Appendix 5). The rationale for ongoing consent was to provide an opportunity for the key participants to decline from participating on a daily basis or the chance to withdraw totally. Key participants were more active in the research study, which involved several meetings, observation sessions, discussions, interviews and feedback.

Anonymity and confidentiality

Polit and Hungler (1995) comment that it is the researcher's duty to implement appropriate confidentiality procedures to protect participants' privacy. Confidentiality assures the participants that any data collected will not be publicly reported in a manner that would enable any individual to be identified, or be made accessible to other interested parties, such as employers. In this study, the architecture of the renal unit brought the nurses and patients into close proximity, which made confidential discussions sometimes difficult to maintain. Therefore, if the confidentiality of the nurse-patient or researcher-participant encounter was considered as possibly being breached, the topic of discussion was addressed at a later time and place.

Each nurse participant was assigned a pseudonym, which were attached to the data and used whenever patient or participant data was referred to. The nurse participants were informed that direct quotes, observations or documentation might be utilised in the final written report and thesis. However, this was a problem at times because colleagues could deduce which nurse would do or say what. In these instances the pseudonym name was not applied. Instead, their allocated nursing level (i.e. Registered Nurse, Clinical Nurse or Nurse Manager) was used. This agreement with the specific nurses meant that sensitive data could still be used, while anonymity maintained. The sole male nurse was also allocated a female name to protect his identity.

Project information was collected, stored and retained in accordance with the 'joint NHMRC/AVCC Statement and Guidelines on Research Practice' (1997). The data remains safely stored, and will remain in the School of Nursing Sciences' archives for at least five years after publication of this thesis.

Conclusion

Caelli, Ray and Mill (2003, para. 12) propose that "enough detail about the study, the approach and the methods needs to be included so that the reader can appropriately evaluate the research". This chapter has introduced the reader to the methods of critical ethnography applying critical theory principles. The context of the study was described followed by an outline of the research study. Rigour of the study was established throughout the project, utilising several strategies that reflected the methodology and methods used, interwoven throughout the research design. Carspecken's five-stages of critical ethnography 'loosely' directed data collection, while structuration theory was adopted for analysis purposes. Collectively, the ethnographic method provided an abundance of data, which are presented in the following three chapters, interlinked with 'parts' of structuration theory specifically adopted in this study.

CHAPTER FIVE: CONTEXTUALITY

Contextuality is the situated character of interaction in time-space, involving the setting of interaction, actors co-present and communication between them (Giddens, 1984, p. 373).

An introduction to contextuality

The notion of context, central to structuration theory, is necessary to "investigate social reproduction" (Giddens, 1984, p. 282). The study of context, or contextualities of interaction, incorporates (a) time-space boundaries of physical and symbolic markers where interaction takes place; (b) co-presence of actors across time-space; and (c) actors' reflexivity to control the flow of interaction (Giddens, 1984). Therefore, the nature of nurses' decision-making was located within the contextualities of interaction where decisions transpire. This chapter introduces salient features of contextuality and nurses' decision-making within the renal unit, which were often manifested as routine decisions. For the purpose of analysis, time and space are initially presented as two separate concepts, although in structuration theory, time-space and co-presence are intricately connected. Nurses' reflexivity, "the monitored character of the ongoing flow of social life" (Giddens, 1984, p. 3), is explored in relation to the *dialectic of control*: the two-way character of alternating power used to control the flow of interaction. In other words, how the 'least' powerful nurses managed contextuality to exert control in established power relationships during decision-making, and how the 'more' powerful nurses attempted to reproduce the characteristics of contextuality to maintain control (Giddens, 1984).

When listening and speaking with the nurses in the renal unit, three themes predominated. First was an issue of trust between the nurses when making decisions; second the technical environment in which caring was embedded; and the third was the nurses' perception of *being stretched for time*. The discourses of trust, caring and time constraint became evident during fieldwork while observing daily interactions in the work setting. The nurses referred to this work setting as *working on the floor*.

The notion of care was reinforced during times of nurse-patient interaction. The nurses greeted the patients by name, while chauffeuring them from the weighing scales to their allocated chair, conversing about the world events, personal issues or in humorous jest, masking the reality of the moment. The absence of an official nurses' uniform was understood by the nurses, as a way to break down barriers between the patients and themselves, promoting a sense of community care rather than part of an acute care setting.

The context of the renal unit was unique and did not reflect other settings within the hospital organisation. Outsiders, visiting the unit, described the renal unit initially as 'overwhelming'. The animated dialysis machines, speaking a foreign language expressed as alarms and flashes, dominated the periphery of the unit in a semicircular fashion. Within this semi-circular frame, human interaction traversed the space in preparation for the dialysis day, the noise of humans and machines becoming one, governed by time that was assumed to maintain and direct the rhythm of the day.

Time

I asked Rebecca how everything else was going. She looked up at the blue folders and says, "It is too much, too much. These are not folders but people. To some they are folders but not to me". I asked her if she felt she was overwhelmed with the work, and she nodded yes; "It is if you want to give quality care to all these patients. You spend such a lot of time chasing up blood results and some patients don't have them done at all. Then the lab faxes through the results and only 2 pages come through, so then you have to ring them back. There are so many distractions that don't help. You get into Auslab [electronic laboratory results] and then the phone rings. By the time you get back to it, you're logged out" (FN, 20/8, #16).

Both physical and symbolic representations of time located nurses' decision-making within the context of social interaction. The renal unit functioned predominantly during daylight hours, where day and night represented physical time. However, symbolic time, rather than physical time, appeared to have the greatest impact on decision-making within the unit. Symbolic time was captured and measured mechanically by the clock (i.e. minutes, hours, days), representing clock-time (Hall, 1971) that provided a resource to 'keep track of time' and direct patterns of action. In every organisation there are cultural norms related to time such as deadlines, promptness, wasting of time, spending time and time limits (del Bueno & Vincent,

1986). Within the haemodialysis unit, the clock was strategically placed above the nurses' station so that it could be seen from most positions and provided time cues for both the nurses and patients. Commonly, time was perceived as a constraint particularly when time was extended across space as Rebecca's experience illustrates. Alternatively, time produced a sense of order and predictability creating routines that enabled the nurses to go on from day-to-day.

Knowing what to do when, the routines in social life, enabled a sense of safety, a concept Giddens (1984) describes as *ontological security*. Ontological security results in a nurse predicting daily events fostering a sense of order and routine. Routine activities were mostly carried out at a tacit, practical level of knowing that was rarely spoken about unless a nurse was directly asked (Giddens, 1984). Repetitive actions, signified as routines, contributed to the "recursive nature of life" (Giddens, 1984, p.xxiii), which created social structures that, in turn, recreated nurses' interaction. Therefore, social structures and action become expressed as a duality. How time was used and understood within the unit depended on whose time it was and what purpose time served. In structuration theory, Giddens (1984) addresses time, or temporality, in three different ways: *life-span* time representing irreversible time, and adopting concepts originally presented by Lévi-Strauss, reversible time, which Giddens (1984) terms the *durée* and the *longue durée*.

Life-span time: novice to expert

Life-span time, or "time of the body" (Giddens, 1984, p. 35), progresses in a linear fashion, a time that cannot be stopped or reversed, in terms of both human and professional development. Time spent working in a renal context represented a skills-knowledge continuum, from novice to expert (Benner, 1984); the graduate nurse through to those who had been there since the *beginning of time* when the renal unit was initially established in 1972. Life-span time controlled who made decisions, what decisions a nurse was capable of making, or expected to make, and whose decisions were accepted.

Learning the ropes - the novice

Decision expectations were not written and rarely spoken about in a formal way, rather these were learnt as part of daily practice, sanctioned through nurses' verbal and nonverbal expressions of approval. The socialisation process into the unit enabled the initiation process, the new nurse learning accepted norms of social conduct, becoming part of the culture where decisions were made. Social interaction became necessary for the continuity of social reproduction that was endorsed as nursing practice. Ivancevich and Matteson (2002) suggest that the socialisation process is more important at some times than others, in particular, when a person initially starts a new position or job within the organisation. The initiation or *trial* period within the renal unit was conducted over three-months, although the socialisation process continued for all the nurses in less explicit ways. Mentors or preceptors play an important role during this time (Glass & Walter, 1998), reproducing social practices which the preceptors themselves have come to know and trust, further validating the organisation's culture (Thompson, 2003). These practices were reinforced through repetition and mutual acceptance. The preceptor welcomed the new nurse to the unit, assisting their transition in becoming a team member. Decision-making at this initial stage was taken in conjunction with the other nurses, with minimal expectations placed on the renal novice in having to make decisions alone:

There are a lot of experienced nurses working there, the Clinical Nurses, so I never felt that the pressure was on me in making decisions to begin with (Donna, 20/6, # 2). ¹ see footnote

Thus, knowledge gained to enable decision-making was predominantly *learned on the job*. Role modeling also played a role that required a *trust of colleagues* in what they were doing and saying was accepted practice:

I was given a preceptor so you can ask them questions and they would guide you in the right direction. There's a trust thing there really isn't there? But yeah it is one of those situations that what else can you do but trust? (Donna, 20/6, # 10).

¹ For nurse participant's profile & demographics refer to appendix 2 at the back of the thesis

Over time, as the arbitrary three-month induction period advanced the expectations to make both clinical and non-clinical decisions increased. These expectations were perceived by the nurse herself and endorsed by the collective group of nurses in the unit. Repetitive practice, particularly when making decisions during the three-month trial period, *created* the perception of *feeling capable* and *fitting in*. Some studies have suggested this process can occur within a matter of weeks (Bradby, 1990; Philpin, 2002). Donna felt that by week six *she knew what to do* and this was enabled by the monotonous nature of the work:

The patients can change all the time within a ward. However, renal, you do get regular patients and work that is over and over. I don't think you'd find anyone who said it wasn't. It's not always monotonous em...(20/6, # 171).

The monotonous yet rhythmic aspect of the nurses' work enabled Donna's decisionmaking capacity, while simultaneously pushing her beyond the *comfort zone* in order to *do better*. Nonetheless she was aware of her limitations:

I am well aware of accountability and what your limits are. I can recall a few things when I said that I wasn't happy to do that [make a decision or carry out an order] (20/6, # 36).

Gellerman (1993) calls this approach 'stretching', assigning tasks to individuals that are outside the routine activities and comfort zones as a motivational learning tool. This created a sense of achievement for Donna affirming her position as an empowered team member. However, not all novice renal nurses felt this way. Denise, for example, did not share the same perception of being expected to make routine decisions during the initiation period. Although she spoke about *peoples' attitudes* as a method of confirming unit expectations, she had not personally experienced or perceived this:

Denise:	probably there is (pause). May be there is (laughs)
	but no-one has told me.
Researcher:	You don't see it?
Denise:	No I don't see it.
Researcher:	How do you know if there is an expectation?
Denise:	Just by people's attitudes.
Researcher:	And you don't feel that or see that?
Denise:	No I don't see that but that could be going over the top of
	me (<i>laughs</i>) (15/11, # 224-231).

In later discussion with Denise, her unawareness of other peoples' attitudes towards her was contradicted or at least understood as meaning something else. How one nurse learns decision-making expectations and another does not, may be answered by addressing nursing interaction within life-span time. Denise felt that as an *older* or mature nurse (50 years plus), she may have been considered a potential threat to the other nurses if she had started making decisions without consultation; *I know I would be pelted down anyway*. When Denise was queried about how she 'knew' this she replied:

Anytime I do make decisions, or make a statement, or make a decision it is always challenged and generally put down so you kind of get to know \ldots (15/11, # 256).

Consequently Denise felt that she was not capable of making decisions alone, referring decisions to the experienced nurses whose knowledge she respected and *trusted*, seeing *no other way around it*. As a result, Denise remained dependent on the nurses when making decisions, unlike Donna who felt empowered. However, Donna too spoke about this notion of 'no other way around it', in a less direct way as she earlier commented *what else can you do but trust*.

Gellerman (1974) proposes that lack of participation and involvement in a team removes a person's decision-making power. In the renal unit, one could not assume that every nurse wanted this decision-making power. Denise may have consciously exercised her capacity to do otherwise by choosing not to make decisions, avoiding the responsibility associated with outcomes and consequences. Although intentions of nurses have been sought in this study, it did not necessarily mean that actual intentions were shared by the participants with the researcher, or acknowledged by the nurses themselves. Giddens (1984, p.10) defines intentions, as "an act which the perpetrator knows, or believes, will have a particular outcome . . .". Therefore, Denise may have intentionally decided to adopt a passive role as a possible approach in maintaining control of the situation, and unwilling to disclose this rationale to the researcher. Alternatively, how Denise came to perceive her present decision-making role may have had wider implications beyond her control, and/or recognition, requiring broader issues to be addressed in trying to understand the differing perspectives.

There were mixed views about novice nurses' decision-making in the unit. Emma, a Clinical Nurse with ten years renal experience, believed that a nurse had to be working in the unit for at least one year before they actually made decisions:

Juniors I know you need to check as sometimes they think they know and they don't. You don't realise you don't know $\dots (9/9, \#70)$.

Rosemary, another Clinical Nurse, supported the idea of collaborative decisionmaking in that *junior nurses* may be *looked upon* as making decisions but were rather *doing assessments and changing care-plans in consultation with a senior nurse*. However, Joanne, a Registered Nurse with several years of renal experience, did not share these views:

Joanne:	[Nurses] develop at different rates. Some people obviously should	
	be working somewhere else. They don't cope or develop to a	
	stage to make their own decisions. Once shown something by	
	different people in different ways they still just don't get it.	
Researcher: Is there an unwritten rule or norm that a person should be doing		
	this [make decisions] by 3, 6 or 12 months?	
Joanne:	By 3 months you should expect a person to be able to make	
	decisions by themselves (19/11, # 70-73).	

Different people showing different ways most probably added to a novice renal nurse's confusion rather than give clear direction to enable decision-making. Lynnette, a Clinical Nurse, saw this diversity as problematic:

Lynnette: I think a lot of nurses who have clinical knowledge do make decisions but a lot of this is not carried through because of conflicting opinions of how to deal with a particular problem.
Researcher: Why do you think there are so many conflicting opinions?
Lynnette: Because I think the knowledge collated by the nurses is not structured in the unit so we have different people doing what they like because there is no documentation out there to say 'do it this way' (26/9, # 28-30).

In light of this, once a nurse was labelled as 'failing' they were not always accepted as a team member, compromising the socialisation process. Furthermore, some nurses had less patience for a nurse perceived as failing causing social isolation, which, in turn, increased the new nurse's stress levels as they coped with unfamiliar technology, constraining the overall learning experience. Another possible constraint was the shared assumption that mature novice nurses found renal dialysis difficult to learn, struggling with technology and the concepts of dialysis per se. This finding is supported by McGregor and Gray's (2002) New Zealand study that proposes that an older person is socially constructed as being less 'adaptable' to new technology and change, yet more 'dependable' as an employee. Therefore, life-span time may have constrained how individual nurses were initiated into the unit in terms of decision-making expectations. Sargeant (1999, para: 14) proposes that ageism is when the age of a person is used to define the person, and is "often subtle and implicit rather than explicit", such as patronising gestures, being talked down to, and exclusion. In this study, the issue was not about age alone, but rather a combination of age and renal inexperience. Older experienced renal nurses did not appear to be exposed to the same aspects of ageism; rather they were valued and acknowledged as pinnacle players when decisions had to be made, particularly, by their less experienced nursing colleagues. Little seems to have been written about this subject to date, rather the nursing literature tends to focus on the nature of decision-making 'expertise' that is acquired over time. Several studies acknowledge that older employees tend to have increased knowledge and skills that often compensate for physical and cognitive qualities that may decline with age (Griffiths, 1997; LaDuke, 2001; Letvak, 2003; Proenca & Shewchuk, 1998). Renal nursing, for instance, is not so much about physical strength but rather technological mastery. This may explain why Denise felt that the decisions she made were not valued, but rather were *challenged* and *put down* as she was yet to master renal technology, unlike her older counterparts who were well positioned within the unit as experienced decision makers. Consequently, peers judged Denise as failing rather than questioning the context of socialisation and the new nurse's responsibility when making decisions. Denise's perception was not in isolation as Jane reflects on her experience as a mature, yet novice, renal nurse:

I see novice nurses like myself. We all started around the same time but we have all shown different levels of skill acquisition. I know novice nurse V sets up the machines quicker than me, but then I am three steps ahead of her in terms of knowing the patients, the hospital administration and all the layers of the organisation. How to get from A to B (6/6, # 15).

Renal novices, with nursing experience, appeared capable and confident in making general clinical decisions such as the management of chronic co-morbidities, for example, diabetes and hypertension, although this type of decision-making was less visible next to dialysis technology. Jane's feeling of being capable in making such decisions was enabled because she *knew the system*, unlike Denise, who was both new to the renal unit and the hospital organisation, as Jane explains:

I thought "how glad it was not me", as not only does she have the machines etc... to learn, but also has to learn the hospital organisational things. In some ways, I think this has been very difficult and people are not so patient around her (6/6, #15).

Comparing self with others, according to Suls, Martin and Wheeler (2002, p. 159) is a "pervasive social phenomenon". Drawing from Festinger's (1954) work, Suls et al. (2002) suggest that comparing the self with similar individuals is useful in evaluating one's ability and opinions. Giddens (1984) terms this as 'reflexivity', whereby a person monitors the conduct of self and others. This is related to practical consciousness, the nurse paying attention to what is happening around them in such "a way as to relate their activity to those events" (Giddens, 1984, p. 44). Burns (1979) stresses that people learn to judge themselves by how they themselves were judged that emphasises institutional patterns of behaviour. Consequently, what a novice nurse was seen to be 'doing' in terms of dialysis treatment, and in relation to 'others', seemed to be the main factor in determining their decision-making ability, judged in subjective ways rather than through formal assessments. A successful nurse was predominantly considered in terms of time taken to set up a machine, initiate and terminate dialysis, and expected outcomes achieved. A nurse who looked to be fast and efficient was assumed to be coping and successful, even when linking theory to practice remained vague. This is a concern, particularly when addressing professional accountability and responsibility when making decisions.

The learning culture- a matter of trial and error

Sarah spoke about the learning culture as being influenced by who else was working on the floor:

... [learn] as you go on and watching others. It depends also who is on with you on the day and what they want to tell you (13/8, #44).

The learning culture of the unit seemed to reflect one dominant teaching/learning style of 'watch, then do', rather than addressing individual needs of nurses. In this

study, many of the nurses spoke about learning dialysis by trial and error, adopting a *hands-on approach*. Errors were not always recognised as negative decision-making outcomes, but rather explained as the unpreventable *nature of dialysis*. The 'nature of dialysis' reflected the unpredictability of dialysis, which the nurses endeavoured to learn and manage. For this reason, this trial and error approach seems to be an accepted practice in renal nursing generally. Daugirdas, Blake and Ing (2001, p. 140) for instance, write that "the dry weight [ideal body weight] of each patient must be determined on a trial-and-error basis". Consequently, when a decision outcome was sub-optimal, the nurses sometimes normalised this result because that was *the nature of dialysis* that was rarely questioned in terms of error, mistakes or poor clinical judgment. Fahs, Morgan and Kalman (2003, p.67) question the application of trial and error in nursing practice because it "lacks efficiency" constraining effective outcomes and at times can be "dangerous". This resulted in a 'trial and try again' approach rather than evaluated in terms of sub-optimal decision-making.

A recent study conducted by LaDuke (2001) proposed that learning styles differed between older nurses and new graduates, although how an older nurse was defined was not specific. Older nurses were found to respond better by talking and reflecting on case studies, unlike the younger nurses who preferred a more hands-on approach to learning. In this study, there seemed to be more emphasis on the hands-on approach of performing dialysis, rather than theoretical discussion. This may have disadvantaged the mature learner within this particular context. This technical aspect of dialysis is further reiterated by Bevan who claims that the beginner nurse "learned a set of techniques" and procedures to enable them to get the work done when directed (Bevan, 1998, p. 732). The unavoidable presence of technology within the unit required timely clinical competency, the know-how, so that the nurses could attain control over their technical context. Therefore, Bevan (1998) proposes that the skills learnt by inexperienced nurses reflect a superficial level of understanding, as a matter of survival, rather than mastery, so that techniques of dialysis are learnt rather than technology per se. In terms of decision-making, superficial learning appeared to be echoed in this study, the nurses learning how to make decisions reflecting pragmatic and experiential knowledge (Thompson, 2003) which, over time, became embedded in routines that enabled and constrained decision outcomes. Thus, the

visible aspect of nurses being able to 'do' dialysis and presumably make satisfactory decisions, with the aim of *getting the work done*, appeared to be more valued than a nurse justifying what they did and why. In this respect, the novice nurse contributed by at least initiating dialysis reducing the workload for the other nurses. Some nurses acknowledged that this was not necessarily the best decision-making approach but felt constrained by organisational structures, which they perceived were beyond their control. On the whole, novice nurses' experiences of decision-making varied within the unit, depending not only on what they knew, but also on who they were, where they had come from, how they learned and how they were positioned during social interaction.

When in Rome. . . new to the unit

Nurses who had previous renal experience, yet were new to the unit, required a shorter induction period. Time was focused on acquiring institutional norms, and adapting prior decision-making processes to reflect the mutual line of thinking. Context specific knowledge was recognised by Sammie, a new member to the team, as necessary to learn in order to make decisions that fell within the renal unit norms:

Coming into a new unit that do things differently you have to learn these new things of how to go about in every day things (Sammie, 28/6, # 108).

Learning contextual knowledge at times caused a mismatch between what a nurse had done in the past and knew at a theoretical level with what they were asked to do now. It seemed as if knowledge per se was not what mattered but who had the power to authorise what knowledge was applied in practice.

You expect there to be power issues between the doctor. They're more educated, but with nurses you can sometimes be on the same level [official title/job status] but somebody perhaps has more experience. They have more power, you know, in that relationship (Alice, 9/11, # 12).

Hence, power for nurses seemed to be related to professional expectations, as well as time spent working in the unit gaining renal experience, yet this time-experience factor did not necessarily equate with best-practice. Carspecken (2001, p. 10) writes about how knowledge becomes more valid in relation to powerful people "who have a stake in its production". Consequently, routine practice reproduced dominant ideologies that appeared to be accepted, more than questioned, maintaining the status

quo. This was not an unexpected finding since all the nurses talked about belonging to the *team* and *fitting in* as important aspects that enabled their decision-making capacity. Deviation or breaking away from routine norms of practice, according to Giddens (1984), would disturb a nurse's perception of ontological security, which is necessary to go on during daily encounters. In other words diplomacy plays an important part in maintaining collective and, assumed, agreement:

tact rather than cynicism is inherent in structuration encounters . . . representing conceptual agreement among participants in interaction contexts (Giddens, 1984, p. 75)

When in Rome do what the Romans do encapsulate Sarah's understanding of maintaining the status quo, learning accepted decision-making behaviour within the unit. This represents domain-specific knowledge within the renal unit setting, which Bonner (2001, p. 273) explains is "augmented by informal and experiential learning". Giddens (1984) refers to this type of learning as part of knowledgeability (see chapter 7).

Domain-specific knowledge is regulatory in nature, such as routines and decision rules that could both enable and constrain nurses' decision-making capacity. For example, Sammie spoke about not making certain decisions inferring a decision rule endorsed by the unit regarding what sorts of decisions a new member could make. For example when asked about deciding the size of the dialyser Sammie replied:

Well it would be for me to look at the evidence but at the moment I am not involved in those decisions . . . I would gather the information that you need to decide on that, and look up their creatinine and see how they are dialysing (28/6, # 25 and 29).

Despite Sammie's rationale and understanding she remained, for whatever reason, excluded from participating in some aspects of decision-making. Cash (1999, p. 37) proposes that when addressing nurses' clinical autonomy, one should speak of "domains of autonomy", contained within contractual space which the clinician moves and practices. Although Sammie had the ability to make decisions, she did not presently have the 'contractual space' or authority as a new person. Over time, Sammie assumed that this space would be broadened as she proved herself as being competent and compliant, making decisions in line with the prevailing cultural

thinking. Only then could she be trusted in making decisions within the unit autonomously. Thus, autonomy for Sammie seemed to represent her commitment in following dominant practice ideologies and group norms that were already established which, in turn, created a sense of independence and freedom when making decisions within the unit context. Therefore, Sammie experienced a degree of agency (Giddens, 1984), the capacity to do and act otherwise within the group context, albeit, agency embedded within the group's overall agency that, over time enabled her to make 'certain' decisions in the first place.

Permitting a nurse to perform a certain task, or not to, could be viewed as a technique of control by superiors in retaining power. Gellerman (1993) discusses the concept of 'over-management' of employees, which constrains professional development and decision-making capacity. Emma described over-management in terms of over-protective behaviour *necessary to maintain a safe environment for both the nurses and patients*. A belief such as this had the potential of limiting professional development while maintaining power during relationships, subordinates continuing to be dependent on their superiors. Staines, Tavris and Jayaratne (1974) refer to this as the 'queen bee syndrome' where a person of authority holds back from sharing information, maintaining subordinates' powerlessness. On the other hand, this dependent relationship may have suited some nurses who did not want the power and responsibility, therefore, retaining control of the situation (Giddens, 1984).

When the ropes were known - the experts

As time passed, there was a belief that 'technique and technology' (Bevan, 1998) became mastered as a resource to be controlled that would *optimise* decision outcomes (Simon, 1967). However, professional life-span time could both enable and constrain decision-making. Life-span time working in the unit appeared to correlate with the level of knowledge and skills a nurse was 'assumed' to have acquired and what sorts of decisions they should be making, and were trusted to make. Sixty percent of the nurses in the unit, with at least five years renal experience, were considered proficient practitioners by their peers, capable of managing time efficiently and purposefully. Their colleagues further considered a subgroup of these 'proficient nurses' as *experts* working in expanded and autonomous roles,

affectionately referred to as *the old timers* and *dinosaurs*. Also, these nurses were perceived by some nurses as having power and control:

The people who have done ... em have got 10 or 20 years experience have a lot of knowledge but it depends on how approachable they are for their power and control, as not everyone is willing to help out and give advice or guidance... perhaps they feel threatened (Sarah, 20/8, #183).

The experts' knowledge and skills were highly regarded and measured in terms of *time spent in the unit* and *capability of making complex decisions*. Time spent in the unit assumed an expert nurse had advanced skills and knowledge, embedded predominantly within daily routines and practices, although capable of responding to complex decisions that fell outside these routines, such as emergencies and unforeseen events. The expert nurses *trained the junior doctors* and directed practice *on the floor*, even though this often echoed what the consultant liked:

Yes and we do it all the time and we even train the junior doctors to do that all the time don't we... we tell them this is what the consultant likes and this is how you should do it and one day they could be the consultant and you have influenced what they wanted to do by doing that (Sammie, 28/6, # 72).

At other times, the expert nurse was observed as both an expert and novice practitioner when away from familiar and predictable routines. Previous knowledge and skills were drawn from, transferring this information into new settings. For example, Rebecca, an expert haemodialysis nurse, was working in an unfamiliar context of peritoneal dialysis. Despite this she was constantly observed drawing from her haemodialysis knowledge to inform the decisions made in relation to peritoneal dialysis. However, this unfamiliarity created moments of tension in terms of knowing what to do and expect, requiring extra time to complete tasks, which led to times of self-doubt that Rebecca recognised. Alternating between novice-expert positions in terms of making decisions has been well documented in earlier studies (Beyea & Nicoll, 2000; Buckingham & Adams, 2000b; Fox, 1996; Marsden, 1998). The amount of time nurses spent working in the unit did not always reflect their level of assumed expertise when making decisions, a finding congruent with Bonner's Australian study. Bonner (2001, p. 232-233) stresses that the "recognition of expertise" is also an important element so that practice can be expanded and opportunities provided to enable nurses to act autonomously and further maintain their expertise. She adds that "being trusted" also promoted the expert's position (Bonner, 2001, p. 233). Consequently, expertise was understood not only in terms of one's 'official' position within the organisational structure, but what a nurse could do and be trusted to do.

Passing the buck or maintaining the mark?

Experienced nurses' avoidance in making decisions was recognised by a few of the nurses, in that although decisions appeared to be made, questioned if they really were:

Some of the senior nurses have done the same job for 10 or so amount of years but they cannot make a decision. Does that make sense? (Julie, 22/8, # 215).

One reason for *passing the buck*, proposed by Emma, was that many experienced nurses did not *trust their judgment*:

Others I find won't make a decision at all and I find this annoying, or they are scared of making a bad decision so they walk around checking with everyone. I feel you should trust yourself in the decision you make. I don't know why this happens but I think it is more a personality thing rather than the unit culture (9/9, # 70).

Giddens (1984, p. 60) suggests that a sense of trust depends on "certain specifiable connections between the individual actor and the social context through which the actor moves through in the course of day-to-day life". The nurse conforms to the routines and rules within the unit, aware of possible sanctions should they *overstep the mark*. Reflexive monitoring of self, and watching what others do and how they respond (Giddens, 1984) was one mode in knowing what this 'mark' was. Thus, the mark was a socially constituted concept learned during interaction. When nurses recognised that they had overstepped this mark, they spoke about experiencing hostile encounters. For instance Sarah described this as a feeling:

Em.... but there is definitely a power trait like you can feel that, when someone doesn't agree with you (20/8, # 183).

At these times Sarah would avoid making a decision or *double-check* with the other nurses saying *this is what I want to do*. However this behaviour was also acknowledged by Sarah as a means of seeking approval. O'Connell (1997) refers to double-checking as a 'back-up' procedure to control and minimise uncertainty in practice. During these encounters Sarah acknowledged a less active role in making

decisions, rather *seeking approval* was deemed necessary to stay within *accepted practice limits*. The 'back-up' procedure, or *seeking approval*, may have further constrained some nurses' decision-making capacity as a mode of control. Who decided what these practice limits were, or who had to seek approval prior to initiating a decision, was not so apparent. However, the senior nurses who supervised the less experienced staff generally decided what were the accepted norms of practice, although these too varied from time-to-time and encounter-to-encounter.

Seeking approval

Sarah recognised that she did not make decisions during awkward encounters, although she still visualised in her mind what she wanted to do, thus, made a decision in less obvious ways. Choices were selected based on what she knew (intuitive response) and thought she should do (reasoning), illustrating a continuum of reasoning processes that have previously been discussed (Hamm, 1988; Harbison, 2001; Thompson, 1999). Therefore, just because a nurse sought approval, this could not be interpreted as dependent behaviour; rather Sarah knowingly, or unknowingly, reinforced the seeking approval behaviour by enacting it as an unspoken rule, yet one that had authority had she breached it. Nor did this seeking behaviour mean that decision outcomes would be optimised. This may suggest that encounters, rather than logic, had a more controlling affect on how decisions were made. Sarah later rationalised her behaviour as a way to avoid *missing something important*. This may have reduced Sarah's personal need of not feeling guilty or being totally accountable should an adverse event have occurred because of her decision-making. Thus, approval of decisions may have also served some nurses' need to relinquish some or total responsibility rather than just to follow authorised, yet unwritten, procedures in the unit. Either way, both had the potential of constraining professional development.

Emma perceived my interpretations differently as she explained that *seeking approval* was not only about professional accountability, minimising risk, or a control strategy, but rather part of *team building* and *collaboration*. However, this contradicts Emma's earlier comment about nurses' *reluctance to make decisions*, and *checking up with everyone*, which had annoyed her. What had change Emma's perception at this time was not so clear but could have occurred during what Giddens

(1984) terms the 'double hermeneutic loop', in which a new level of understanding was generated during the researcher-participant encounter. This further highlights how meaning and understanding are constantly changing as they are redefined. Alternatively, Emma may have said what she thought I had wanted to hear, *seeking approval* from the researcher. Consequently, consensus and disagreement cannot be assumed to occur during any dialogical encounter, whereby one may be mistaken for the other. This was also apparent in clinical practice.

Occasionally a nurse did not always agree with a decision when it was made. The capacity to say 'no' appeared to be harder for decisions that were not directly linked to patient care, but to the nurse herself. For example when a nurse was deemed *ready* by her colleagues to conduct on call or out of hour dialysis. Sarah spoke about how her idea of *being ready* did not always correspond with that of her colleagues:

She said [the Clinical Nurse], "here you pop her on [the patient], no problem". So I did and then I was really chuffed as only a select few have got to needle her, so I felt really privileged and I was kind of "Oh I got the needle in patient X". The comment back [by another Clinical Nurse] was "well you should be able to" . . . It's "no you can't needle her" [on one day] to "well you should have been [needling her]!" (29/8, # 90-92).

A nurse's readiness served the group's interest since an extra nurse was rostered to share the on-call duties, or available to cannulate a difficult fistula, implying an element of bureaucratic control. When reflecting with Lynnette on this issue she accentuated how time constrained nurses' practice, suggesting that the issue was not so much about nurses exercising power and control over one another, but rather the senior nurses themselves were *under pressure* and often *unable to supervise less experienced staff effectively*. Therefore, resource constraints and bureaucratic hierarchy seemed to control social practices within the unit, rather than intentional acts of domination over other nurses as perceived by some of the nurses. Giddens (1984) emphasises how social practice can be produced and maintained by unintended and unacknowledged consequences.

Overall, life-span time could either constrain or enable nurses when making daily decisions. How a nurse perceived these constraints or enabling factors depended on who they were, where they were in terms of professional development and the type

of decisions that needed to be made. For some, life-span time provided an opportunity to carve out powerful positions within the unit, establishing social intimacy with colleagues while becoming experts in renal nursing. Interaction with less experienced nurses reproduced power positions, while maintaining dominant, recursive practices. Dominant practices controlled the daily flow of conduct within the unit, the nurses drawing from routines that were often taken-for-granted, contributing to the *durée* of daily activity and the *longue durée* of institutional time, constituted across time-space dimensions (Giddens, 1984).

Reversible time - the durée of activity and longue durée of institutions

I mean, they really should be doing best-practice. You know, that is what we are trying to work towards, best-practice, but it is not always happening. They really should [the nurses] be doing best-practice if nothing else (Carol, 28/10, # 144).

Structuration theory explains the durée as the continuous flow of routines and rituals that constitute nurses' tacit or practical knowledge of 'how to go about' in the renal unit and the world generally (Giddens, 1984). The durée, or the here and now, was embedded in, and recreated through, repetitive nursing actions, creating routines that became tradition. When Carol, for example, was asked why she felt that best-practice was not happening she replied that some things people don't want to address as they don't like change. Routines provided mutual knowledge about what had to be done when in order to achieve the goal of providing dialysis, while rituals prescribed valued and accepted practice. This might explain why some nurses did not want to change. Martin (1998, p. 189) comments on how a common set of assumptions, or mutual knowledge, over time becomes established, often expressed as rituals constituting daily routines that "inevitably become a system of control". Initially when talking with the participants, many of the daily routines within the unit had not been consciously recognised as routines, but rather a shared understanding of what to do and what to do next. When routines were nondiscursive, they became implied through action. del Bueno and Vincent (1986, p. 16) explain that "ritualistic behaviour may be practiced because it works, because the routine is comforting, or because the ritual stands for an underlying value about what is right". Accordingly, the nurses relied on routines for the same reasons in that certain practices did work,

reinforcing a sense of comfort and control when making decisions. Lynnette further supports Carols view:

. . old habits carry on and hard to die. Things like that. It is hard to change old habits and introduce new ideas at times, as human nature tends to be lazy (26/9 # 54).

This may elucidate why many routines remained unquestioned as to how they came about and why they continued to exist or what purpose they served. This results in *routinisation* of practice, the "habitual, taken-for-granted character of the vast bulk of activities of day-to-day social life, supporting a sense of ontological security" (Giddens, 1984, p. 376). Ontological security originates from Erikson's work as an anxiety-controlling mechanism based on trust of others, including "autonomy of bodily control and predictable routines" (Giddens, 1984, p. 50). Nurses' familiarity of the context, routines, and patients, for instance, enabled their decision-making capacity so that practice could flow with little disruption further reproducing ontological security facilitated by the durée. As time passes, the durée forms stable, continuous patterns of practice that constitute Giddens' (1984) third concept of temporality, the longue durée of institutions or institutional time.

Routines and social practice

The durée and longue durée were assumed to serve the renal unit to complete assigned tasks rather than serve a specific individual (Boettcher, 1985). Daily routines were negotiated around the dominant culture of 'clock-time' (Hall, 1971), which shaped the day's activities. These decisions were often made in relation to resources in terms of machine availability and skill-mix of nurses. Adherence to fixed-time schedules was necessary to effectively and efficiently meet the assumed mutually accepted organisational goal of providing renal care. Time, therefore, was managed, fixed, discrete, saved, borrowed, divided, and even lost (Samover & Porter, 1995). When the durée was interrupted, disrupting predictable daily patterns, a sense of insecurity was created impacting on institutional time, creating a "critical situation" (Giddens, 1984, p. 60). This sometimes caused confusion, particularly for patients since time had to be renegotiated and rescheduled. In contrast, nurses were more flexible to time change, adapting accordingly, although this was not encouraged or welcomed since the routines provided stability, especially for less

experienced nurses. Patient time and nurses' time, although drawn from and understood as 'clock-time', were experienced differently. Time for nurses tended to move quickly dividing time between completing assigned tasks within expected time frames, and time to socialise, moving within the confines of the unit.

The morning shift 'officially' commenced at 0730 hours, although some nurses would arrive a few minutes early to open the unit. This job was not allocated to any one particular nurse, although the overall responsibility fell within the role of the person in-charge, the team leader. For most nurses the waking up ritual of acquiring a hot drink was essential. With coffee mugs in hand, and after viewing the diary for *extra tasks* or messages, the nurses progressed to the machines that had already sprung to life. Simultaneously, the nurses and machines enacted the cleaning ritual that was repeated throughout the day, while sterile packages were strategically opened so that the nurses could artistically manipulate the dialysis appliances as necessary. The novice nurses learned the ropes under direct supervision, each step appearing clumsy and deliberate, unlike the experienced nurses who moved from machine to machine, initiating and completing multiple tasks, answering the phone, reviewing blood results, checking the stores, while occasionally stopping to sample their coffee. This was a time for nurse-nurse interaction competing with one another as they called across the unit, catching up on the gossip and the day's predicted activities.

Next-door, separated by a wall was the peritoneal dialysis area which, unlike haemodialysis, remained silent as the frequently sole nurse read the diary prior to proceeding to the wards to visit the in-patients. Decision-making within this context was often administrative, yet just as important, so that peritoneal dialysis could be provided at the community level. Administrative decisions included the ordering of stocks for the peritoneal unit and patients dialysing at home; communicating with general practitioners regarding patient's blood results; and following up telephone enquiries. Anna described the work as *hidden:*

There is a lot of hidden work in peritoneal dialysis. The haemodialysis (HD) nurses see it as a cushy number. It is not up front like haemo (FN, Anna, 3/5).

Less explicit and unfamiliar routines made decision-making more demanding. This contributed to a nurse's initial anxiety when first working in the area, as unfamiliarity resulted in uncertainty about what decisions a nurse could or could not make. For the more experienced nurses, who knew peritoneal dialysis routines, this was less of an issue rather they spoke about the flexibility of planning and directing their day and making sole decisions. Thus, working between the two locales required interchangeable decision-making styles, yet was rarely questioned as to why this may have been and what significance this may have had on nursing practice.

The patients, too, had their routines arriving in the unit an hour or so later with no individual appointment times. Recording vital signs and pre-dialysis weights became established learnt patterns of behaviour, followed by the meticulous preparation of their dialysis treatment space where the machine and nurse eagerly waited. Consequently, routinisation of action automatically occurs in any encounter, in any setting (Giddens, 1984). Embedded within practice routines was decision-making.

Simon (1960) distinguishes two types of decisions: 1) programmed decisions that are repetitive and routinised as specific procedures to be followed, and 2) nonprogrammed decisions that do not have routine steps and procedures posing new and unfamiliar situations. Most of the decisions in the unit were programmed or routine decisions. As the nurses learnt the routines they became more confident working within them, relying less on analytical aspects of decision-making, but rather seemed to engage more intuitive approaches. Despite this few nurses spoke about making intuitive decisions rather they acknowledged the routines that enabled their practice. When routines were disrupted, the appearance of control and confidence in making decisions became less evident, possibly due to the routines becoming vague, revealing who were experienced renal nurses and who were not.

Get them on!

The main aim of each shift seemed to revolve around timely commencement of dialysis. Hence, *getting the patients on* served both nursing and patient needs of getting home quickly as Lynnette describes:

The aim is to get the patients on the machines in time, you know (26/9, #30).

Deciding which patient was assigned to a nurse depended on the nurse's ability, the patient's vascular access and length of treatment time. The patients requiring the longest dialysis time would try to be commenced first, while difficult cannulations were left for the experienced nurses to do. This process of *who could do who* was learned by both the nurses, and eventually, the patients. For an inexperienced nurse, initiating dialysis required more time. When time constraints were not an issue for nurses, these time differences were tolerated and expected. In comparison, some of these time differences were not so well tolerated by the patients.

Decision-making time for the inexperienced nurse was focused on the 'here and now' of managing dialysis that was enabled through set patterns of action. Predialysis assessment, for example, included learned patterns of knowing *what to ask and what to do* in order to initiate dialysis. Sarah expands this notion further:

There isn't time to impart knowledge to new people, but ultimately it would make the job easier but people don't see it that way. In the short term, she [inexperienced nurse] does what they did yesterday (13/8, # 81).

The more experienced nurses provided a safety net for the inexperienced nurse, changing treatment parameters if, and when, required. There was a certain amount of trust in routines that enabled *all* the nurses to perform daily tasks and gave an appearance of 'making decisions' (i.e. following care-plans, implementing previous treatment decisions). However, not all routines were acknowledged as being conducive to decision-making outcomes, such as pre-treatment assessment:

Routine for a lot of people especially in the main haemodialysis unit [compares with satellite unit] as they [nurses] are always rushing to get patients on. (26/9, # 232)

Sarah confirmed this belief in that there was minimal discussion about how to best manage a patient, rather the focus was on *getting the work done*. Despite their concerns, these issues were generally not made public.

In contrast, the experienced nurses focused not only on the here and now of time, but also future time, anticipating potential problems should dialysis be delayed. As a result, getting a patient onto the machine promptly reduced the pressure on potential future decisions. Sometimes this required pre-dialysis assessment to be abandoned in order to commence dialysis first and then decide treatment options later. This was more of an issue for inexperienced nurses, rather than a 'general' problem overall. For knowledgeable nurses Giddens (1984) suggests that deviation from routines does not present too many threats to ontological security. In contrast, when knowledgeability of how to go on is limited this has the potential of disrupting the daily flow (Giddens, 1984). This may explain why Sarah felt that changes in routines still caused some nurses to follow what they did yesterday even when this was not conducive for a particular patient's problem today. Consequently, this repetitive action could unknowingly facilitate a satisficing decision-making culture where decisions were accepted as being *okay* rather than optimising all possible outcomes (Simon, 1967). As a result, decisions appeared to be made on minimal information, while outcomes judged against the unit's preconceived expectations of what was considered acceptable or good enough (Simon, 1960). When satisfied outcomes were attained, this may have reinforced the nurses' belief that what they were doing was okay. One likely reason for this satisficing culture was due to the nurses' continuous perception of *being* stretched for time:

I think in the mornings we are running around setting up machines for the patients and no one is really discussing what they want to do. And when the patient arrives there is no discussion, 'well you do this with this patients because.....'. It doesn't happen because we want to get the work done and there are a lot of other things we need to check, do blood pressures, write down their weights. There's a lot of routine things that take up our time. These are time consuming but you are still expected to do your job (Sarah, 13/8, # 81).

Decision-making reliance across time

Unlike irreversible life-span time, the durée and longue durée are reversible time, since routines and rituals can be stopped, transformed or continued, hence become de-routinised. This transformative capacity reflects an actor's capability to do and act otherwise, thus exercise 'agency' (Giddens, 1984). Although the nurses were not consciously aware of the durée and longue durée, they were important elements of time related to decision-making. As time passed, for instance, the decision-making role of the nurse appeared to have occurred spontaneously rather than as an intentional act. This may have been in response to external factors such as changing health care practices, increased demand for renal therapies and technological evolution. In addition, renal nursing credentials promoted professional status

whereby nurses assumed autonomous, accountable positions. Katie, for example attained renal nursing credentials that reflected her level of authority within the unit. However, most nurses in the unit acquired their knowledge and skills whilst working *on the floor* in less deliberate ways. Giddens (1984) refers to this type of change as incremental that occurs as an unintended outcome of social reproduction. These are small progressive changes leading to another with no set agenda. Over time, this learning approach becomes stabilised as an institutional tradition, which Emma refers to as *look, do and learn*. Therefore, change and stability across time illustrated the decision-making processes in this unit, each nurse reliant on the next, unquestioning how the decision-making tradition had come to be, yet very important to enable practice to go on.

Julie describes the tradition of reliance as a *learnt behaviour*. Heller and colleagues' (1988) analysis of organisational decision-making found that important characteristics like structures, norms of behaviour and practices could be traced back to the birth of an enterprise. Therefore, one reason for the continuation of reliance could be explained when addressing the history and the role nurses initially played in decision-making when the unit was first established. Decision-making was not always considered every nurse's responsibility as Rebecca recalls:

I couldn't make any decisions and I would have to ask and ask. It was quite different. I would do what I had to and then wait for more instructions \ldots I can't recall whether the nurses made any decisions based on blood results, or about dialysis hours \ldots I think the charge nurse would come and put their weights up (ideal body weight). \ldots the doctor still only puts in the same amount of time as he did then (Rebecca, 25/6, #18-20).

Over time, the number of patients attending the unit increased, while the nephrologist's clinical hours remained the same. The nurses became more involved in making decisions, such as analysing blood results, deciding anticoagulation therapy and adjusting patients' ideal or target body weight, either intentionally or unintentionally as an incremental change, which possibly facilitated the nurses' current perception of *being in control*. Even though the nurses' specialised knowledge and skills matured in view of this, this did not necessarily signify best-practice was being implemented as knowledge remained context 'bounded' (Balsa, Seiler, McGuire et al., 2003) as previously mentioned by Carol and Lynnette. In

addition, values and attitudes within the health care institution may not have shared the same nursing interests in promoting nurse 'autonomy'; rather a select few became appointed by the organisation to make certain decisions on the doctors' behalf. Therefore, bureaucratic hierarchies and power structures have been unavoidably sustained within this nurse described *autonomous context*, albeit, in less explicit ways, constituting the current decision-making culture of the unit.

Doing much the same

Consequently the nurses learned what to expect in their daily work, as well as knowing what the institution expected of them. This learned behaviour created and maintained how the nurses 'thought, felt and acted' (del Bueno & Vincent, 1986). With this understanding, reliance on certain nurses to make decisions and provide information may therefore be explained as 'recursive and habitual behaviour' (Giddens, 1984) that was not generally talked about, and possibly, unacknowledged. Jane, for example, would rely upon her nursing colleagues to provide *trusting information* on which she based decisions. She had not considered this as a form of dependency until verbalised (moving from practical to discursive knowledge) during a reflective encounter with myself:

It has made me realise how reliant I am on other nurses. I need to do more for myself and look at other information sources (11/6, #17).

This resulted in Jane questioning her actions, while posing alternative practice options, such as seeking information from other sources and becoming more independent. Giddens (1984) explains recursive practices as generating a sense of safety, or ontological security, which can constrain and enable nursing practice. Jane may have possibly constrained her personal and professional development in order to feel safe, although this reliance may have also misinformed the decisions she made. This practice of going from one nurse to another (seeking approval), as previously mentioned by Emma, seemed to be not only a *personality* issue but also part of the institution and renal culture, reinforced as nurses passed information orally while gaining approval when a decision was made. This further promoted the oral tradition of nursing (Street, 1989, 1992) in that spoken information was *quick and saved time*, contributing to the appearance of an efficient and effective unit which, indirectly

served the health care organisation. Decision-making for the nurses in this unit, therefore, fell within a discourse of providing patient care, while maintaining technological efficiency in both outcomes and monetary terms. Dividing and allocating time was assumed to assist with maintaining efficiency and providing patient care.

Dividing and allocating time

Rebecca saw time as a scarce resource that had to be divided not only between tasks, but also between patients. Deciding how this time would be allocated depended on who the patient was, and how they were categorised by the nurses. Moss (1988) identifies that nurses over a period of time assign patients into categories, based on preconceived ideas that are often incorrect, and is a finding congruent in this study. When nurses were *stretched for time* labelling patients could enable how nurses justified their time allocation. Rebecca, for instance, labelled patients who *misbehaved* as non-compliant:

We are not trying to change their behaviour [non-compliant patients] unless they misbehave (28/8, # 60).

Monica, a Clinical Nurse, even though aware of how damaging labels could be, believed that most times the patient labels were correct, founded on *truth*. However, this was the nurses' truth, not the patients. Bonner (2001, p. 275) identified knowing the patient as a useful strategy "central to the practice of expert nephrology nurses". This facilitated clinical judgment, cue recognition and problem solving. However, assuming to know the patient was, at times, a barrier to effective decision-making. Carol, for example, had ambiguous feelings regarding knowing the patients and their level of treatment compliance:

We try to put patients on and organise time to suit them and for extra consultations [cardiologist, general practitioner] and then they don't turn up and you think 'oh I have just spent four and half hours arranging these things and they didn't show up', so you think 'why bother'? (17/9, # 176).

Emma identified nurses as contributing to patient non-compliance:

Researcher:Do you think the patients feel or 'know' they are under surveillance?

Emma: Probably they do but wouldn't call it this. They know we will be

looking at their blood pressure, weight and bloods. This can tell us a lot about them. They know they will get 'yelled' at if they have say 5 litres or more on, then they switch off, but yes, I think they do know (28/6, 67-68).

When patients are *yelled at* and *switch off* this further complicates decision-making and compliance issues. Joanne felt that nurses made assumptions about noncompliance too quickly without looking for other causes. For example, renal anaemia can contribute to non-adherence leaving the patient lethargic, depressed and despondent (Hansen, 2001). Consequently, time, in particular for education, seemed to be least allocated to the very patients who perhaps needed it the most.

Morgan (2000) and Saran et al. (2003) emphasise the importance of nurses spending time counseling patients with regards to non-adherence issues, as this is thought to have positive beneficial effects on patient outcomes. Deviant behaviour, such as noncompliance, required the nurses to work harder when already *stretched for time*. Having to work harder may have strengthened the nurses' position and gained support from colleagues which, in turn, justified the use of labels making the nurses "an innocent party in any encounter" (Thompson, Melia, & Boyd, 2000, p.35). Hence, labels justified how nurses decided who they would, or would not, spend time with. Issues of noncompliance are further explored when discussing 'rules of compliance' in the next chapter.

Nurses too were labelled according to their nursing practice style and time usage. These labels included the *slow nurse*, the *indecisive nurse*, the *clock-watcher*, the *panicker* and the *all rounder*, a nurse who was efficient at everything. The label bestowed upon a nurse when in-charge of a shift, ultimately controlled how other nurses' perceived that particular nurse's position within the unit and their capacity in making decisions:

It can depend who you are working with as some people are more erratic than others \ldots . They make the atmosphere more obvious, different, if someone is a panicker. It's like "if everyone is not on by this time we're going to have problems" (Carol, 17/9, # 184).

Thus, some nurses could be relied upon and trusted more than others. In such circumstances decision-making appeared more explicit and shared. When a nurse

could not be trusted the nurses spoke about conferring with peers or made decisions alone, which had the possibility of producing sub-optimal decisions, particularly, when knowledge was limited. In addition, time was not always measured in terms of decision-making productivity, but rather quality.

Unintentional loss of time control

Sarah talked about time not as a commodity, but in terms of quality time spent with patients. She did not feel that 'clock-time' pressurised her in what she did and the decisions she made. However, while observing Sarah's interaction with patients it became apparent that some patients had an affect on how she used this quality time, although this was not always acknowledged. Sarah talked about *saving patients' time,* which was enabled through the *routine nature of haemodialysis.* While observing Sarah commence a routine dialysis the following field notes (FN) were recorded:

I look at his notes and note that his IBW (ideal body weight) was not adjusted last week. He remains above it so I assume he is constantly over his IBW – hence it was not adjusted. I look at the dialysis flow sheet for today but note that nothing has been entered. I have no idea how much fluid Sarah is aiming for (FN: 20/8, 0900 - 0910hrs).

When sharing my observations with Sarah she was surprised that she had not entered any treatment details on the sheet, claiming that this was a *one off for her*. I assumed that her perception of haemodialysis being *routine* enabled her to by-pass stages of decision-making as another time saving ploy, following the care-plan, while assuming no alterations were required, or at least, not until the patient had commenced dialysis and dialysis-clock was ticking. On reflection, Sarah stated:

"This patient likes us to hurry, be quick. It takes me on average 30 minutes to put a patient on [*I had observed Sarah take approximately 15 minutes to put another patient on yesterday*], yet with this one 20 minutes although he is usually straight forward with no problems ... and he is ready but some others aren't and slows you down" (FN, Sarah Validation, 21/8, # 5).

Therefore, the decision to be quick may not have always been an intended choice for the nurse, but rather necessary to prevent potential conflict had the patient been kept waiting. I noticed on several occasions this particular patient receiving attention before others. Even though this may appear as a choice made by the nurses in order to succumb to the patient's demand, this may not have been a conscious decision. This may explain why the *first in, first served* principle, an unwritten rule that was generally followed in the unit, was apparently not followed in this case.

This split from the rule, thus temporarily changing the usual flow of conduct or durée, had the potential of modifying traditional established patterns of social conduct. However, this gratuitous change had not escape criticism. One nurse privately complained to me, whilst I was observing the nurses *on the floor*, how this patient expected to be done *first and quickly*. Consequently, the patient no longer tolerated inexperienced, slow staff. Inadvertently the decision to not keep the patient waiting, unintentionally and unknowingly, controlled some nurses' behaviour when making decisions.

Time fluctuated between high and low nursing demand throughout the day, predetermined by the arrival of the ambulance that brought the majority of patients to the unit, rather than a steady flow of patients arriving at allocated times. Fluctuations of time corresponded with certain decision-making styles observed, presenting another controlling aspect on nurses' decision-making. When time was not an issue, nurses had the opportunity to delay, refer and debate a decision, although this was not always evident. When time was of essence, decisions tended to be made quickly, often by the experienced nurses, with apparently little deliberation.

Deciding treatment time

Once the patient was attached to the machine and dialysis initiated, the machine's internal clock would count backwards from the pre-set required hours. The decision of how many treatment hours were required was usually a routine decision as indicated on the treatment plan. However, the more experienced nurses could alter this time based on the patient's blood chemistry and dialysis adequacy with little, or no, doctor consultation. The internal clock was synchronised to stop each time the alarms were activated and the blood pump stopped. This ensured that actual dialysis-time was administered, rather than time measured symbolically as clock-time. The more interruptions during the treatment, the more clock-time a patient remained on the machine. The nurses had no direct control over the in-built technology during dialysis, although they had the knowledge to stop dialysis by adjusting the clock,

adding or subtracting dialysis-time. The rationales as to why and when a nurse would decide to do this were many and varied. Providing rationale for adjusting dialysistime during a treatment was easier to justify for clinical rather than non-clinical decisions. Clinical reasons, for example, included patient instability, hypotension, inadequate blood flow, coagulation of the blood through the circuit, and cramping, in particular, towards the end of a dialysis session. Deciding adjusting actual dialysis time for non-clinical reasons primarily included economic constraints and patient request.

Economic constraints usually meant that a patient's dialysis time would exceed nursing hour availability, requiring nurses to either work over-time or the on-call nurse to come on duty. This was not a frequent event, and was usually caused by unforeseen circumstances, such as reliance on other hospital departments that delayed the initiation of dialysis. For example, a patient kept waiting for the insertion of a temporary vascular access (i.e. subclavian line). The most senior nurse, in consultation with the nurses and referring to the patient's blood chemistry, would make this demanding decision as to whether to reduce actual dialysis time. This served the purpose of saving nurses from doing extra shift time, justified in economic terms of saving money for the organisation. However, when there was uncertainty regarding the 'best' decision or the blood results indicated a complete dialysis session was required, economic constraints were no longer a consideration.

Ethical decision-making: awkward decisions

The nurses did not always acknowledge routine decisions as being 'ethical'. For example, several of the nurses when asked about ethical decision-making generally spoke about life and death type decisions such as withdrawal from treatment and transplantation that were rarely dealt with on a regular basis. In comparison, almost daily, a patient would request to terminate their haemodialysis session prematurely, yet this was rarely presented as an ethical decision-making dilemma. One reason for this lack of acknowledgement may have been because of the perception that a patient requesting to come off the machine was not considered as a decision to be made as it had already been made by the patient. Whilst sharing some of my observations and thoughts with Emma, she believed that it was the *patient's right* understood as *verbal* *consent*, adding that the nurse *was legally obliged to explain to the patient the consequences of their action*. When a patient disagreed with a decision, documentation of the disagreement became necessary in order to protect oneself:

If a patient says no then the decision is taken out of your hands ... so that can present argument, but as long as you document what you have done to cover yourself. It seems a nasty punitive way to go writing down that but cover yourself (Sarah 29/8, # 26).

Not all the nurses shared this same view about patient rights, advocating a more protective or paternalistic approach, the nurses making decisions on behalf of the patients since *they* know *what is best*. This resulted in some patients becoming agitated as the nurses applied controlling strategies to manage the situation. A nurse would perform *tricks of the trade* in order to persuade the patient to *do their time*. Humour, for example, was one such persuasive strategy (Hegarty, 1976) when dealing with awkward decision-making. "Humour offers a path of control during tense encounters" (Foot, 1986, p. 362), although at times joking was observed, and commented on, by the nurses, as *overstepping the boundaries*:

I watch Emma intensively as she eases both the new patient, and the relatives looking on, into the reality of haemodialysis. She explains what is what and, at times, uses humour in a deliberate way as if to break the ice, almost normalising dialysis. [Had I not known Emma's level of expertise, and in my opinion professionalism, I may interpret this use of humour as being insensitive]. The patient seems too ill to care but the relatives perhaps seem confused not only by the technology but Emma's casual approach as she claims "that's as exciting as it gets!" (FN, 20/6, 1700hrs).

Humour was also observed to alleviate a patient waiting for a more experience nurse to do his cannulation. The junior nurse who had decided that this cannulation was beyond her skill level referred to herself as a *dud* which the patient reinforced:

"Yes you are". I noticed that the patient often referred to the nurse as 'dud' as the shift progressed. Although this was still in a joking way this still reinforced her position. [I think it was at this time I realised how humour could be enabling at one point but now had a constraining effect for the nurse]. What does this mean in term of professional boundaries? Why does she allow herself to continue being called a dud or does she not know how to change the situation? Had I not observed this earlier interaction of "call me a dud" I would find this encounter confusing. Will this patient call all nurses duds if they can't cannulate him and how will another nurse take this? I know I would not like it. Must follow up later (FN, 30/4).

Unfortunately no follow up occurred as the nurse's contract finished. In terms of contextuality (Giddens, 1984) joking-encounters may be seen as a temporary revolt against normative social structures within the unit, reinforcing a nurse's dialectic of control, as the flow of interaction becomes controlled via the disguise of humour and laughter. Consequently, such an encounter reinforces who actually holds power and, therefore, who, for example, controls the decision of starting and terminating dialysis. However, it could not be assumed that the nurses constantly held this power, as clearly they did not. Every person's dialectic of control is constantly at play (Giddens, 1984), including the patients as Monica reveals:

...they [patients] probably have more control over us then the other way around if they aren't coming in [to dialysis]. They will come in when they want to, and 9 times out of 10 it is out of hours and results in a staff member being called in. You know, they can . . . they can show their control that way (11/11, # 253).

Early termination of dialysis was not only about what a nurse decided to do, but which patients were asking to come off. Some patients' requests appeared habitual during certain patient-nurse encounters, yet were seldom publicly questioned. When practices are left unquestioned, Giddens (1984) suggests that incremental change can occur which, in turn, can alter beliefs and values in subtle ways. Hence terminating dialysis may have no longer been noticed as an ethical issue, rather the continuous practice became unintentionally normalised, creating a false sense of ontological security as the nurses dealt with the issue (Giddens, 1984). This may be one reason why little deliberation seemed to have occurred when making such decisions, compounded by some nurses limited knowledge regarding the harmful effects of early terminations on patient mortality and adherence issues (Saran, Bragg-Gresham, Rayner et al., 2003). In addition, on several occasions I heard nurses talk about the importance of the patients' quality of life rather than quantity. This belief may have unknowingly biased decision-making as this may, or may not, have represented the patients' short-term rather than long-term interests. Unacknowledged and preconceived assumptions about patients' interests, therefore, could have controlled decision-making in unexpected ways.

Ultimately ethical decisions seemed to be decided in an ad hoc fashion as an extension of daily routines, referred to, by several nurses, as being awkward

decisions. This can place nurses on a very fine line between professional accountability and respecting patient rights, particularly, when such decisions seemed to be directed by personal opinion rather than collective consensus that were supported by research-evidence and policies. Without deliberate consensus, through which group agency could be exercised, several nurses appeared to be placed in compromising positions as they exercised individual agency, thus action, that reinforced their perception of *being in control*. However, few nurses recognised this compromising position as such, appearing to understand and accept this as a consequence of working with patients in a dialysis unit rather than as an ethical dilemma because this was *the nature of dialysis*-unpredictable, not always controlled.

Saving nursing time

When nurses saved patients' time, they indirectly saved nurses' time. A senior nurse observed how some nurses controlled clock-time with such accuracy, relating it to an aspect of empowerment. Julie felt that the nurses had been empowered to make clinical decisions since *there was no one else to do it*, yet in the past disempowered in other ways in terms of managerial and non-clinical decision-making. A consequence of this, she believed, was some nurses regulating their meal breaks and finishing times with such *precision*, representing the nurses' inflexibility within the system. However, time precision may not have been a conscious act of resistance, but rather part of what Giddens (1984, p. xxiii) calls 'practical consciousness'. The nurses' time was accepted and valued as a natural way of life, the *precision* reflecting subtle routines, creating a positive reason why the nurses decided to work there, since they could create time for themselves within institutional time constraints.

In summary, decisions a nurse made at one time did not mean the same decision would be made at another. Nurses' decision-making episodes were unique which required flexibility as each encounter required different choices. Despite the nurses having varied degrees of decision-making agency or freedom, this at times could have detrimental consequences for decision outcomes. For example, decisions had become predominantly founded on nurses' expert opinions and past practices that have worked before, that eventually became routine, establishing the *durée*. Giddens (1984) explains that routines provide rationale for decisions which, over time,

produces practical, tacit knowledge that offers security about *how to go on* so that practices become taken-for-granted and institutionalised. Contextuality, where decision-making practices were created, maintained, and at times, changed during social interaction, was not only in relation to time, but also space (Giddens, 1984).

Space

Giddens (1984) proposes that people make space, which at the same time makes people by creating opportunities and constraints during interaction. Therefore space, according to Giddens (1984, p. 118) "is critical in constituting contexts of interaction" known as 'locales'. Locales, like time, are represented by physical and symbolic markers, creating public and private areas that expand and contract depending on the time of the day and what activity is happening (Okun, Fried, & Okun, 1999). The architectural layout of the unit discretely defined the divisions of public and private space, although these markers could be changed making locales, at times, obscure when first encountering them. Private markers of space could be explicit such as locked and labelled doors that indicated what their purpose was and who could legitimately enter them depending on the time of day (i.e. the Technician's room, the Doctor's room, the Nurse Manager's room). Alternatively, physical markers of space could be less visible such as a curtain drawn around a patient and then pulled back when private space was no longer required.

The nurses moved between various locales within the unit context as interactions transpired requiring constant re-negotiation of both time and space, creating what Giddens (1984, p. 119) terms "regionalisation of activity". For example, the meeting room was an area of regionalised activity depending on social routines that controlled how the room was used, when and by whom. The decision to allocate this space as a general meeting room, rather than specifically for nurses, was an organisational decision, although the nurses predominantly controlled access to the room. This observation of nurses' competing for private space within health care institutions was no exception in this unit. Hence, a dual purpose for the room was created that served as both an official meeting room and an unofficial tearoom. This concept of nurses borrowing space has been previously documented (Halford & Leonard, 2003; Kerr, 1985). When an official meeting was held, the nurses had to

find an alternative space for meal breaks. However, the event of this occurring was infrequent since the nurses' daily routines of scheduled meetings and official breaks rarely intertwined.

Boettcher (1985, p. 28) introduces the concept of "boundary marking" that incorporates three elements: delineating space, institutionalising time, and controlling supplies that is commenced from the moment a person enters the unit regardless whether a patient, visitor or health care provider. This is similar to Giddens (1984) idea of social structures being created and recreated across timespace encounters. The implementation of boundary marking within the renal unit was influenced by nursing and technical interventions, institutional policies, social interaction and the physical layout of the unit. As a result, boundary marking assisted the nurses in creating decision-making locales that were recreated in response to interactions across time-space. When space was less defined in the unit, the subtle use of space was learned through mutual understanding, for example, during nursepatient interactions. Unspecified spaces, such as the kitchen, were not explicitly advertised as public space, although a few patients felt comfortable enough to access the fridge or make a drink. Ultimately the kitchen was under the nurses' control, a locale that could easily be supervised and monitored.

When space could not be physically manipulated, cultural markers of space were implied. Roberts (1986) identifies body language, facial gestures and social attitudes as aspects of symbolic space markers that can differ between cultures and groups (Gudykunst & Kim, 1984). Symbolic social distance enabled the nurses to create ownership of space, including personal values, beliefs and interests, which predetermined what was considered as acceptable and not acceptable behaviour across time-space. Consequently, symbolic markers subtly controlled and regulated behaviour expectations. Giddens' (1984) concept of social structures incorporates elements of symbolic markers expressed as rules and resources that are drawn from during social interaction and are further discussed in the proceeding chapter. Lefebvre (1991, p. 26) described space not as a "container" where action occurs, but rather space was "a tool of thought and action", producing and reproducing social

practice. The nurses' station, for instance, was one locale where thought and action created and recreated social practice as nurses went about their day.

The nurses' station

The nurses' desk, commonly referred to as the *nurses' station*, was a region of alternating activity according to both time and space where many decisions were made. From the desk the nurses could regulate the *floor* monitoring nursing activities and patients' responses to treatment. Monitoring was extended across space using a video-surveillance camera located in the waiting room, particularly necessary when the clerk who was located in the patient waiting area, was off-duty. However, visitors could enter and exit the unit with relative ease since nurses were invariably busy, unable to view the monitor situated at the nurses' station, therefore unable to control the flow of human traffic.

The nurses' station provided an essence of private space where renal business was discussed, although nurses often remained exposed to public view or communal 'gaze' (Foucault, 1973). Katie's analogy of this constant observation was the gold fish bowl where the patients reciprocated surveillance of the nurses, watching them out of curiosity or perhaps boredom. The unconstrained environment enabled nursepatient communication, yet, at times, compromised confidentiality since conversations could be heard and nurses' reactions observed. This often went unnoticed by the nurses as they went about their day. The communal gaze (Foucault, 1973) was further extended to professional scrutiny as nurses' monitored one another and the doctors coming into the unit. Escape from colleagues' inspection was necessary in order to reduce anxiety so that some decisions could be made at a distance, necessary to maintain privacy that facilitated a nurse's sense of autonomy (Margulis, 1972, 2003). The meeting room (unofficial tearoom) was one place that served this purpose where private decisions could be made. Consequently, understanding space constraints further illuminated perceived time constraints on nurses' practice, providing an explanation as to why the nurses were earlier described by Julie as controlling time with such precision. The nurses' actions may have been more about accessing private space, rather than time control, necessary to escape the gold fish bowl to maintain an element of personal control and autonomy (Sundstrom,

Burt, & Kemp, 1980). This may also question if decision-making was as shared as the nurses believed if, and when, decisions were made in the private, back regions of the unit clear of public view.

Front and back regions of decision-making

Well you know, they offer support and they are very nice to your face, in front of you but then em....behind the scenes you just don't know (Sarah, 30/8, # 60).

Goffman's (1972) concept of front (public) and back (private) stages, which Giddens utilises in structuration theory, can help to explain how decision-making may change across space. The nurses were observed alternating their decision-making behaviour between public and private space. For example, during public social interaction the nurses restricted what they said, how they said it, and whom they said it to, appearing to conform to the unit norms. However, behind the scenes this conformity was at times resisted. This was when individual agency could over-rule group agency. Although Giddens (1984) does not specifically distinguish between group and individual agency, this may help to illustrate why nurses felt autonomous even within a group context. For example, consenting to group norms publicly did not mean that an individual nurse would act accordingly once positioned in new space. Alternatively, a nurse's perception of autonomy could have been assisted because they were reproducing the group's values and norms, which, in turn, enabled his or her capacity as an individual agent. Knowing which was which was difficult to know without bringing practice to a discursive level that could be deliberately reflected on (Giddens, 1984). Consequently, private, back regions provided ontological safety were nurses could be themselves, by doing and acting differently, providing a place for emotional expression (Craib, 1992). This was a safe place where nurses often spoke about unfairness, disagreement and conflict regarding decisions made away from the patients, the doctors and their nursing colleagues.

Craib (1992, p. 70) suggests that front and back regions are important in the dialectic of control, proposing that the back regions provide "an escape from power or a place where the exercise of power can be generated", hence, individual agency. Thus, decisions *seemingly* agreed to during the nurses' meeting, were not always enacted in

practice, resulting in individual agency over-ruling group agency. Alternatively, knowledgeability about what was expected from the nurses in front of patients and when interacting with colleagues may have constrained the nurses unknowingly as they produced and maintained prescribed patterns of behaviour. This may clarify why some nurses diverted to acts of trickery and game playing to maintain a sense of control as they went about their day, rather than question current practices and challenge perceived constraints on them. The perception of *being stretched for time* may have been one reason why practices remained much the same, especially when less visible strategies seemed to work for some.

Time-space and decision-making

They look cheeky [two nurses laughing in the back store room]. "What are you guys up to"? I ask. "Oh nothing just escaping the main area for a while and having a catch up before I go home". I watched the nurses playfully enlighten one another with stories and then watched an almost metamorphosis as they came back into the work area as if their roles altered not because of who they were, but rather caused by the space they now found themselves in (FN, 2/5, # 9).

The idea of nurses controlling time-space is not new (Boettcher, 1985; Cash, 1999; Hägerstrand, 1975; Halford & Leonard, 2003; Leininger, 1979; Okun, Fried, & Okun, 1999). How the nurses 'positioned' (Giddens, 1984) themselves in relation to others indicated ownership and possession of space or territory (Roberts, 1986). Physical and symbolic markers of time-space can enable or constrain how a person is positioned, articulated as behaviour during interaction, or what Roberts (1986) terms as territoriality, and is closely linked to dominance and control in how time-space are expressed and maintained (Hall, 1966; Okun, Fried, & Okun, 1999; Roberts, 1986).

Positioning-self

Giddens (1984, p. 82-84) talks about how a person is socially positioned in timespace rather than adopting the term 'role' that are perceived as "given, predetermined and then enacted". Instead, Giddens (1984) talks about social positions being structurally constituted as a social identity that carries certain obligations and privileges, therefore, is best understood as positioning of self to others, a position that is constantly reconstituted across time-space. For that reason, why a nurse appeared to make a decision at one time, yet not at another, could be explained by how nurses positioned themselves during encounters. For example, decisions a nurse usually made were referred to the doctors when they were present in the unit for various reasons:

Role expectations: Well I should n't make those decisions really, so when there is a
doctor on the floor that is their decision to make; andSocial:We don't see much of them so I like to make contact so they know
who I am; andOpportunistic:I like to bring up patient issues as I see the opportunity, so why
wait?

Emma would go as far as *informing* the doctor of the decisions she had already made and implemented, as this was *hospital policy* that required legitimate approval. The junior doctors tended to question why Emma would tell them about decisions she had already made since they were not so keen to carry the responsibility for the outcome. In contrast, the nephrologist rarely questioned this independent decision-making behaviour, which was assumed inevitable since no one else was around to make the decision. Emma jokes about this mutual understanding:

I present him with a completed form to sign. He laughs at me now because he knows I will have it there, but it is the evidence here that directs the decision we make (3/7, # 13).

This suggests that it was not so much about a person's role within the organisation, but rather how a nurse positioned herself to another and how that position was accepted, tolerated or even rejected within the organisation itself. This is a similar notion presented by Bonner (2001) in terms of 'expert recognition', which, in turn, facilitated the extension of nursing roles.

Alternatively a person can use time-space during encounters to disempower others (Altman, 1975; Halford & Leonard, 2003; Okun, Fried, & Okun, 1999), a scenario observed several times in the unit. For example, Donna, a Registered Nurse, was observed having a disagreement with a Clinical Nurse:

While reviewing documentation I could see a novice nurse in conflict with an expert. I was not able to hear what it was about but found it interesting how the expert nurse followed the novice in the unit from machine to machine until finally the novice left the site completely claiming she had to "use the toilet". I saw her proceed to PD (FN, 12/5, #2).

At another time, when asked about this incident Donna described her space as being *invaded* requiring her to finally leave the unit. Donna exercised individual agency by making the decision to leave, yet this decision to leave had clearly been affected by another person's behaviour, questioning who was actually in control. Understanding nurses' decision-making in terms of contextuality can be further explicated through Giddens' (1984, p. 64) concepts of "presence and co-presence".

Encounters: presence and co-presence

Giddens (1984) draws from the works of Foucault (1979), Goffman (1959), Hägerstrand (1975) and Merleau-Ponty (1974) in understanding presence and copresence: "being and being with others" (Craib, 1992, p. 65). Contexts, where copresence occurs, are defined as "bands or strips of time-space" (Giddens, 1984, p. 71). Anyone moving into the bands make themselves available for gatherings, creating individual time-space pathways that are unique, necessary for social integration. Social integration focuses on the way in which social actors view and relate to one another during gatherings in specific social contexts (Mouzelis, 1991). Therefore, being and being with others, entailed gatherings or 'encounters' (Giddens, 1984) across time-space, which could affect how decisions were made and by whom. Encounters are a "guiding thread of social interaction" that typically occur as routines (Giddens, 1984, p.72). Gatherings can be structured, focused and intended such as a meeting that is controlled by the furniture layout, set agendas and time frames. Similarly, encounters can be loose, transitory and unfocused such as a fleeting glance across the unit floor or nonverbal exchanges communicated through physical positioning of the body (Giddens, 1984). The nurses were often in the dominant position of deciding whether to pursue an encounter or not, or what type of encounter this would be.

Patient-nurse decision-making encounters

How the nurses perceived a person with renal failure and the treatment they received (i.e. haemodialysis, peritoneal dialysis, community based) prescribed how decisions were made. For example, the nurses were observed, at times, alternating between the two terms, 'patient' and 'client', depending on what type of dialysis a person was receiving. When asked about the switching of terms, at a discursive level, most

nominated the term *patient* regardless of the treatment mode. On further reflection the nurses spoke about making decisions *with their patients*, emphasising patient autonomy. Forrest (1989) claims that caring is inextricably bound to a belief system. Therefore, the nurses' belief system valued working *with* patients, although the context of peritoneal dialysis seemed to enable this belief more in actual practice, compared to haemodialysis. One reason for this difference may be explained because of the requirements of peritoneal dialysis where patients had to be independent so *they could go home*, therefore were more involved in decision-making:

- Monica: In PD because you've got to rely on them over the phone. They've actually got to participate more actively in their treatment for problem solving then get back to us perhaps about, em... how it has worked.
- Researcher:Do you think patients are invited, or wanting to be engaged in decision-making, in haemodialysis decision making?
- Monica: Not to the same extent. They rely a lot on us in the main unit to make those decisions for them whether it is because they are too ill or they just don't have the understanding.
- Researcher:Do we make them reliant on us?
- Monica: No not always. It is mainly em.... When they are unwell and they don't have that capacity to make those decisions that we try and encourage them to be involved and it depends on to what extent they choose to be involved if they can make it.

Dominance and control of patients can be carefully disguised as a culture of caring that further reproduces and legitimises what nurses do (Rafael, 1998). This was even more evident when nurses were *stretched for time*.

When *stretched for time*, nurses could justify doing 'for' rather than doing 'with' patients, possibly unintentionally creating what Bevan (2000, p. 730) describes as a "dialysis production line". Time constraints may have contributed to why the nurses' perceived haemodialysis patients as being more passive in their care, therefore, *doing for*, when compared to peritoneal dialysis patients. This unquestioned disparity was justified by haemodialysis patients' invariably dependent nature on nurses, rather than how the nurses may have constituted this dependency by the very way they interacted with the patients between the two locales. Martin-McDonald (2003, p. 32) writes about how patient control "wanes and waxes" according to changes in the function of their renal system, where, at times, they are forced to relinquish control to the health experts. In this unit, a patient regaining control was not so much about

their changes in renal function, but rather what type of dialysis a patient was receiving. Once in the haemodialysis unit, with exception to home haemodialysis training, the nurses seemed to maintain control. Monica further illustrates this belief in that patients like to *hand-over their care* . . . *temporarily relieved from responsibility*.

Ivancevich and Matteson (2002, p. 83) write about power distance; "the level of acceptance by a group of the unequal distribution of power in organizations". For example, in the unit, there appeared to be a power inequality between the patients and nurses, each knowing what was expected from the other implying 'high power distance' (Ivancevich & Matteson, 2002). However, most nurses believed there were minimal power structures between themselves and their patients, representing 'low power distance' (Ivancevich & Matteson, 2002), even though nurses spoke about being in control. Therefore, being in control may have been more about doing one's job as Emma explains: It is the nurses' legal and ethical duty to provide safe care, thus, make good decisions. Nurses deciding to set up the haemodialysis machines on the patients' behalf was therefore not seen as a control mechanism, but rather a consequence of organisational and resource constraints such as insufficient number of haemodialysis machines and nursing staff. Consequently, this action had the potential of creating high power distance through a knowledge-power discourse (Foucault, 1979), further reinforcing patient passivity and dependency. Furthermore, the patients appeared to accept this status quo despite hegemonic implications (Stillo, 1999). Lynnette, in comparison, argued that this was a nursing decision that failed to be changed because of minimal group consensus. This in turn, maintains structures of hegemony. This picture illustrates how group agency can override common sense, constraining some nurses' individual agency that may have facilitated better outcomes for both the patients and nurses. Group agency, therefore, may have possibly served organisational, and some nurses', needs before the needs of the patients, the least resistance being perceived as the easiest way out:

The reason we don't push for self-care is the time limitation in them setting up the machine . . . much easier to set up and deliver care than educate the client to be independent and empower them to care for themselves . . so a lot of our clients are looked after and the nurses do that. So that makes it difficult if one nurse will do it but another nurse won't (Lynnette, 4/9, # 54).

Overall, deciding how to manage time-space was not only about controlling nurses time in regards to tea breaks and finishing times, but included controlling the work pace and productivity levels (LaNuez & Jermier, 1994). This may have been necessary when working within resource constraints such as insufficient nurse skillmix, which inadvertently placed extra demands on the senior nurses, who were often seen as the nurses who resisted change the most. Time saving decisions tended to offer short-term rather than long-term solutions. Long-term strategies had a greater potential of changing established institutional practices; practices that appeared to contribute to the nurses' reality of *being stretched for time*, further constraining practice. Furthermore, the nature of dialysis controlled how nurses used time-space which, in turn, affected how decisions were made, what sort of decisions were required and how decisions were evaluated.

Low and high presence availability

Differences in the nurses' decision-making styles were also noted depending on whether decisions were made face-to-face (high presence availability) or across space through other communication means (low presence availability) (Giddens, 1984). Craib (1992, p. 47) comments that any society that "exists beyond face-to-face interaction must have means of extending itself over time and space", made possible by electronic resources such as the telephone or email.

In peritoneal dialysis, many decisions were made in low presence availability, the nurse-patient encounter conducted over the phone. The application of modern communication technology, at times, complicated such encounters requiring the nurses to manage systems beyond the renal unit locale. This required specific technological communicative decision-making skills that the nurses predominantly learned on the job. The peritoneal dialysis patient had to learn the appropriate technology and terminology to participate in low presence decision-making fostering independence and control that served the patient, the nurse and the organisation. Time was created and easily justified to facilitate this learning journey. In contrast, high presence availability within the haemodialysis unit may have been a major controlling factor in how decisions were made. Face-to-face decision-making enabled quick choices to be made, frequently based on visual cues that replaced

many aspects of the nurse-patient dialogue observed in peritoneal dialysis. These differences had not gone unnoticed, as Monica spoke about *a control situation*, thus decision-making, *within the haemodialysis unit*. The nurses in peritoneal dialysis tended to talk about both the physical and psychosocial aspects of patient care, unlike the patients receiving haemodialysis:

In home dialysis *[peritoneal]* we stress the value and importance of being at home, but once on haemodialysis, then the focus is on what happens in the unit, not outside the unit. The physical, not psychosocial. (Anna, 8/5, # 19).

Sarah perceived patients situated in the community or attending the peritoneal dialysis unit as usually requiring less urgent decisions, when compared with haemodialysis where outcomes were often more unpredictable and, at times, more *urgent*. This could explain why the physical aspects of patient assessment tended to dominate in haemodialysis, in that breadth and depth of decision-making was lost because of uncertainty and urgency. Several studies have focused on decision urgency, the nurse alternating from analytical reasoning when time was not an issue, through to intuitive practices when time was crucial (Cioffi, 2000a; Gerdtz & Bucknall, 2001). Unexpected outcomes related to peritoneal dialysis tended to result slowly and in a timely fashion, unlike haemodialysis, where urgency could mean a matter of seconds before blood was lost or a fistula permanently damaged. Consequently, decision-making in such times of urgency required masterful skills and exactness, induced from intuitive resources, often expressed as automated acts. However, this level of competency could sometimes be manifested as overconfidence, yet gave the appearance of being in control and autonomous. These aspects are revisited in chapter 7.

Nurse-nurse decision-making encounters

Even though nurses perceived a low power distance culture within the unit (Ivancevich & Matteson, 2002), some nurses talked about having more or less power in relation to other nurses. A nurse's official position in the unit was assumed to strengthen this power position, ultimately affecting who made decisions or at least had the final say. For example, decisions made during the nurse's weekly meeting depended on what was written on the agenda for discussion and which nurses were actually present at the meeting on the day. Although the nurses' meeting was generally considered a democratic process in terms of making decisions, this was not always evident. Consequently, some decision-making issues received more time for debate than others. For example, when an item had the potential of disrupting routines the decision seemed to be made quickly, often by one or two dominant nurses, leaving little space for collaborative decision-making:

Item presented: Should we continue taking pre and post temperatures on
stable, chronic patients?Response:Yes, it is policy. Next item (FN,11/9).

In spite of the appearance and perception that decisions were made through a democratic process this was not always the case. In addition, decisions made during one time-space episode were not necessarily applied in another:

.... they said [the nurses at the meeting] "oh people aren't just to come in" and then the next day Patient A comes in and the level two [Clinical Nurse] says "come on we'll put him straight on" and she was at the meeting. You know what I mean? We all work together or we don't work at all (Denise, 15/11, #520).

Denise explained this behaviour as *too many Chiefs and not enough Indians*, which confused her as a beginner renal nurse. Consequently, when individual agency did not correspond to group agency and values, this could undermine a sense of ontological security (Giddens, 1984). This may have been another contributing reason as to why Denise was seen as failing by some of her colleagues in that decision-making freedom constrained certain nurses' practice rather than providing decision-making opportunities. Sharing decisions, for instance, could enable and constrain a nurse's sense of space and degree of freedom.

Sharing decision-making space

Control during the decision process implied a certain level of nurse autonomy. Deciding to share a decision was generally perceived as a positive outcome, although sharing decision-making space could be taken away from a nurse without even being noticed. Alice felt that she could make decisions both on her own and with others:

You still have the ability too.. yeah, you still have the choice whether you decide to take it or not [advice]...I still have the choice to agree or disagree with a decision (Alice, 9/11, # 156).

Alternating between individual and group decision-making was expressed by several of the nurses. However, earlier Alice had claimed that there was *power play* in the unit between the Clinical Nurses and experienced Registered Nurses, who Katie referred to as the *Intermediate Nurses*, who were at different stages of *knowing what and how to do it* [dialysis]. This made me question if a team approach to decision-making in this unit was always possible. Alice responded:

I think the Registered Nurses...not do as they are told, but they do have a lot of respect for the Clinical Nurses, or the majority of Clinical Nurses. I wouldn't say all the Clinical Nurses because I can't, but I do have respect and even when I don't agree with them I follow their instructions because I do have respect for them and know that their practice is safe. It wouldn't matter whether they were Registered or Clinical Nurses, I'd question if I thought their practice was questionable but with most I do feel safe (9/11, # 132).

A feeling of *respect* and *being safe* appeared to have a controlling effect over Alice's decision-making, rather than her need to be an independent, autonomous practitioner. While reflecting further, I wondered just how autonomous Alice really was and, what circumstances enabled and constrained her perception of *being in control*. For example, nurses spoke about their alternating levels of responsibility that often coincided with who else was working, where they were working and what resource constraints were visible. By sharing decision-making space, a feeling of safety may have intentionally been exercised by Alice that, in turn, made her feel in control of the moment and, therefore, produced a sense of autonomy. However, Alice also spoke about times when she did not feel in control, her decision-making space *invaded* as nurses told her what she *ought to do* or felt she had to *seek approval*.

This perception supports Rosemary's earlier description of novice nurses *appearing to make decisions*, a belief that could be extended to all nurses in the unit regardless of their experience since many decisions were routine. Consequently, the shared concept of decision-making, and ultimately sharing of responsibility by *seeking approval*, could be deceptive. When nurses trusted one another this did not mean that valid and credible data was shared or that a decision was well informed. Some nurses spoke about *checking up* on other nurses, albeit in less explicit ways, changing treatments as required. When this occurred in less obvious ways, learning opportunities could be missed. Even though trust was accepted as part of nursing

encounters, it was manifested in different ways. Furthermore, decisions made across time-space or low presence availability, required an element of trust and professional integrity where decision-making freedom sometimes appeared to have no limits.

Low presence availability could facilitate nurses' decision-making freedom and individual agency, in which decisions were made away from public view or 'gaze' (Foucault, 1973), thus inspection. One example of decision-making freedom was when a nurse was observed taking a post-iron treatment blood test:

I saw the experienced nurse take some post-iron bloods despite her stating to me "the time was not right to repeat the iron study". I was confused by what she knew and with what she did. I quizzed her on this to try and gain some better understanding. When asked about this a few days later she responded; "there was no risk to the patient, easy to do and that she was curious about the result" (FN, 28/6 & 2/7).

Deciding to act beyond 'prescribe rules', hence the policy regarding repeat iron studies, generated a sense of control and autonomy for this nurse, yet, this decision was not discussed or evaluated in terms of patient consent, ethical concerns, professional trust and accountability. 'Getting away with it' seemed to be part of the nurse's autonomy and authority that was unquestioned. In view of this, low presence availability enabled some nurses' autonomy when making decisions, although this control did not necessarily mean it was acceptable or warranted. In addition, a nurse's bestowed position within the institutional hierarchy assisted with this authority as their dialectic of control could be exercised when making decisions, their official position trusted, therefore, often left unmonitored.

Overall, nurses' decision-making encounters could be both enabling and constraining from one time to another. Following accepted social norms, learning not to overstep the mark, and sustaining routines to maintain the status quo, all had powerful connotations, yet were not always perceptible. Decision-making space for both the patients and nurses could be shared, given or taken away. This meant that not all the nurses participated in decision-making equally and is a finding congruent with other studies (Baker, 1997; Manias & Street, 2001a; Snelgrove & Hughes, 2000).

Doctor-nurse decision-making encounters

Decision-making encounters were not only isolated to the nurses and patients, but also how nurses positioned themselves to their medical colleagues, including the nephrologist, and how these positions were respected and accepted. Therefore, how a nurse perceived co-presence in terms of who had control and power during doctornurse encounters, influenced how decisions were made. Emma saw the absence of a full time nephrologist as *an opportunity:*

This promotes our autonomy and we can be responsible for much of the decision-making and dialysis treatments (3/7, #12).

However, she spoke about *letting the doctor think he had made the decision* implying a doctor-nurse game (Stein, 1967; Stein, Watts, & Howell, 1990). This was particularly important when special fluid or medications needed the doctor's authorisation. In this case Emma collected the evidence that was then *presented to the doctor*. Despite power play, the doctor-nurse encounter was perceived as friendly, open and collaborative.

Differential power relationships were observed during the clinical meetings, the nurses contributing to this imbalance by what they did and said. Ultimately, the nurses decided and directed the flow of interaction during the meeting, although resource constraints once again appeared to have a major effect. For example, it was not atypical for thirty or more patients to be *discussed* within a two-hour period during the clinical meeting. Consequently, decision-making at these times was quick, based on predictable and familiar routines, rather than aimed at optimising outcomes. Most nurses felt that they could contribute during the meeting, although this contribution was usually explained in terms of the nurses *presenting problems* so that the doctors could make the *final decision*. Despite this, Rosemary still referred to multidisciplinary decision-making encounters as being participatory:

Nurses present problems they have encountered with their primary patients or may have some suggestions what they think may solve the problem. (16/11, # 2).

This infers an element of clarification for decisions already known, that did not require in-depth discussion. As Sarah explained, this represented a *legitimating*

process in accordance with institutional rules. Lynnette disapproved of nurses presenting problems, describing this as a passive activity that could be done better in order to meet patients' needs:

I think it could be better as issues of psychological needs [for patients] are often lacking as we tend to focus on the physical rather than the psychosocial (26/9, # 22).

Despite nurses presenting problems, for Sarah, such meetings were still a *slow*, *painful process* that she did not always feel part of. While observing these meetings I would have to agree that they were often drawn out, unfocused and, at times, members were distracted with 'other' issues, questioning just how mutual the decision-making was.

When disagreement arose this was not usually verbalised until after the meeting when the nephrologist had left. When asked about this Rosemary replied, *well then, that is that* accepting the situation as it was. Clinical experience suggests that "power relationships between two professions differ from one specialty to another" (Sweet & Norman, 1995, p. 170) and was evident in this context. Joanne also believed that the nephrologist ultimately had the final say, and recognised the power difference between the members within the collaborative team. Mackay (1993) proposes that nurses accept the unequal balance of power since it arises principally from the differing educational traditions of nursing and medicine. However, this acceptance of the nephrologist's final decisions was less evident in practice.

In practice, away from the context of the meeting and official power structures, nurses appeared more able to challenge, question and/or complain about decisions made, using their specialised renal and contextual knowledge to their advantage. For example, Joanne talked about some nurses *intimidating* junior doctors with their knowledge, reinforcing the nurses' authority:

Sometimes we're very nice to the doctors but sometimes, I think, we can be quite brutal. I think because the doctors just flick through our lives. We, as the nurses, work with one another for years (19/11, #81).

Whether this contributed to the doctors' noticeable periods of absence from the unit is difficult to say. However, such absences were, at times welcomed, the nurses *making decisions on the doctors' behalf*. When decision-making was unfamiliar, creating uncertainty, or the nurses were too busy to take on the extra responsibility, the doctors' absences were less welcomed.

The nurses indirectly spoke about getting *what they wanted* once on the floor away from the confines of the meeting room. Nurses appeared more confident in approaching different doctors with the same problem until a *suitable decision was made*, judged by the nurses themselves. This may imply an optimising approach to decision-making (Simon, 1967), although done in less productive ways. This covert behaviour fails to challenge routine practices constituted during the clinical meetings leaving change to occur in an ad hoc fashion that is difficult to control or evaluate. Nor does this support or suggest a multidisciplinary approach to decision-making. Sarah, for example, would specifically select a junior doctor who was assumed more open to nurse instructions. Sarah acknowledged this as *taking advantage*, but justified this coercive behaviour as necessary if *best-practice principles are to be followed as per the CARI guidelines*, assumed to benefit the patient in the long-term.

However, this did not guarantee best-practice since many decisions were already preknown, based on what the nurses *had done before*. When a junior doctor did not agree with a nurse's premade decision, or made an *incorrect decision*, the nurses would bring this to the nephrologist's attention, usually via the more senior nurses. This informant behaviour has been noted by Manias and Street (2001a).

Another doctor-nurse game, proposed by Katie, was the careful selection of decisions presented to the nephrologist that the nurses wanted to dispute, ignoring incidental issues. This, she believed, reinforced the nephrologist's perception that he had *overall control in his unit*, creating an impression of authority, even in his absence. However, this authority seemed to be a reality, rather than a created impression, as nurses repeatedly drew from the nephrologist's decision-making framework in terms

of what he liked and did not like. Sarah, for instance, consciously asked what would the nephrologist do or want us to do if he was here?

Decisions made across time-space, therefore, extended locales and circumstances which, in turn, facilitated a nurse's agency, albeit, making de facto decisions based on the nephrologist's preferences. At other times, the nurses would humorously, but respectfully, jest about the nephrologist's inability to make technical dialysis decisions. This was clearly the nurses' practice space, or at least this is how many nurses perceived it. As a result, decision-making domains seemed to be apparent leaving task-orientated decision-making for the nurses, which, at times, some nurses alleged excluded them from making certain decisions such as medical decisions that were considered the doctors' domain. Lynnette spoke about patients on one side, and the doctors on other, the nurse in the middle, representing a game of piggy-in-themiddle. The medical establishment was perceived as pulling the nurses towards the biomedical aspects of care, and carrying out orders. Yet, in another time and place, in the doctors' absence, medical decisions became the nurses' responsibility. On the other side, patients complicated decision options by not adhering to treatment advice, limiting optimisation of treatment and care. While reflecting on this analogy, I personally felt that the patients too were positioned in the middle, between the decision-making capacities of both the doctors and nurses.

Decision-making outside the renal unit locale

Unfamiliar decision-making territory reduced the nurses' sense of safety or ontological security (Giddens, 1984) creating a perception of increased uncertainty and risk. This often resulted in the nurses unwilling to take on increased responsibility. Making decisions about unknown patients with unknown colleagues produced varying degrees of anxiety. In intensive care, for example, nurses were aware of their decision-making boundaries and took advice from the doctors, although still capable of questioning orders if they did not reflect *optimal renal therapy* for the current situation. The patients located in this context were often acute patients, or unstable chronic patients who missed dialysis so required out of hours care. When uncertainty prevailed, and routine dialysis disrupted, decision-making was no longer about sacrificing, but rather optimising, suggesting that uncertainty and risk unintentionally caused nurses to seek all possible options (Arnaud & LeBon, 2000). Time-space encounters in such an acute setting may have enabled deliberate decision-making because of the patient's acuity. The nurses' could no longer justify decisions based on routines or intuitive practice alone, rather rationale for practice was generated through analytical decision-making processes, reflecting previous findings that have addressed decision uncertainty (Balsa, Seiler, McGuire et al., 2003; Fonteyn & Grobe, 1992; Neville, 2003). These concepts are also revisited in chapter seven.

Chapter summary

This chapter has introduced nurses' decision-making within the natural context of the renal unit, addressing the characteristics of contextuality. Characteristics of contextuality included time-space and interactions across time-space during encounters. Repetition of social practices across time-space maintains stable social order. Giddens (1984) conceives stability as a means of *continuity*, addressing how things are now and how they used to be. When exploring decision-making, integrating temporal and spatial properties offered insights into the nurses' working context. How the nurses used, manipulated and interpreted time-space depended on personal, team and organisational cultural values, drawing from past and present routines. However, it was not until stability within the daily routines and encounters became threatened that the nurses began to reflect on how they used time-space when making decisions. This had the possibility of optimising decision outcomes.

Interpersonal and professional relationships have also been discussed whereby nurses were subjected to, and agents of, power. The dialectic of control was threaded throughout the chapter to illuminate this aspect of power in social practice that could either enable or constrain the nurses' decision-making. The nurses' continuous monitoring of action, through the process of reflexivity, enabled the routineness of daily practice (Giddens, 1984) yet, also provided opportunity for change. What was perceived as normal, was often desirable, providing ontological security in how to go on from day-to-day without having to always consider the meaning of what they do and why (Giddens, 1984). Critical dialogue, between the researcher and participants, questioned taken-for-granted practices generating new interpretations through the

double hermeneutic loop (Giddens, 1984) that had the possibility of undermining the authority of established ways. Such a process seemed to reveal a satisficing decision-making culture at the cost of optimising outcomes. Trust of nurses and daily routines enable decision-making, fostering a caring environment despite nurses *being stretched for time*. Consequently, satisficing served the interest of the nurses as this saved time. Furthermore, social structures, the rules and resources, assisted with the organisation of time and space in different ways, which controlled how decisions were made, who made them and how they were implemented. Therefore, it becomes necessary to explore the social structures (rules and resources) in further detail; structures that are created during nursing interactions. By not asking who made the rules and what access to resources the nurses had, as the next chapter does, a fuller understanding may not be achieved. Furthermore, until such questions are asked, the concepts of individual and group agency cannot be optimised to produce effective decisions outcomes, rather decision outcomes become compromised, leaving accountability and responsibility for such outcomes open to debate.

CHAPTER SIX: SOCIAL STRUCTURES

Introduction

The preceding chapter depicted nurses' decision-making as being constituted and reconstituted across time and space during encounters. The nurses demonstrated a great deal of knowledge about their context, drawing from routines and social structures. Social structures, according to Giddens (1984), are the rules and resources that are not independent of action but rather are created and maintained through social interaction that become patterned across time and space (Giddens, 1984). For this reason, Giddens' concept of structure does not follow the traditional belief that structures are an external force that determines (determinism) human action or that actors possess a free-will to behave and do as they wish (voluntarism), but rather social structures share aspects from both of these competing ideas (Seidman, 1998). Social structures are figuratively brought to life by knowledgeable actors, created and recreated during interaction. Orlikowski (2001) explains social structures as being constantly recreated, renegotiated and redefined because of what people do and how they think. Structures are portrayed by Giddens (1984, p. 16-18) as having three dimensions: 1) rules of signification or language that constitute meaning necessary for interpretation assisting the communication of what people think; 2) rules of legitimation endorsed via sanctions that provide moral guidance and codes of social conduct for what people do; and, 3) resources that are accessed and controlled to generate power and domination during encounters. Like time and space, rules and resources are separated into the three domains for analytical reasons although, in structuration theory, they are all interconnected and constituted during agencystructure duality.

This chapter addresses how social structures, within the renal context, controlled nurses' decision-making. Knowing the rules, and access to resources, created and maintained the nursing culture, which was articulated predominantly as routine activities. Over time, routine patterns of social practice became established as the *longue durée* of institutional time (Giddens, 1984). How decisions were made in the past predominantly controlled how decisions were made in the present. Institutional

patterns emerged around who could do what, when they could do it and on whose behalf. By observing and speaking with the nurses about decision-making, their social and mental constructions regarding their world and workplace were revealed (Orlikowski, 2001). The nurses interpreted and applied social structures, the rules and resources, as they tacitly went about their day. Consequently, structures could be constituted in ways not always intended. Once structures were known at a discursive level, then the nurses had the capacity to revise them, "opening up possibilities of action" (Giddens, 1984, p. 173).

Rules

I ask Sarah how she knows that taking more than 2.5 litres of fluid off would have negative consequences for this patient. She replies, "There is an understanding. It is not written as such but you get to know it for individual patients. Sometimes it is recorded on the care plan, but most times it is unspoken . . . It is an unwritten rule that we come to learn or take-for-granted. Someone who did not know this patient would perhaps go for the 3 litres and then run into problems. Most I would say will ask until they feel familiar with that patient's history. You would also look at their chart and see what others have aimed for previously and if they have gone for more, then you would see she required IV saline towards the end of dialysis" (*FN, 20/8, #4*).

Rules were important for the reproduction of social practice, often expressed as taken-for-granted norms and beliefs that controlled how decisions were made and who was allowed to make them. Rules were assumed to serve the needs of the nursing group rather than individuals, although this did not mean that they were necessarily followed or implemented within the renal unit context. Rules of signification gave meaning to social conduct, while rules of legitimation endorsed social conduct during encounters. The nurses followed the rules, knowingly and unknowingly, during social interaction, which, in turn, shaped different power relationships. Consequently, rules become inseparable from meaningful social action and from the exercise of social power (Layder, 1994). Power, in this sense, was the nurses' ability and capacity to monitor actions, provide rationale for their actions and to act otherwise, supporting Giddens' (1991a, p. 200) claim that "all social rules are transformational".

Rules can be explicit such as knowledge rules [i.e. procedures, the CARI guidelines], and bureaucratic rules [i.e. policies, code of nursing conduct]. At the same time rules can be implied through action, such as social rules [i.e. social distance and time rules] that are produced by the nurses themselves in order to establish what constitutes acceptable and unacceptable behaviour. Rules can become part of routines, which produces nondiscursive knowledge that has meaning through action, and is often accepted as *just is*. In this study, it was the researcher's endeavour to bring the just is to a discursive level during dialogue, or when there was an interruption to familiar routines and the *durée*, producing what Giddens (1984) terms a 'critical moment'. The possibility of a critical moment arising was not isolated to the nurses alone, but also for myself. For example, one rule I had previously accepted as an 'official written' rule, from my time as a Registered Nurse working in the unit, was the opening time of 0830hrs for patients. This rule was learned and reinforced through daily practice, and therefore, existed through my interpretation and interaction with the other nurses, and with patients themselves. However, during a dialogical encounter, via what Giddens (1984) terms the double hermeneutic loop, Emma questioned my interpretation and revealed my misguided understanding. There was no such rule! Rather this rule was 'figuratively' (Giddens, 1984) brought to life, and 'existed', through my own perception of what I thought was going on. This was an important lesson for me to learn as a researcher. Although I thought I knew the renal unit and the routines, my meanings were not always mutually shared and required a relearning process. Munhall (1993, p. 128) refers to a similar process that she terms unknowing - "a condition of openness"- where the nurse-patient, or in this case researcher-nurse, interacts to create new meaning. This emphasises Giddens' (1984) idea that rules always have the potential to be changed and reformulated across time-space encounters. Hence, they are never perpetually fixed.

Rules across time-space

Rules could change across time-space either deliberately or inadvertently in response to societal changes or internal demands within the unit. For example, Rebecca spoke about how less experienced nurses, in the past, were excluded from making decisions, but there was now an expectation that all nurses made decisions, even if only routine decisions. Nonetheless, Rebecca still questioned why less experienced nurses wanted decision-making responsibility, causing a moment of friction between past and present practices:

"Nurses today [juniors] want to make decisions and be part of that, yet this is difficult, as they don't have the skills and knowledge. They always want rationale and explanations . . . this can cause conflict and disagreement so it's not always a good thing" (FN, Rebecca, 25/6).

The decision-making rule 'today' was about reasons and rationales, replacing past practice rules of *waiting to be told*. When nurses asked for rationales, thus brought day-to-day practical knowledge to a discursive level, this had the potential of disputing routine practice and rules, which, in turn could be a threat to ontological security or the nurses' sense of safety as they went about their day (Giddens, 1984). However, in this unit it appeared that preserving the status quo enabled *the work to get done,* and so it was often in the nurses' interest to maintain such practices, particularly when *stretched for time,* reinforcing a culture of satisficing (Simon, 1967) behaviour whereby nurses did not always look for all possible options but rather settled with decisions that sounded good, or were part of routine and did the job. These aspects of decision-making have been discussed in the previous chapter. When rules could not be explained or spoken about they still signified something at a practical level, constantly produced, maintained and recreated.

New practice rules are assumed by Giddens (1984) to create new meanings that are facilitated by the means of language. This meaning, in turn, can also control how rules are applied in practice. For instance, the present vocabulary within the renal unit referred to nursing practice in terms of 'autonomy', 'accountability' and 'responsibility', regardless of a nurse's level of experience. However, what nurses said (rules known) and what nurses did (rules enacted) were not always congruent with the language used, since nurses were observed reproducing unit routines and familiar patterns of decision-making behaviour. The recursive practice of *doing much the same*, such as waiting for instruction, seeking approval and sharing decision-making, looked as if it contradicted the nurses' perceptions, reinforced via the language, that spoke of autonomy, independence and control. Therefore, what is understood and what is said can easily cause a disparity. Giddens (1984) recommends that researchers look for contradictions as this can illuminate seemingly

stable and continuous social patterns. In this case, what I had initially observed and understood as recurring practices may not have been as repetitive as I had thought. Rather, the nurses' social practice was discursively explained in terms of the professional qualities to which they ascribed. For instance, Sarah justified her actions of 'waiting to be told' as *recognising my scope of practice as a learner*. Likewise, 'seeking approval' for Carol was about *being accountable* and, finally, Emma perceived 'sharing decision-making' as a *team building exercise*.

In light of this, only the person doing the action, or thinking about the action, can really know their intentions, and even then, this may be concealed as something else. Giddens (1984) is particularly interested in actors' intent by speaking about what they do and why, because this reveals one's perceived capacity, and thus, agency to do and act otherwise. Consequently, when exploring nurses' decision-making intent, the researcher relies on participant honesty and truth about what they know and do, keeping in mind that this may not always be spoken about, thus known, at a discursive level. In the renal unit, a rule had the potential to be applied to serve certain nurses' interests and aims although, understanding when this occurs, and why, is difficult to know. Even the nurses themselves lacked this insight when asked what purpose rules served, implying that rules were used inadvertently during agency. Alternatively, the nurses may have deliberately elected to say nothing.

When rules are immersed in daily practice and automatically applied with little acknowledgement, they can remain unexplored. It is not until rules become known at the discursive level that the possibility of changing rules can occur (Giddens, 1984). Thus, the more knowledgeable a nurse was about renal unit rules, the more opportunity a nurse had in making and breaking such rules. Rules of social conduct, including rules of clinical conduct, were created during interaction, representing normative rules of accepted and unaccepted behaviour within the unit. Giddens (1984) terms normative rules 'structures of legitimation'.

Normative rules in decision-making

Structures of legitimation, rules relating to social conduct, are interpreted and verbalised by people as rights and obligations (Dillard & Yuthas, 1997),

accompanied by sanctions and rewards. If social conduct is improper, penalties occur. Therefore, rules are "inseparable from the exercise of social power" (Tucker, 1998, p. 80). For example, the health care system has legitimate social structures. The patient has a right to health care, while the nurse is obliged to provide care. When the patient does not follow the 'social rules of sickness' (Parsons, 1951), as prescribed by society, sanctions can be applied. The nurses, too, have an obligation to follow legitimate rules of professional practice to provide fair and just care. However, Martin (1998, p. 190) questions if social norms, which claim legitimacy, are "generally accepted by those who follow and internalise them", or whether social norms are merely there to stabilise the relations of power (Lukes, 1974). Consequently, rules could be bent and, at times, broken to suit the interests of the renal unit or individual nurse. Alternatively, some rules could be unintentionally broken and, unacknowledged as such. In this unit there were clearly times when nurses followed rules, breached rules and ignored rules.

Makers and followers of rules

Knowing the rules enabled the nurses' dialectic of control to be exercised since rules could be endorsed and applied to change or control another person's behaviour. How a nurse was 'positioned' to another person during decision encounters prescribed whether the nurse was a 'maker of rules', thus producing them, or a 'follower of rules', reproducing them. Tucker (1998, p. 81) emphasises that people can be both "rule-followers and rule-makers", their position alternating across time-space encounters as they draw from social structures as a collected knowledge. Although several senior nurses had the authority of making and enforcing rules they were also followers of rules, founded on institutional traditions, rules they had come to know from past experiences, yet continued to apply in the present time. Rebecca, for instance, within the present climate of nurse accountability, responsibility and autonomy still told an inexperienced nurse what to do at the expense of collaborative deliberation, since discussion required time. This telling approach was not too different from her own inauguration into the unit as a novice nurse. This behaviour appeared to correspond with Simon's (1967) notion about people satisficing when making decisions rather than looking for all possible solutions. He adds that human

rationality is bounded which limits how informed decisions can actually be. Beliefs, for example, could bound a nurse's rationality:

I don't like putting their weight up as I feel they need to go down as they are not eating so well. That is, those who are not cared for within their own communities and fend for themselves. If they are in care then I know they will be fed well and tend to gain body fat, but as a general rule they lose body fat (Emma, 26/8, #70).

Furthermore, what role organisational constraints, such as time, nurse-skill mix availability and bounded rationality played in determining how decisions were made, was not so clear.

Decisions during these moments seemed to be based on *what had worked before*, the knowledge deliberately passed on to junior staff by telling them what to do, reinforcing the oral tradition of nursing and, it is assumed, saved time. Emma did not see this as *telling* but rather *directing* nurses. Regardless of how this was interpreted or understood, both modes reproduced the decision-making authority of those who gave instructions, and those who carried them out, resulting in a recursive pattern of social practice; a patterned behaviour also observed during nurse-patient encounters. In defense of this behaviour, Giddens (1984) believes that it is not possible to always question what it is we do, or provide all possible options. If so, anxiety would make day-to-day living unattainable and no decisions would be made. It was through *telling* or *directing* that routines become established providing ontological security (Giddens, 1984) so that decisions could be made.

Some nurses welcomed rule-following, yet still described themselves as exercising their control by deciding whether to follow a rule or not. This seems to contradict nursing's aim of autonomous practice if individual nurses continue to obey orders made by other decision makers rather than be more active and accountable. Nevertheless, it cannot and, should not, be assumed that all the nurses want professional status or control. Trying to understand when and why nurses do not want decision-making control, or believing they have control when they do not, is of importance since this may reveal hidden dimensions about nursing and nurses. For example, when Denise earlier spoke about not making decisions without consultation (see chapter 5, p. 115) this inferred a level of dependency, although this action may

have actually been a deliberate act of choosing not to make decisions. If this was so, then Denise had control, referring the responsibility back to her superiors who then had to make a decision.

Prescriptive rules of practice

The *Code of ethics for nurses in Australia* (Australian Nursing Council Inc, 2003a revised) and the *Code of professional conduct for nurses in Australia* (Australian Nursing Council Inc, 2003b revised) are well-defined normative, prescriptive rules of what nurses 'ought' to do and assumed to guide nursing. In this study, few nurses referred to the codes when asked about decision-making, unless an unfamiliar incident arose producing a 'critical moment' (Giddens, 1984) that required the nurses to justify their actions. When Sarah was deliberately asked about nursing codes, she described them as *legal rules* that helped to *justify* what she did in practice, particularly when *refusing* to perform a certain activity that she felt was *beyond her scope of practice*. Professional codes appeared to function as a set of protective rules, which, for Sarah, gave her a sense of *being in control*. For the more experienced nurses, normative rules were at times constraining when they needed, or wanted, to work beyond their professional scope of practice.

The doctor arrives and is asked to sign for maxalon that was administered yesterday. He asks why should he sign for it if it is per protocol? The nurses respond by saying it is a requirement in the hospital, not for panadol to be signed but maxolon. The doctor argues that he knows nothing about the patient, or why it was given it and now he is asked to sign the order and take responsibility for it (FN, 20/8, #12).

Consequently, the nurses' practice boundaries alternated depending on time-space and who else was *on the floor*. This, at times, required a nurse to make decisions beyond their professional boundary, causing an array of emotions². For example, deciding to terminate haemodialysis prematurely; sending a patient home to do home dialysis yet unsure if they are ready; and deciding anti-coagulation therapy for an acute patient without the doctor's official order. When rules were explicitly written, such as a medication policy (i.e. administration of intravenous iron), the nurses generally perceived them as having more authority, and therefore, felt less able to

² Emotions and decision-making are addressed in chapter 7, pp. 248-255.

deviate from them. In contrast, when practice rules were not explicit this was found to be enabling for some nurses, while a point of unease for others.

Breaching or breaking of rules was not unique to the nurses in this unit. Expert nurses were observed bending rules in Bonner's (2001, p. 241) study, a process she calls "blurring the boundaries" where nurses exceeded accepted rules in their day-today nursing practice. In this study, both experts and non-experts appeared to 'blur the boundaries'; although the less experienced staff may not have intentionally done this, rather they mimicked their superiors, by *watching and then doing*. Giddens (1984) describes watching and listening as an actor's ability to monitor self, and others, by the process of reflexivity, applying and reapplying rules that further strengthen their legitimacy and existence. This at times caused technical decisions to be made prematurely, the nurses appearing to follow not 'rules of theory' but 'rules of action':

You look at a glance and pretty much know what is going on, it comes with experience. However, I do see some that just re-set the alarms without really considering why it has alarmed or what is going on (Emma, 26/8, # 30).

Familiarity with technology made some nurses' actions appear blasé. Experienced nurses, according to Emma, were *actually making decisions* but in less visible ways, drawing from *previous experience*. This seemed to then foster an intuitive style of decision-making as previously described by Benner (1984). Rationales for practice were assumed to follow rules that justified actions, therefore, could be purposefully applied, and spoken about. However, this was not always the case as not all rules were known or could be explained. In such cases, nurses may have given an appearance of being in control, thus made autonomous decisions, yet their level of control was questionable.

Breaking rules

When the nurses broke rules, this appeared to mainly serve their interests, and produces a disparity with Bonner's (2001) assumption that nurses blurred practice boundaries to serve patient needs. In this study, the event of breaking a rule seemed to be calculated in terms of nurses', rather than patient, consequences so that some rules became more valued, or authoritative, in practice than others, in spite of

whether they were written rules or not. The two scenarios below illustrate this point further.

Don't forget the phosphate binders

The majority of patients were prescribed phosphate binders, a medication taken with food to maintain phosphate balance necessary to prevent destructive bone disease (Albitar et al., 1997; Barrett, 1999). Any renal nurse, if asked about phosphate binders, may not be able to explain how binders work, but would know the rule, whether it was written or not, that binders must be taken with food. The nurses in this study were no exception. The rule was a general rule; routine practice; and the nurses' responsibility. However, this well-known rule was rarely monitored in practice when patients were eating. When asked why this was so, the responses varied: we presume they are handed out; we don't have time; it's not a written policy; the patients could bring in their own but should be given by us to reinforce the importance; and probably not all junior staff know that they are given as part of routine care. Consequently, it could be argued that nurses were also noncompliant by not following treatment rules, yet this was not made public or acknowledged as an issue. Wellard (1996, p. 229) mentions the irony of Australian "renal nurses insistence on compliance by patients" yet position themselves outside the powerknowledge discourse of compliance in terms of their own preventative health behaviour or, in this case, professional practice. Rosemary, for instance, mentioned that phosphate binders were not being routinely administered. Despite her senior position within the unit she had done nothing about it, nor could she explain why she had decided to do nothing. Following this discussion, Rosemary remained passive in addressing the problem, even though she mentioned that she would bring this up at the next meeting. Rosemary's supposed lack of action may have been intentional or unintentional. What was important was how Rosemary was positioned in terms of accountability and responsibility. In view of this, this could be considered a time when a nurse was not 'evidently' constrained in practice (e.g. Rosemary was a Clinical Nurse, had knowledge, and knew the policy or rule). Therefore, one could argue that she had the opportunity to exercise agency and provide responsible practice. However, for reasons still unknown (unacknowledged circumstances and my own bounded rationality (Simon, 1967)) Rosemary did not take this

'opportunity'. Giddens (1984) reminds us that dialogue and reflexivity can increase the researcher-participant awareness about taken-for-granted practice but this does not mean understanding is actually achieved, or a change will occur. Furthermore, what I saw as an opportunity, another may see as a risk; a idea discussed in chapter 7.

Always two on the floor

There was an inferred rule, thus unwritten, that two nurses had to remain *on the floor* at all times while patients were receiving haemodialysis treatment. This rule was learned during the initial indoctrination period to the unit, founded on common sense, and justified in terms of safety should an unforeseen event have occurred. Likewise, this rule also served the nurses' interest of always having someone else working along side them. For this reason, the rule was sustained and routinely repeated as a normative rule that controlled practice and decisions made in a specific way, for a specific purpose. Nonetheless, there were moments when this rule was broken, either intentionally or unintentionally. Knowing which was which seemed to be controlled by what was happening at the time, and who else was working on the floor. Some nurses were more persuasive in providing reasons as to why they had to momentarily *leave the floor*, thus break the rule, while others used their official authority, often providing no reason at all.

Overall, the distribution of phosphate binders to patients did not directly impact on the nurses' day-to-day practice and work organisation. In contrast, this may explain why nurses tended to adhere to *the rule of two* because of sanctions that were implied and reinforced during interaction, unlike the distribution of phosphate binders that seemed overlooked despite potential complications for the patients. Furthermore, taking binders with food was considered, by some of the nurses, as the patients' responsibility even though a rule imprecisely existed in the unit that the nurses would distribute them. This may suggest that, not only were the nurses perplexed about this rule, but the patients were too. Thus, misinterpretation of rules, which were assumed to enable practice, could become a constraint, leading to uncertainty.

When uncertainty about what constitutes accepted practice was evident, disparities in decision-making arose. One strategy that may have assisted in maintaining

consistent, yet not necessarily good, practice was through the production of written rules, for example, policies and procedures. However, at times, the nurses saw written rules as a constraint because they were obsolete and ambiguous.

Policies and procedures

The renal unit policies and protocols provided standards of care, in which renal nursing procedures were set out as written rules, which can be established to control and direct practice (Manias & Street, 2000a). When speaking about policies, protocols and procedures the nurses in this study used the terms interchangeably, although they did not define them as the same thing. The exchangeable use of terms may have limited the nurses understanding, mixing 'recommendations' with 'regulation'. Written polices and protocols were considered *law*, while procedures acted as *guidelines*, which Sarah believed *allowed her greater flexibility* in how she applied them.

Even though polices and protocols were seen as legitimate and lawful, this understanding was not always evident in practice. Several nurses, including Lynnette, further validated this observation identifying several reasons why policies, protocols, and procedures were rarely used: *they're out-dated so not credible; still opinion rather than evidenced-based;* and *they're vague*. However, at another time, when the nurses were asked about policies and protocols, they seemed to contradict earlier beliefs, describing them as EMMA *important for the new staff,* necessary to *standardise procedures* and *maintain patient safety,* thus, assumed to support nurses' decision-making. However this was not usually the case:

Lynnette:	So many things impact on your decision making like constraints,
	policies you know? Policies are just guidelines so should draw on
	your own knowledge and not be afraid to use it.
Researcher:	Do the policies reflect the decision making in the unit?
Lynnette:	No I think a lot of it needs to be up dated.
Researcher:	Do the policies we currently have help in decision-making or add
	to confusion? (RN passes by and hears me ask the question. She
	calls out "If I looked at them they may help". Lynnette responds to
	the RN.
Lynnette:	No. You were not aware of the policy for first time dialysis. I
	showed you that one (26/9, #175-179).

The ambiguity of written practice rules seemed to complicate decision-making rather than provide a useful tool. The nurses were rarely observed using the documentation, or referring others to them, particularly within haemodialysis. In contrast, Manias and Street (2000a) reported how the nurses in their study valued policies and protocols as a beneficial resource. Even when the nurses consulted the documentation in this study they were often left unaided. For example, the policy regarding retesting a patient for Vancromycin-Resistant Enterococcal (VRE) infections was considered *lacking* by the nurses who then had to search for further information prior to making a decision. As a result, the Clinical Nurse Consultant made the final decision, yet, appeared uncertain remarking that she would need to seek *further advice*. Seeking further advice required time and may have been detrimental to the patient's outcome. In light of this, written rules could enable and constrain how nurses made decisions and had the potential of creating tension between what was done and what ought to be done.

Monica and Rosemary claimed that the nephrologist did not like the term policy but preferred guidelines. Wilson (1999) and Klein (1996) explain guidelines as choices or recommendations which nurses can draw from, yet flexible enough to endorse clinical judgment and evaluate outcomes. Therefore, flexible practice guidelines encouraged the nurses to apply clinical judgment rather than be confined by prescriptive rules. However, Giddens (1984) may argue that when nurses repeatedly draw from guidelines that become part of daily practice, they become rules, albeit in less precise ways. Rappolt (1997, p. 977) comments on how clinical guidelines and professional autonomy have a "paradoxical relationship" in that guidelines can disempower medical practitioners. In my opinion, clinical guidelines may disempower one's individual agency, but can also be professionally empowering, particularly for nurses, should knowledge be limited and personal practice preferences be out-dated. The CARI guidelines (Australian and New Zealand Society of Nephrology and the Australian Kidney Foundation, 2001), for instance, although not entirely implemented, provided a useful tool to which the nurses often referred, particularly when reviewing medical decisions; for example, the management of renal anaemia. Messana (2003, p. 325) writes about how many United States dialysis facilities have approved anaemia protocols that "empower nurses in day-to-day

management", unlike this unit, that still predominantly relied on doctors' opinions and discretion. When such clinical discretion takes precedence over written, and systematically appraised, guidelines, Mead (2000) proposes that nurses can become disempowered if the evidential basis for clinical judgment is not critically examined. Owen (2000a) warns medical practitioners to avoid unstructured opinions, because opinions can change, advocating for evidence in practice. Furthermore, professional opinion is regarded as the least reliable source of evidence in clinical practice, even though nephrology research, like nursing, is still relatively new. Despite this Owen, a nephrologist himself, argues "there are not many wild cards in clinical science, despite statements otherwise" (Owen, 2000a, para. 44). The CARI guidelines, although remain contentious, do provide guidelines for individual units to design best-practice protocols, particularly, when medical presence is minimal. Consequently, guidelines, like policy, should be critically appraised from time to time, asking from where practice and opinions arise, how are they maintained and, whose purpose do they serve (Mead, 2000). In nursing, one may argue that opinionbased practice continues to exist, despite evidence-based databases (e.g. Cochrane collaborative, Joanne-Briggs). One reason for opinion-based practice is because so much of what nurses do, and have done, remains undocumented and critically unexplored (Bevan, 2000). Consequently 'wild cards' (Owen, 2000a) are often all that nurses have, or think they have, and may explain why the renal nurses spoke about trial and error as they went about their day.

When written policies were extended beyond the unit context (i.e. patients' homes, community health care settings and regional/remote hospital centres), there was increased possibility for scrutiny and critical appraisal of the documentation. Written rules that directed, or governed, was no longer a private affair. Public access beyond the unit required precise, consistent rules so that they could be followed, unlike haemodialysis, in which nurses understood and maintained rules by enacting them during interaction (Giddens, 1984). These inferred, or unwritten, rules produced and reproduced during action may have contributed to the vagueness or "fuzzies" of nursing practice that the nurses spoke about. "Fuzzies", according to Greenwood (2000, p. 13), are constituted (theories-in-use) during practice and may only become apparent as clinical experiences are shared, hence bringing them to a discursive level.

Once rules became known, then they could be intentionally modified, changed or ignored.

Over time, as nurses became competent in learning and applying written and unwritten practice rules, the rules could be *modified*, a process justified by Monica as necessary to meet *individual patient needs*. Modification of rules may have constituted Sarah's perception that policies and procedures did not reflect what was actually going on in the unit or gave an appearance of fuzziness:

There's no standard and I think there should be. If you do deviate then need to document why. People chop and change and I don't agree with this just because of what they believe in. Like, "you can do three hours [haemodialysis treatment] instead of three and a half". It's ad hoc decision-making (Sarah, 20/8, # 62).

The *chopping and changing* of rules may have further contributed to the difficulties apparently faced by novice renal nurses who were *learning the ropes*. This contradicts Emma's, and some of the senior nurses', ideas that the policies and procedures provided a useful resource, particularly, for *new staff* since they did not always echo what was happening on the floor. For that reason, it was not necessarily the written rules that controlled nurses' decision-making, but rather implied rules enacted as nurses went about their day. Jane, for instance, did not refer to written rules:

"I ask several nurses for advice and then I would decide which option sounded the best" (FN, 6/6).

The most persuasive nurse may have influenced Jane's decision, based not on knowledge rules, but rather language rules. In addition, Jane would monitor decision outcomes to determine which nurses made *good* decisions. *The Oracle* was one nurse whom Jane trusted and admired for her 'good' outcomes. On reflection Jane responded:

"It has made me realise how reliant I am on other nurses. I need to do more for myself and look at other information sources" (FN, 6/6).

Jane was not the only nurse who sought information from other nurses:

Anna asks another nurse whom she thinks may have a better idea and then she listens to what they say and then makes a decision whether it sounds fair or needs to gain further information or advice. If non-urgent Jane explains that she may ask for it to be discussed in the clinical meeting. If urgent she would go to more senior nursing staff. Group consensus usually directs her decision making when unsure. "It's what decision sounds best" (FN, 5/5).

Watching you, watching me

Giddens (1984) explains that monitoring is an inherent feature of actors, and part of reflexivity. The nurses monitored people entering and exiting the unit, people who were not in a privileged position of knowing all the explicit and implicit rules. This made certain groups of people reliant on the nurses. Nurses could further reinforce a rule through language. For example, when Sammie talked about nurses telling the junior doctor this is what the nephrologist likes us to do (see p. 124). This gave a sense of empowerment for the nurses who controlled the floor. When a doctor made a decision this would be carefully checked that it complied with accepted normative practice. This monitoring of the doctors' behaviour reflects similar findings in other studies (Geatti & Pegoraro, 1999; Manias & Street, 2000a; Tariol & Hales, 2001). When the nurses spoke about *what the nephrologist liked*, this often reinforced their own understanding about the rules of social and clinical practice that were rarely debated. Furthermore, we like to do . . . suggested a nurse-generated rule but these were often medically oriented. As a result, even though medical presence was minimal in the unit, medical control persisted. Although this may have been considered a constraint, it also allowed the nurses to get things done. Knowing the rules promoted a sense of autonomy, this, in turn, enabled nurses various degrees of control as they drew from the nephrologist's barely visible commands. Katie acknowledged the nephrologist's almost symbolic authority as she endearingly referred to him as the boss jesting we like to make him think he is in control.

Kerr (1999, p. 265) comments that doctors may "subscribe to collective decisionmaking", producing a public image of shared power and unobtrusive control, yet "promote their individuality" once in their own environment. It was difficult to ascertain who was actually in control in the renal unit, and whether the nephrologist assisted nurses to constitute their own image of *being in control* or vice versa. This was no surprise when investigating social encounters and the dialectic of control (Giddens, 1984) since power structures are constantly changing as people come and go, making decision encounters difficult to study. What it does do, however, is increase nurses' awareness of such encounters, and the rules that bring the practical level of social life to a discursive level, thereby "opening up possibilities of action" (Giddens, 1984, p. 173). Once medical control is acknowledged, new rules can be introduced to facilitate a more mutual encounter. In terms of technical rules or the know-how rules of dialysis, the nurses appeared to have monopolised this domain, often drawing from implied 'rules of thumb', 'golden-rules' and 'intuition'. However, even these rules, were sometimes, individually driven during nurse-nurse encounters.

Rules of thumb

Heuristic rules are based on rules of thumb that provide enabling strategies to process large amounts of information when making decisions (Buckingham & Adams, 2000b; Cioffi, 1997). Such rules generally serve people well for routine type decisions, such as judging distance, or estimating weight, but are not perfect (C. Thompson & D Dowding, 2002). The length of time a nurse had worked in the unit seemed to bestow upon them the authority to employ short-cut strategies when making decisions, modifying or tailoring policies and procedures as they went about their day. Past experiences, familiarity, and memory, informed rules of thumb, which could control nurses' reasoning, and therefore had the possibility of misinforming decisions (Kahneman & Tversky, 1972). Thompson (2003) identifies how nurses make decisions based on experiential knowledge that involves cognitive short-cuts or heuristics such as overconfidence and hindsight, that can lead to decision bias. In this study, heuristics were not only used by competent nurses, but also those *learning the* ropes who talked about *rules of thumb* that were learned by means of *watch, then do.* These were unwritten rules that provided formulas to assist decision-making, if they were known. When a nurse could speak about a rule of thumb, they did not always have rationale for the rule or the rationales varied. One such rule was the rule of 7. This was a rule used in this unit although not necessarily a rule used within other renal units. The rule helped some nurses in deciding how much potassium to add to the dialysate fluid, to make what is commonly known, a potassium bath. However, it became apparent that not all the nurses knew about this rule, nor was there literature to support its usefulness.

Lynnette mentioned that *there seems to be a rule of 7, but it's not written anywhere*. Carol and Sarah confirmed the rule's 'existence', although as they tried to explain the rule to me, other rules inadvertently surfaced as to when *the rule of 7* could, or could not, be used making the rule quite complex and difficult to actually understand [my perception]. Despite this, Carol and Sarah spoke about the rule in less than problematic terms as if it was a single rule. In contrast, one Clinical Nurse was not so familiar with the rule of 7. She had heard that a *mathematical formula was required*:

No but there's a formula for that; litres to the millimols of potassium (K) and the bottle that you use it from and		
then you need maths to work it out.		
But if a patient's potassium was 5, then how do you know		
or decide what you're going to put them in?		
Clinical Nurse: Well I would put them in a 2, but I don't know if that is		
right.		
No don't say that! You know what you would put them in.		
You've been doing this for years.		
Clinical Nurse: That formula only came into mind 2 years ago I have		
not found it in the literature so far so I don't know		
So for a patient with potassium of 5?		
If I put them in a K3, to me that sounds too much. I don't		
know why. It's because a 5 is too high and a 3 is still too		
much (25/8, # 450-456).		

Deciding a potassium bath, for this nurse, was based on what she had previously done and what she, or the unit, considered was a *safe amount* of potassium to administer. This leaves one wondering just how informed, or safe, some nurses were when deciding a potassium bath. Anna acknowledged this as a medical decision but the nurses in this unit did it on a daily basis:

We do it without thinking really. It is just part of our day (5/6, #14).

This tacit approach to knowing represents Giddens (1984) notion of practical knowledge that enable actors to go about in the world even when this cannot be discursively expressed. Rebecca would, *as a rule*, ask another person, including the doctors, when unsure about a potassium bath even though she believed a doctor would not know: *He'd say K1 as he doesn't know the K1, 2 and 3. He'd probably say K2*. This suggested that Rebecca was in a position of deciding what decisions she would and would not make, referring the decision along the line of command as per

institutional rules, even when she *doubted* the doctors' decision-making ability. Therefore, it appeared that Rebecca did not 'blur the boundaries of practice' (Bonner, 2001) by working beyond them. Rather she stayed within organisational boundaries, at different times for different purposes, *passing the buck* or decision to the medical authority. Rebecca's decision to 'pass the buck' may have been determined by organisational structures rather than based on a person's knowledge or ability to make such decisions. Organisational practice boundaries, for that reason, could be constraining, yet, sometimes enabling, constituting for Rebecca a safety net belief. Sharing this thought with Rebecca provided further insight as she began to acknowledge how she had accepted unit rules, rules of thumb or *frameworks*, which, in turn, constituted her safety net belief, seemingly controlling many of the decisions she made. Organisational rules were often embedded within routines, policies and practices, making them less visible, therefore, difficult to recognise and explore. Despite Rebecca's increased awareness about rules that provided frameworks of practice, the 'safety net' was something she was not willing to let go of or deliberately change.

Both written and unwritten rules seemed to have a prescriptive nature that controlled nurses' decision-making behaviour. Despite this controlling and, at times, constraining nature of rules on nurses' autonomy, Rebecca still saw herself as *being in control*, a conviction reinforced by comparing her unit with others:

Yeah we like to think we are autonomous but we still have a doctor to tell us that we can give that blood pressure pill, so in a sense we're not autonomous but we can decide the heparin, the dialysers, the length of treatment and hours and all that. We are autonomous in all that, as there are units [in Australia] that don't have that decision-making as the doctors do it for them. That's the only autonomy we have (28/8, # 496).

Rebecca's reality about being autonomous did not mean that the nurses in this unit were more empowered when compared with other renal units. On the contrary, *frameworks*, or rules that constituted her safety net, could be controlling, and possibly constraining, depending on whose rules they were. Deciding *the heparin, the length of treatment time and all that,* particularly when rationales remained vague and ambiguous, could be considered as unsafe practice based on *preferred* practices rather than on verified evidence.

Rebecca's idea about being in control and autonomous was no exception within this unit; most nurses shared the belief that *we* [the nurses] *are more autonomous than other nurses in other units.* One reason for this understanding may have been due to the minimal presence of doctors, yet, this absence did not necessarily mean being in control and making autonomous decisions. Furthermore, statements such as: *what can I do; I can't change that;* and *the doctors make the final decision*, all seemed to contradict this shared belief, although there were some nurses who rarely spoke in such helpless terms. Perhaps it was this latter group of nurses who really were autonomous and in control. Routines may have also reinforced the nurses' perception, as they felt confident and safe as they went about their day (Giddens, 1984), working within the frameworks or *safety net* of practice. However, when routines, frameworks or safety nets are not critically examined, they may be found to do more harm than good.

Consequently, when nurses are asked, or expected, to take on extended roles, without the appropriate knowledge and skills to maintain and support decision-making accountability, then on what terms do nurses' perceive themselves as being autonomous? When *the rule of 7*, as previously discussed, is rationalised in terms of belief and opinions this questions nurses' accountability as decision makers, reinforcing a sense of individual, rather than collective autonomy. Autonomy can be experienced and interpreted in many ways during interaction across time and space, so is forever changing. Nurses need to critically address what autonomy means for them and if it is serving the needs of patients who receive their care. When knowledge and skills are ineffective to inform decisions, how can accountability be achieved? Nurses need to ask who is responsible for this current state of affair, whether it is the organisation, the nurses, or both.

Accidental or intentional breaking of rules: which is which?

Despite some rules being documented, such as policies and procedures, they were not always adhered, although knowing if this was intentional, or not, was difficult to know. Unintended consequences were easier to discuss with participants than 'true intentions'. For instance, Donna made an unintentional, and unacknowledged, error when applying, the *golden dextrose rule* for all patients with diabetes:

For example if you have a patient come in, and the Golden rule is, if you have a patient who is a diabetic you give them D10 [dextrose 10], don't you? However, there were some patients on a D5 [dextrose 5]. Why? Well, those patients did quite well on D5 so they stayed on that, you know. Who made those decisions? Well I suppose they [the nurses] knew the patient, didn't they? (20/6, # 104).

In contrast, Monica knew this golden rule to be *policy* that separated insulin and noninsulin dependent patients:

Yes [Diabetics are normally dialysed in D10]. It stops their blood sugars from dropping too low, which causes a hypoglycaemic attack. Saying that if their BSL's [blood sugar level] is exceptionally high then we won't do that (11/11, # 57).

Donna's misunderstanding about the golden rule was unacknowledged; therefore, her trust of the rule continued that reinforced ontological security as she went about the day (Giddens, 1984). Furthermore, those who 'knew' the rules failed to correct Donna's misapplication of this rule in practice, even though she was a novice 'learning the ropes'.

At another time, I observed Veronica, a novice nurse, administrating oxygen to a haemodialysis patient who was hypotensive. The first line action of the policy is to 'administer normal saline and/or stop ultra-filtration to prevent further fluid removal, and raise the patient's feet'. Oxygen administration was advocated if the patient was unresponsive or had breathing difficulties. Veronica's action was based on what she had seen other nurses doing, rather than explained by the policy's rationale. I also noticed Alice administer oxygen for a similar hypotensive episode. When talking about hypotensive treatment decisions at a later time, she confidently responded that *it would be a rare event that the nurses would administer oxygen*. I shared my observations with Alice:

Alice: Actually I have put oxygen on someone who was hypotensive Researcher: Why do you put them on? Based on what?

Alice: I don't know. To be honest the very first day I ever walked into dialysis, on my first shift, one of the ladies fitted because she was hypotensive and from that experience I just automatically . .

and I may not leave it on. I might just take it off the moment they start opening their eyes Researcher: So is it a preparation thing because of the fear of them . . . Alice: Yeah I think so (*laughs*) (9/11, Abridged #s 237-248).

This resulted in Alice learning how to manage a hypotensive episode by reaching out for the oxygen as part of 'routine' treatment *just in case* the situation became a crisis; an event she witnessed on her first day. This imprinting or first exposure to a situation can have detrimental effects on nurses when learning how to do dialysis since this is when they learn the rules (Giddens, 1984). Furthermore, Alice spoke about the nurses using oxygen as a *rare event*, yet when reflecting on her own practice, she laughed as she recognised that she broke the rule, albeit unintentionally, thereby illuminating incongruent practice and theory. Interestingly, none of the nurses had questioned Alice's divergent practice. This may have been because she was 'considered' competent; therefore, the nurses did not consciously monitor her actions as she had already proven herself as a trusted colleague. When Giddens (1984) speaks about actors being inherently reflexive and capable of monitoring self, and others, this can occur at different levels of consciousness. This resulted in rules assumed to be unintentionally changed by Alice, but did not necessarily provide better patient outcomes.

Dangerous liaisons - deciding how much fluid to remove

When a patient cramped, possibly as a consequence of electrolyte imbalance and fluid removal, many nurses felt that this was an unintended outcome and a consequence of dialysis. Rebecca talked about deciding how much fluid to remove at the initiation of haemodialysis as a *hit and miss* event; a conviction generally shared in the unit. However, this *hit and miss* or 'trial and error' event appeared relatively problematic for the nurses as they learned how to *control dialysis* by manipulating variables, so that adverse events could be quickly rectified with *little fuss*. This understanding supports Bevan's (1998) opinion that dialysis is still perceived as being 'experimental and scientific'. Because of this perception, deciding whether an unexpected outcome was because of judgment error, or because of the nature of dialysis, was difficult to know. Even the nurses found this difficult to establish.

Several nurses explained that adverse outcomes *were to be expected* and not necessarily errors but rather *bad luck*, since neither patient nor technology could be successfully controlled and manipulated on the day. The nurses learned which nurses could manage difficult situations should an unexpected consequence have arisen, which, in turn, may have influenced the choices some nurses made. When nurses perceived themselves, and others, as being less capable in controlling unexpected events this seemed to curb the choices they made, working within their practice limits. Therefore, 'blurring practice boundaries' (Bonner, 2001) was not for everyone. Beliefs, values and attitudes could control how far a nurse would stretch practice boundaries, and which rules they would play by. This made nurses' intentions and motives during social practice difficult to study, particularly when practice was based on beliefs.

There was a general belief that it was in the *patient's best interest* to remove as much fluid as possible in order to achieve their ideal or target body weight. For example, the patients' tried to maintain a moderate fluid gain of 2-3 litres between dialysis sessions. However, it was not uncommon to see patients fluid overloaded up to 6 or 7 litres, making fluid removal via dialysis a difficult exercise. A long-term consequence of fluid overload is cardiovascular complications and may have been a reason why nurses favoured maximum fluid removal regardless of the consequences. Sarah, for example, preferred a patient to cramp rather than go home with fluid on since she could control the short-term outcome of cramping whilst the patient dialysed, unlike a patient at another time presenting to the emergency department with shortness of breath and other complications. Sarah also understood cramping as an indication that the patient was at, or near, their ideal body weight, thus, used her clinical discretion that was informed by experiential knowledge, personal beliefs and the unit culture. Rebecca and Carol supported this belief, suggesting that this was a valued and accepted decision rule. Thompson (2003) addresses the use of experiential knowledge in terms of evidence-based practice that can dominate the decision process, producing sub-optimal outcomes and biases. When belief informs nursing practice, the belief is reproduced and continues, until such time that the practice is either taken-for-granted or re-examined (Giddens, 1984). Emma recognised the shortcomings to this approach of fluid removal, identifying

experience, time and judgment as important decision-making parameters so that the patient went home, not dehydrated or overhydrated, although added that even this judgment required *good luck*. Consequently, when time, experience and skills were limited the nurses may have opted for maximising fluid removal in order to prevent future problems arising that may have required emergency care and 'out of hours' dialysis. When a routine dialysis resulted in a patient being dehydrated, this was usually managed in the unit by providing the patient with a *drink, and then, a good night's rest*.

A nurse's decision regarding fluid removal was a complex phenomenon, controlled by many factors. For this reason, some decisions appeared to be made spontaneously, almost unconsciously drawing on intuitive reasoning, while at other times, careful deliberation and analysis were necessary. These diverse methods represent a cognitive continuum of decision-making (Harbison, 2001). Motives and rationale regarding where, and why, a nurse was situated along the continuum were not always known or, at least, not able, or willing, to be shared. However, one day, while in dialogue with two nurses regarding fluid removal and subsequent cramping, the Clinical Nurse revealed a belief she once had ascribed to:

The aim was to get the fluid off and if they cramp then, sorry, that is a lesson they have to learn (FN, Clinical Nurse, 20/8).

I asked if she saw this belief as a form of behaviour modification:

Yes, I tried to modify their behaviour through the side effect of cramping, if they carried too much fluid, although now I don't do that. . . They have to learn that they can't take so much fluid on as it catches up with them. I got frustrated with them being overloaded, getting complications and invariably me getting called out to dialyse them at 2 in the morning. In the end you stop as no matter what you do and say they do as they like (FN, Clinical Nurse, 20/8).

The Clinical Nurse deliberately made decisions that caused cramping, although over time she came to realise that this was not a successful strategy. Whether this strategy was to change behaviour positively or a consequence of her frustration that wanted to punish the patients was difficult to know. The other nurse, a Registered Nurse, admitted taking risks when deciding fluid removal, but *not* with the intent of causing cramping:

Not intentionally, but then if they do cramp, I agree it is a lesson they will learn and remember for next time (*She pauses and smiles*). I do however remember one time, it was Christmas Day and I was called out and I did give a good dialysis with the aim of removing the fluid and she cramped. I must admit I was glad in a way, like payback for getting me called out on Christmas day, but I would never do this intentionally (FN, Registered Nurse, 20/8).

Despite the Registered Nurse speaking about unintended outcomes, her selection of words such as 'lesson they will learn', 'glad' and 'payback' may infer an element of conscious intent, yet the motives remain unacknowledged. The Clinical Nurse continued:

I don't remove the fluid now. What's the point! They don't change; you have to revive them with fluid so it is pointless. I see the newer staff doing this and I sit back and watch. I think we all come in here with good intentions to provide the best quality care yet some patients constantly abuse themselves, until finally you give up and accept it. This is what they do so why keep hitting your head against the wall. They are adults. Keep them informed so they can make choices, we are not their mothers and they resent us if we try to be (FN, Clinical Nurse, 20/8).

The Clinical Nurse's behaviour seemed to have been transformed through a process of reflexivity (Giddens, 1984), and she was now advocating for patient responsibility and involvement in addressing the problem of fluid overload. However, this change may also have been influenced by how the patients responded; yet, this also was not acknowledged:

 \dots I changed my perspective as I realised I was losing a battle and getting tired of it. It is easier to say "this is all we can take off safely" and not argue with them (FN, Clinical Nurse, 20/8).

The Clinical Nurse has since resumed a passive position, as she decided to *sit back and watch* other nurses follow her previous footsteps, particularly since she had got *tired of it*, suggesting an almost voyeuristic behaviour. This sitting back and waiting for something to happen was mentioned several times by other nurses. I wondered whether this behaviour was a consequence of the belief that decision-making was a *hit and miss event* based on trial and error. The Clinical Nurse went on to justify her seemingly passive role in that *you can't always tell them* [the nurses] *what to do, that comes with experience*, inferring that one way nurses learned in this unit was by the errors they made. If this was the case, what did this mean for the patient during these

voyeuristic moments, for the nursing profession, and for individual nurses? When errors are documented, evaluated and innovative strategies applied, knowledge can be deliberately developed out of accidental events. This, in turn, can provide a useful learning strategy so that what *comes with experience*, the 'knowing how', begins to include 'knowing that', which informs renal nursing practices.

Kincheloe and McLaren (1998, p. 260) state that "critical theory can produce undeniably dangerous knowledge". This was a memorable 'critical moment' (Giddens, 1984) for me, as I gained new insight into a secret world I had hardly known. The two nurses agreed that this was an area of decision-making rarely explored, an area that uncovered nurses' motives and personal interests that seemed to work against the concept of 'caring'. If this decision-making authority symbolised the power and control that nurses often spoke about, then one may argue that the nurses abused their power and positions to gain a sense of control, questioning if they were actually in control. As Giddens (1984) notes, even the powerless have power, so that fluid overloaded patients maintained a degree of autonomy by controlling how the nurses responded and acted during these encounters. Once again the dialectic of control was at play for both the nurses and the patients making it difficult to know who was actually in control and what actually controlled the decision being made. Autonomy, expressed as one's agency to act and do otherwise (Giddens, 1984) can be presented in subtle ways, creating a dark side to renal nursing. The nurses' understanding about autonomy in this unit may have unintentionally arisen because of their shared belief about the nature of dialysis and its inevitable consequences on patients' lifestyles and outcomes. When the concept of autonomy is not critiqued as to what it means and what purpose it serves, detrimental consequences can result for both patients and nurses.

Several authors have highlighted how critical reflection can be empowering (Driscoll & Teh, 2001; Foster & Greenwood, 1998; Gilbert, 2001), yet as Gilbert (2001, p. 119) reminds us, it can be a method of "professional surveillance", as practices are discussed and exposed. This study was not intended as a form of surveillance, rather to "open up possibilities of action" (Giddens, 1984, p. 173) and transform practice in light of this. However, what this study has uncovered is that unacceptable practice

can be privately maintained, yet, disguised as something else or completely ignored. Knowing about practice at a discursive level in this unit did not guarantee that it would be spoken about collectively and, therefore changed. Understanding why certain practices continued was difficult to establish.

When asked about this private side of decision-making practice, Carol acknowledged its presence and offered several reasons as to why it seemed to be. One reason reflected a general understanding that some outcomes were unintentional, usually based on *poor clinical judgment* or *dialysis*. However, Carol saw how deliberate intent could be exercised to cause cramping:

Carol:	I won't purposefully make some one cramp because they have
	fluid on.
Researcher:	Do you think that actually happens?
Carol:	I am sure for some any thing is possible but you know at 2
	O'clock in the morning when some body has annoyed some one
	emthey'll make them cramp (17/9, # 110-114).

Mullally (2002) comments that in any human activity, including nursing, there is always the chance of error caused by faulty judgments and reasoning. Nurses' motives could easily be disguised as unintentional acts rather than premeditated intent. What is important to recognise is that judgment errors do occur and require risk management strategies to support nurses when making 'risky' decisions, in order to minimise both intentional and unintentional faulty reasoning. Error recognition, within a complex context such as this, becomes difficult to achieve, particularly when there is a shared belief that *the very nature of dialysis has undesirable consequences.* This raises the question as to when a decision error is considered an error, and what the rule is that controls error recognition.

When is an error an error?

Johnson and Horton (2001) claim that nurses do not routinely disclose errors to patients or one another. Rebecca believed that the culture of the renal unit was to keep problems private by *keeping them under the carpet*. One reason for keeping problems private was to avert change:

The thing I don't like about writing an incident form is the person at the other end has to do something about it. The person is going to make changes and make everyone check everything twice (25/8, #400).

Incident forms were viewed as a form of *negative surveillance*, rather than a risk management tool, prompting the nurses, *as a rule*, to deal with decision errors 'informally'. Reporting an error through the official lines depended on individual nurse discretion and on who had made the error. Anna talked about error reporting as a *game*. For example, exposing a nurse's mistake could be used as a payback tactic. In contrast, 'friends' were protected, the error quietly brought to their attention. Therefore, the rule of reporting errors served individual rather than patient or unit interests. Sarah, however, saw incident forms as a constructive tool:

I think if people had that knowledge base then they don't seem such a threat, because they' aren't designed just as a punitive tool to bring somebody down or to highlight what they have done wrong. It is also about risk management. Look at the way it is handled, to come up with a better way to deal with this next time (30/8, # 44).

Tailoring practice rules

Not only were internally generated rules breached, changed or ignored, but so too were external organisational rules such as Queensland Health policies (e.g. workplace health and safety, infection control policies). Joanne believed that some nurses *made their own rules:*

We do have our own things [rules specific to the unit] that cause conflict. For example health and safety things. I always make my point known. I have the role to do something else. A group decision does not mean it is correct. You know, sharp containers and eating food off the treatment trolleys. Hospital policy, infection control and health and safety say no!, but nurses here do what they want we can't pick and choose what rules we want to obey – we have to obey them all if practical (19/11).

This at times caused conflict between the nurses who tried to sanction the 'official' rules, and those who tailored the rules to serve their needs within the unit. Although group decision-making was often involved in this tailoring process, Joanne was well aware that this *did not mean the collective decision was correct*. This tailoring or modifying perhaps occurred because of the nurses' shared belief that they had control of clinical practice in their workplace, and therefore could determine what they felt was best-practice. This, in turn, may have reinforced a sense of autonomy

and independence, which gave the nurses a perception of being part of an entity separate from the larger organisation. This perception may have been encouraged by both internal and external recognition of the unit's area of expertise. Therefore, modifying rules, in this context, may have been workplace control, what several authors refer to in Wade's (1999, p. 311) paper, as "work or structural autonomy", in which the nurses' decisions were predominantly influenced by work structures and organisational needs, rather than patient or professional needs. In this unit, the nurses predominately concentrated on organisational needs as they spoke about achieving effective and efficient care that met the unit goals of providing dialysis care. Work structures and organisational needs, however, can have the danger of dominating caring aspects of nurses' practice so that nurses' autonomy is in relation to mastering technology and resources rather than mastering patient needs. The focus on technology, rather than people, can shape and reshape how nurses think and what they do, producing new rules that can go unnoticed and unquestioned as to what they actually mean and whose purpose they actually serve. Giddens (1984) terms this producing-reproducing process 'duality', whereby nurses' actions create rules, which, in turn, shape their actions so that action is created by people and through structures, yet, there is always the possibility of being changed.

Work rules and nursing autonomy

The nurses decided how patients were allocated to each nurse in relation to long-term care. This type of patient allocation, ascribed to at the beginning of the study, was based on primary nursing where one nurse had overall responsibility for planning patient care, yet this approach was seen to be *failing*. In response, a team nursing approach was implemented in which several nurses shared the responsibility. The Nurse Managers, in particular, felt that team nursing would strengthen the team spirit, share the workload, and be more supportive for junior nurses who needed guidance in managing ongoing patient care. The nurses were invited to make written comments about the proposed change and thus, contribute in making new practice rules. Few took the opportunity and the lack of feedback was assumed to be a sign of agreement. However, while implementing the change, nurses spoke about wanting to *continue making decisions alone; be independent* and; *have total responsibility,* reinforcing primary, rather than collaborative, nursing principles. Several nurses

believed their workloads had actually increased despite the introduction of the team approach. These remarks, that fostered independent decision-making, appeared to also contradict the nurses' previous comments that decisions were generally *shared on the floor*. Even though team nursing appeared to be ascribed to in public (Goffman, 1959), behind the scenes the nurses selected, or were allocated, *their patients* from the larger group. Thus, work autonomy appeared to serve certain nurses' personal needs that over-ruled what was possibly best for the patients, and for nursing accountability as a whole. This also supported Joanne's earlier concerns that some nurses made up their own rules despite the majority view or organisational demands. Why this was not challenged, I am unsure, but the nurses claimed that as long as *the work got done* that is what mattered and may be one reason why practice tended to remain the same. A similar finding was noted in Orlikowski's (2001) study, in that people and things remain much the same within their work settings.

Wade (1999) describes 'professional nurse autonomy' as being associated with patient advocacy, accountability and responsibility. She adds, "discretionary decision making, a key component of professional nurse autonomy, is based on nursing knowledge, and not emotions or the exercise of routine tasks" (Wade, 1999, p. 311). This then raises the question, as to what cost nurse autonomy comes if official rules have to be worked around, or broken, to produce a 'sense of control' and, as to whether this is in fact, professional control. A nurse's ability to break or bend rules may be presented and understood as autonomy but raises concerns as to where this leaves the nurse in terms of accountability and responsibility for the decisions they make. Both group and individual agency can be exercised within the governance of institutional and professional rules, which, in turn, are assumed to enable nursing autonomy. However, questioning the appropriateness of these rules promotes conscious reflection on what it is nurses do and why, which has the potential of changing practice, and thus, for creating new rules (Giddens, 1984). When reflexivity is not embraced and is seen as a threat to current practice, covert practices may arise in order to enable clinicians to work round the rules. This can have detrimental outcomes in terms of decision-making and nursing practice. As already mentioned, bending, breaching and working around the rules was not unusual in this unit, and depended on who else was working and what decision needed to be made.

Nurses were observed operating their agency, via the dialectic of control, in different ways during interaction, such as using coercive means and skills of persuasion, strategies that are inherent during any human encounter (Giddens, 1984). What one nurse may see as enabling a decision-making encounter, (e.g. the rules and resources, social interaction) another nurse may see as constraining (Giddens, 1984). Joanne, for instance, perceived the workplace health and safety rules as enabling her work practice, unlike others who saw the rules as constraining. Alternatively, some nurses may have found Joanne's commitment to the rules more constraining than the rules themselves. Despite this, most nurses followed rules as they went about their day with apparently little conscious thought, which can be problematic if rules are not critically appraised. Deliberate reflection generally only occurred when a rule was observed by another nurse as having been breached, the event becoming known at a discursive level, possibly producing a 'critical moment' (Giddens, 1984). A nurse exposing this contravention could be an empowering moment and used as part of a control strategy. However, if rules are genuinely considered as constraining nursing practice then they should be dealt with explicitly. Only then can new practice rules be deliberately produced, and evaluated, rather than ad hoc, incremental change resulting that may further constrain nurses. It is only by dealing with, and responding to, these issues that constraints have the potential of becoming enabling (Giddens, 1984), thus, facilitating decision-making.

Knowledge rules of practice

Renal nursing knowledge arises from practice and research. Most of the research that informs practice is predominantly generated and funded by the renal product suppliers and pharmaceuticals companies, each with their own agendas. This, in turn, shapes and reshapes nursing knowledge and practices. Deciding what is 'bestpractice', and what is not, can be problematic. Resources, health care policies and the geographic location of a renal unit can further complicate the decision. For example, Renal Anaemia Co-ordinators, who can monitor and direct nurses' management of renal anemia, are frequently located in the metropolitan centres. In this unit, the nurses were expected to take on this role, requiring them to be knowledgeable in many aspects of renal care, which, at times, constrained decision-making since it was not always possible to have the required level of specialised knowledge. In addition, what may be considered as best-practice in one location may not be relevant in another, adding to the ambiguity of renal health care delivery. For example, several writers suggest that the Kt/V (urea clearance/volume) model that assesses dialysis adequacy has different conclusions regarding its usefulness and accuracy (Cohen, 2001; Di Giulio, Meschini, & Triolo, 1998); a belief shared by a few expert nurses in this unit. For this reason, under the guidance of the nephrologist, the nurses used both Kt/V and pre/post blood readings (e.g. potassium, sodium, albumin, haemoglobin) to determine the nutritional status of patients, in order to assess dialysis adequacy and treatment response, which then informed decisions to be made. This practice created an accepted and valued common sense rule, seemingly approved by the nurses who believed pre/post blood readings gave a better picture of a patient's condition. Approval did not necessarily mean the nurses understood the rule, but its recognition and application continued its existence, which then reinforced its authority (Giddens, 1984), particularly when expert nurses endorsed it:

We can measure the Kt/V 3 monthly and other readings such as haemoglobin, potassium, urea, iron studies Looking at some patients clinically is not enough. Other ways to assess them is clinically but look at their weight loss, reduced muscle mass, compared to when they first came in when not well. They may say they are well but not clinically (Lynnette, 26/9, # 14).

Hence, the rule became known through practice at an implicit, practical level for some of the nurses. The rule alone did not determine behaviour, nor were the nurses totally independent of the rule, rather both action and structure existed together during interaction as a duality (Giddens, 1984). Furthermore, the rule could be discarded, continued or modified. In this respect, best-practice was often based on multiple ways of knowing as described by Carper (1978) and, in particular, opinions and values that formed a personal knowledge base and mutually shared rules.

New and old rules

Occasionally, some nurses were unaware when a rule was introduced, modified or ceased. Anna would refer to the *official minutes of the meeting* to keep informed about recent collective decisions made in her absence, decisions that were usually made at the weekly meetings. From time to time, discovering where the official minutes where located was a problem. This inconvenience led some nurses to

proclaim, we know nothing about the changes when observed at handover. When the minutes were accessible and changes known, nurses did not always ascribe to them. This contradicts a shared understanding among the nurses about the *majority vote* principle when making decisions. Collective consensus was assumed to reflect the nurses' shared goals, thereby fostering a team spirit. However, Sarah confirmed how nurses were inclined to *agree to group decisions in theory:*

I have made suggestions before but they are generally agreed to in theory but em... I guess it's because they haven't seen it done before, or for 20 years they have always done it like this so might feel threatened with advice from someone at my level (30/8, # 88).

At other times, nurses would give into *what they actually wanted silently disagreeing;* their disagreement manifested while *working on the floor.* Once on the floor, several nurses were observed reverting back to *old and familiar ways.* This was interpreted to mean that these nurses perhaps felt more in control working *on the floor* away from the group context. This may suggest that group agency was aimed for, but in reality individual agency prevailed. These discrepancies regarding how rules were produced, maintained and changed may have been a consequence of misapplication of language rules that constrained, rather than facilitated communication. Misapplication and misunderstanding of rules can control encounters, enabling some nurses' dialectic of control while constraining others.

Rules of signification

Interpretive rules, according to Giddens (1984), provide general rules of signification that structure language in ways necessary for communication. Such rules are continuously reproduced during interaction, and gives meaning to the interaction, even though this meaning may not be understood or shared. In this way, language, therefore, can become politically charged (Delpit, 1988), the rules changing in relation to how people are positioned. This positioning could also shape how a nurse understood autonomy within the unit. Sarah, for instance, spoke about being an *independent* and *autonomous decision maker*, yet was careful to abide by the unit rules so as to avoid sanctions being enforced for *overstepping the mark*. Despite her awareness of sanctions, understood through language rules, Sarah still considered

herself autonomous within the team. When reflecting further with her about this belief, she appeared to speak unknowingly about constraints:

Sarah:	We know what is expected of us.
Researcher:	How do you know this?
	Well we get told off [rules of legitimation-sanctions] and talked
	about [rules of signification-verbal]. You pick up vibes [rules of
	signification- nonverbal] if you were doing what the other 9
	out of 10 don't do and you say okay (13/8, # 272-278 abridged
	version).

Consequently, Sarah looked as if she did what the majority said she should do. You say okay did not mean that consensus or agreement was achieved, but rather that Sarah followed group rules in order not to feel marginalised and lose face (Goffman, 1972). Dillard and Yuthas (1997, para. 5) explain Giddens' interpretive rules as stocks of knowledge that are learned during social interaction "that provide ways for actors to see and interpret events". Sarah applied the stocks of knowledge to interpret her understanding that she knew she would get told off had she not followed expected norms of practice and daily routines, yet at the same time saw this knowing as enabling her decision-making. As a researcher, I could only see this as a constraint on individual agency since there appeared little space for innovative or creative practice. Giddens (1984) argues that different perspectives and interpretations are not 'distorted realities' (Habermas, 1979). From Giddens' perspective, this was Sarah's constituted meaning, her reality that may have purposely, or unsuspectingly, served her needs. 'Constraints' for Sarah actually provided enabling rules about 'how to go on' (Giddens, 1984) from day-to-day, creating a sense of belonging and contributing as a *team member*.

This study shows that language can both enable and constrain interactions. It is consistent with Hewison's (1995) observation that nurses can exert control during social interaction, especially with patients, but can also be constrained, particularly within the health care organisation. Giddens (1984, pp. 76-77) describes the 'rule of interruption' that we tacitly recognise during conversations, but would not normally stop and think about, until it was consistently broken and/or considered as unacceptable. How the nurses judged behaviour depended on who they were interacting with. In the unit, the nurses tended to be less tolerant of junior doctors'

interruptions compared to those of the nephrologist. In this regard, Zimmerman and West (1975) comment that a person bestowed a position of authority may have more space in 'bending' the language rules. The nurses allowed this behaviour to occur, perhaps out of respect, or inadvertently as a consequence of the doctor-nurse or male-female encounter, reinforcing the nephrologist's space to further bend the rule. To know a rule, according to Tucker (1998, p. 81), is to "implicitly know what one is supposed to do in particular situations" and constitutes knowledge that can be applied in new situations. When rules were not known, a nurse could have less control during social interactions, while possibly contributing to the continuation of dominant structures.

Knowing what to say when

Sarah may not have known all the rules when interacting with the doctors, and this was one likely reason why she felt that doctors did not seem to *listen* to her. Emma, in comparison, spoke about *being ready* with the *right information* when interacting with doctors, implying a rule of preparation. Preparation involved the nurses adopting specific medical and technical jargon that fostered collaborative decisionmaking. Nurses who knew this rule, and were prepared for the encounter, seemed to be as much in control, if not more than their junior counterparts. Similar findings have been presented by Kosowski and Roberts (2003), who write about nurses choosing their language carefully to be perceived as successful. The success was judged in scientific rather than humanistic terms. In this study, it was difficult for the nurses to escape medical and technical jargon as the very nature of dialysis ultimately controlled the language used. As a result, nurses who did not understand what the language signified when making a decision may have felt excluded, remaining dependent on their more knowledgeable colleagues. Martin (1998) suggests that specialised communication can only be interpreted by those who know the context from which it arises, how it is applied, and its purpose. Thus, decisionmaking in the renal unit was not only dependent on the language used, but also what the language meant within the context and how this could then control nurses' actions. As a result, withholding knowledge was another controlling strategy that may have been intentionally, or unintentionally, applied, further maintaining some

nurses' authority within the unit. Rules of signification could also be used to control nurse-patient decision-making encounters.

The communication gap

Chinn and Kramer (1991, p. 82) talk about how the power of language is the power of "naming and creating meaning". This, in turn, constitutes how we perceive the world. The renal language could describe a patient as being *flat* [hypotensive], *overloaded* [too much body fluid], or a *no-show* [did not arrive to the unit for treatment]. Designated terms could constrain the nurse-patient encounter, the words sometimes being misunderstood as uncaring, and possibly, controlling. Trudgen (2000) comments that the communication gap between health professionals and consumers may be so wide, and so ingrained in healthcare, that it is no longer acknowledged as such, and rather just accepted as the norm, and infrequently challenged. Julie acknowledged how language *separated the providers from the consumers*, the language providing a tool that assisted decision-making but often at a cost to the patient. This resulted in a nurse-patient communication gap.

Furthermore, nurse-patient encounters during decision-making had significant consequences in how decisions were made. Communication rules vary between cultures and languages, which further compromises interpretation and understanding (Trudgen, 2000). Devitt and McMasters (1998, p. 164) describe the lack of communication between Aboriginal patients and their non-Aboriginal health care providers, producing ineffective comprehension, and as a result "communication within renal patient care was found to be seriously fragmented and deficient". The language rules applied in this unit were generally based on a dominant European culture that directed most encounters, often leaving the patient in a powerless position as the nurse resumed a professional role. This class/race disparity between patients and nurses seemed to go unnoticed, or at least rarely talked about. The lack of discussion inferred that differences were the norm; the patients assumed to accept the European-Australian manner in both social and medical terms. This may explain why many of the nurses viewed several patients' lack of involvement as not wanting to make decisions, rather than a consequence of nurses' actions that unintentionally caused patient exclusion as captured in the following fieldnote:

Nurse: How much fluid shall we remove today? (pause of 2 seconds). You don't know? (another pause looks at the chart - 4 seconds elapses. Continues to look down at the chart and starts talking). How about we take off 2 litres this time as you tolerated that last time and your blood pressure is still elevated (the patient turns their head away looking towards the ground, mumbling an audible 'yes'). What do you think? (The nurse tries to establish eye contact, while touching the patient's arm. The touch proceeds from one of gaining attention [my assumption] to procedural touch as the fistula is assessed). Where shall we put the needles today? (The patient turns and points to an area where the needles had last been). Shall we go there or to a new place? (The patient responds 'there'. The nurse continues to assess the arm). I think it would be best here as we don't want to keep going there, do we? (The patient looks away, the silence taken as agreement). I will go and wash my hands (FN, 23/4).

Reasons for miscommunication between Indigenous people and nurses within renal unit settings, proposed by Cass, Lowell, Christie et al.'s (2002) recent study, included lack of patient control over the language, timing, content and circumstances of interactions, and the dominance of the biomedical model. These constraints could be extended to any person who is reliant on nurses for their care. Furthermore, gaps in communication caused gaps in decision-making, constraining patients' level of participation. Cass et al.'s (2002) findings are relevant in this study since over sixty-five percent of the patients attending the unit were Indigenous Australians. It was not unusual to hear a nurse state that *the patient doesn't understand; they have poor cognition;* and *I doubt they really want to know*. Such perceptions contributed to the communication gap, further excluding patients from the decision process. Compliance with treatment, for example, may have been produced by unintended miscommunication, yet, this was rarely acknowledged by the nurses.

Rules of treatment (non)compliance

Power, expressed through language, was not always unintended during the nursepatient encounter. There seemed to be a private, but accepted, rule in the renal unit that permitted nurses to openly identify patients who were not following treatment orders. This resulted in rules of compliance being socially constructed by the nurses, rules that enabled noncompliance behaviour to be managed and changed, reinforcing patterns of paternal and dominant practice (Parmee, 1995). How these rules were understood by the nurses, controlled how noncompliance was managed within the unit and how decisions were made. Murphy and Canales (2001, p. 178) challenge the concept of noncompliance, claiming that it has been "uncritically accepted" by nurses, while other writers propose that the term should be abolished altogether (Klagsbrun, 2001; Russell, Daly, Hughes, & op't Hoog, 2003). The 'noncompliant label' was used in the renal unit to justify how nurses used their time and interacted with patients, possibly advantaging the nurses' interests rather than patient care. For this reason, how noncompliance was understood could become a subtle tool of power and control during the nurse-patient encounter. Furthermore, the nurses' acceptance that noncompliance was unavoidable for such patients (renal patients) recreated its existence within the unit, whereas it may have been more constructive if the nurses had had asked 'how and why it had come to be'. Statements observed during fieldwork, such as if you keep drinking like this you will die; your heart will swell up and you'll end up in hospital; and; you will never get on the transplant list, perhaps had good intentions but conveyed a variety of meanings for patients and spectators. Consequently, public humiliation appeared to be an accepted strategy used in the unit. However, not all the nurses agreed with this behaviour or endorsed the 'rule'. Nicky, for example, believed this was no worse than *a mother hitting their child*:

But then it is a cultural thing that, they [nurses] give up. And they look at only one way of challenging them [patients] em... an analogy although it is a poor one is the mother who can't get pass hitting her child as a behaviour modification and doesn't get anywhere, so they give up, although there's a whole stack of other things they could have tried and if they had given them a go then they can say "well that does not work". It maybe the wrong nurse trying to modify that patient and you need to look at the over all treatment and you need to look at who is doing the modifying. You don't put nurse A with patient X, to modify. You look at matching to eliminate the situation (23/8, # 68).

Furthermore, creating shame could have aggravated the patients' initial resistance and defiance. Thorne (1999) suggests that some patients consciously chose to be noncompliant as a mode of control during the professional-patient encounter. This often made management of patients difficult and impersonal, the decision-making partnership reflecting a more autocratic style, driven and directed by the nurses themselves. Nurses who persisted in identifying patients as noncompliant were likely to continue a system of dominance, in which nurses can also be part of within a paternalistic model of health care delivery (Grbich, 1999). This in turn reinforces structures of domination in which nurses oppress patients, recreating their own oppressed state within the institution (Parmee, 1995). Thus, until nurses recognise social structures that can constrain their practice, they will be unlikely to consider themselves as autonomous in terms of exercising their actual agency to facilitate a sense of *being in control*.

One reason why this dominating pattern may have recurred was proposed by Nicky, who believed that there was one predominant teaching style in the unit, *the telling approach*, which many of the nurses had come to know and, unfortunately, accept. When behaviour is learnt through repetitive action, routines and rituals can limit patient outcomes and constrain nursing practice (Ford & Walsh, 1994; Martin, 1998). Until the nurses collectively acknowledged the interpretative rules, or stocks of knowledge, that defined what non-compliance meant within this context, the impulse to change them was lost. Following critical discussion, several nurses maintained the belief that 'non-compliance' was *a universal problem found in most renal units*, thus, continued its existence without benefit for the patients, or the nurses. These were rules that the nurses were partially responsible for making, but also trapped them through a hegemonic process. The nurses had the capacity to remake such rules if, and when, acknowledged as being able to do so (Giddens, 1984).

Rules of signification extending space

Language rules were not only specific during face-to-face encounters, but were also applied across time-space or low presence availability (Giddens, 1984). Rebecca, while on the telephone, would close her eyes, creating a mental image of the caller as their story unfolded, momentarily transporting herself into the same space zone. Subtle data cues would, *as a rule*, be collated: *breath sounds*, for example, might signify fluid overload. This visualising behaviour has been identified by Edwards (1998) as a form of compensation when a nurse is not in a face-to-face encounter. This tends to make telephone decision-making systematic and analytical in order to extract information which the nurse could not obtain through sight (Edwards, 1994; Endacott & Dawson, 1997; Marsden, 1998). Consequently, language rules constituted during low presence availability were predominantly directed by who the nurse was, what level of ability and understanding the patient had, the location of the caller, and their previous renal history.

Rules controlling the dialectic of control - a summary

In summary, rules were part of the nurses' daily practice in the renal unit, created and recreated through their actions and the decisions they made. Knowing rules, according to Delpit (1988), makes it easier to acquire power. Rules of signification and legitimation controlled the decision-making process in terms of who had power, who made decisions and who knew the language and understood the context in which decisions were made. Thus, language rules created and maintained meaningful social relationships that enabled the nurses to be understood and, in turn, to understand others (Hewison, 1995). Rules define boundaries of expected practice and social order in terms of 'how to go about from day-to-day' (Giddens, 1984), yet were flexible enough to promote a sense of control, although this did not necessarily result in desirable outcomes. Once rules became known, then there was a possibility that rules would be intentionally changed. The nurses had the capacity (agency) to decide whether to follow rules, and hence reproduce or consciously change them. However, not all rules changed with intent, but rather accidentally.

Nurses need to ask what the rules are that govern their practice and the decisions they make, and whose interests they serve. When the decision process is not critically assessed and evaluated, nurses remain powerless in their practice, and professional development is immobilised. Until these questions are addressed, nursing accountability and responsibility for their patients becomes constrained, which, in turn, can be assumed to control and govern nurses' potential autonomy. Giddens (1984) reiterates that everyone has power; just some have more than others and is implied by a person's access to resources meaning that power has to be renegotiated across time and place. Nurses must therefore be part of this negotiation process so that they gain and maintain control in the domains of nursing and the delivery of care. Normative and interpretive rules indicated who could access and control resources, sanctioned through the exercise of power, which, in turn, influenced how rules were interpreted and applied (Dillard & Yuthas, 1997). Therefore, like time and space, rules and resources were found to be inseparable from the context of daily life (Giddens, 1984).

Resources - structures of domination

Giddens (1984) describes power as the means of getting things done and can be exercised in two predominant ways: 1) by drawing on allocative resources (i.e. raw materials, land, technology, equipment); and 2) via authoritative resources (i.e. communication skills, organisation of time-space, interpersonal connections) in order to get people to act in some way (Tucker, 1998). As a result, Giddens (1984, p. 16) proposes that "power is not itself a resource", but rather power is exercised through resources and structures of domination. He adds that "all forms of dependence offer some resources whereby those who are subordinate can influence the activities of their superiors" via the dialectic of control (Giddens, 1984, p. 16). Like rules, resources are not fixed but dynamic and expandable, constantly redefined and renegotiated during social interaction. People combine rules and resources in different ways for different purposes during social interaction (Giddens, 1979), which in turn enables their dialectic of control. As a result, power continues over time and space, presumably because of normalised relations of autonomy and dependence between people and groups during interaction. In the renal unit, allocative resources, such as dialysis equipment and pharmaceuticals, were associated with authoritative encounters that transpired across time and space, often governed by timetables and routines. Such encounters were important for the production and reproduction of social life.

Allocative materials in the unit

There was an unquestioned trust that allocative resources were generally available and reliable to serve the purpose of providing efficient dialysis treatment. The longer a nurse had worked in the unit, the more knowledgeable they appeared to be in terms of resource availability and accessibility. All the nurses identified the Nurse Managers as the main resource decision makers, in collaboration with the Hospital Purchasing Manager and the nephrologist. Therefore, it was no surprise to find that the majority of the nurses were not directly involved in purchasing decisions. This finding is similar to those of other studies. For example, one nursing poll in the United States indicated that only 23 percent of Registered Nurses were regularly involved in making purchasing decisions (Lastround, 2001), although how 'purchasing' was defined and understood was not so clear. Most nurses were aware that final purchasing decisions were made externally from the unit, based on Queensland Health's purchasing policy, which aimed to standardise resources to reduce waste and promote efficiency. In contrast, the nurses appeared less knowledgeable, or perhaps less concerned, with regard to purchasing practices at the unit level. This lack of interest was, at times, a potential constraint in relation to evaluating new resources. Instead, evaluation, referred to as verbal *feedback*, tended to occur only *if problems came to light* rather than as a deliberate action. Most times, problems could be *worked around* (controlled and manipulated), inferring that the resources were normally accepted or tolerated. Monica described how the nurses could *sway* a decision indirectly through the feedback given on products trialed in the unit. Therefore, *feedback* may have advantaged the nurses' interests before the organisation, and Monica perceived this as a way of *having control*. There were times, however, when the nurses could not 'sway' a decision:

A Doppler would help with the placement of difficult cannulations *[placement of needles into fistula]* but the hospital won't buy one. We can justify it for cannulations instead of guess work. That would cause less problems for the patient with difficult fistulas. The patient has a problem but it is a cost factor of buying it... (Emma, 26/8, # 37).

Even though the nurses had the knowledge and skills to justify a request, they did not have the power to approve the request. Rather, purchasing power sometimes lay in medical hands external to the unit. Emma explained how the intensive care doctors, constrained by economic rationalisation, would make some renal decisions, yet were not renal specialists and/or did not understand the nursing issues.

Fluffy-duffy 'non-clinical' decisions

Procuring certain resources through orders and supplies was considered everyone's responsibility and was not always done. This was a recurrent problem raised during the nurses' meeting. Why the problem persisted was difficult to ascertain, especially since nurses saw it as a *routine task. Neglect* was one reason offered by Rebecca, since each nurse assumed another would do it. Anna explained how nurses would *game play* by *looking busy* as an avoidance tactic. Miscalculation when deciding supplies could have detrimental outcomes that could disrupt daily routines, and this may have been another reason why some nurses appeared less willing to be involved,

fearing chastisement if they got an order wrong. Consequently, while the nurses were expected to share in this task, not all accepted the responsibility, appearing to remain 'dependent' on their colleagues. However, appearances can be deceptive, in that this dependency could have been a nurse's deliberate, but subtle, exercise of control, since escaping the duty meant that someone else had to do it. Alice, for example, decided to take a less active role, describing non-clinical decision-making as *fluffy-duffy stuff* that was *less important* for her, rather this was an area of decision-making predominantly controlled by senior staff:

....being more at that expert level, maybe they do get a bit more bored with clinical decision-making and so worry about fluffy-duffy stuff which takes time and energy (9/11, #294 - 296, abridged version).

Through the reflexive process (Giddens, 1984) Alice had consciously decided to focus her time and energy mastering clinical knowledge and skills, as this was an area over which she felt she had more control in terms of patient advocacy and accountability. In contrast, many senior nurses saw non-clinical decision-making as important since this maintained the daily practice that nurses, such as Alice, take-forgranted. Nevertheless, there were times when the significance of fluffy-duffy decisions seemed to be overestimated. Expert nurses' 'boredom' as mentioned by Alice, may have been one reason why some decisions seemed to take precedence over others in irrational ways. For example, during one meeting the ordering of sandwiches was discussed for about 8 minutes, followed by where to locate the micro-pore tape (7 minutes). In contrast, calcium administration policy received 4 minutes discussion, followed by resource ordering (1 minute) and the pre/post vital signs policy (10 seconds). However, this appearance of 'boredom' may have resulted due to other factors such as lack of motivation, stress relief, or a deliberate strategy to encourage less experienced nurses to make clinical decisions instead. Furthermore, the Clinical Nurses may have intentionally, or unknowingly, restricted the other nurses' access to resources, excluding them from making non-clinical decisions. This, in turn, may have shaped the nurses ideas about what seemed important in the meetings, and what did not.

Barnard (2000, p. 379) writes about the "interrelationship between material resources, knowledge and skills, and technique". When knowledge and skills about

material resources employed during practice is limited, the technique of applying technology to provide professional care and maximise outcomes is also constrained. Consequently, how nurses became informed and how that information was used when making decisions was of interest.

Just another resource!

The focus of technology in academic writing, according to Bevan (1998), has tended to look at the outcomes of technology on nursing, rather than ask how technology has defined and changed nursing. Emma, on the other hand, speculated how technology might shape renal nursing and decision-making:

In the future I don't think nurses will make many decisions, the machine will respond to the patient as we do now, following routines or programs . . . and deliver appropriate treatment (27/8, # 38).

Emma's depth of reflection appeared to be an exception to the rule in this unit. For Emma, the renal nurse would become the *chronic nurse*, no longer dealing with the 'doing' aspects of dialysis, but rather managing the undesirable consequences of dialysis. This later made me wonder whether nursing is encroaching on the medical domain or whether this domain will be 'given' to nurses as the technical side of dialysis once was. And if so, what this means for nursing as a profession providing care. In some ways, managing chronic problems may actually redirect the nurses' focus from the dialysis technology back to the patient, rather than vice versa, which, then, once again, redefines the renal nurses' role. Despite Emma's reflexivity, how technology shaped and defined nursing in the unit tended to be an accepted part of the renal context that was also, taken-for-granted. Similarly, new products introduced into the unit seemed to escape the nurses' skepticism; rather they were *just another resource*, their existence accepted with little critique as to where renal nursing was heading, or rather, where technology was taking renal nursing.

Sandelowski (1997) has challenged conventional beliefs about the role of technology in nursing, suggesting that it offers another way of knowing, which can be perceived as either technologic optimism or romanticism. Technology in this unit was embraced as empowering (technologic optimism), rather than viewed as something to be wary of that could be damaging to nursing (technologic romanticism). For instance, the nurses' understanding about the haemodialysis machine enhanced their capacity in controlling the machine and, to a degree, patient, thus was considered as empowering, rather than a mode of domination and control that might have, and possibly did, diminish nurse-patient relations. Sandelowski (1997) adds that nurses should be careful so not to become slaves to technology as maids of surveillance and technical mastery. However, knowledge and decision-making based around technology did not seem problematic for the nurses in this unit. In fact, technology predominantly drove the decisions being made and was the reason why renal nursing existed and why nurses decided to work there. The nurses were no longer caught up with traditional nursing routines but rather with the specialisation of renal technology.

The new dialyser

One purchase made during this study was the vitamin E-coated membrane dialyser, acclaimed to protect red blood cells during dialysis (Calzavara et al., 1999). Many of the nurses were vague about who had made the decision, why a change was thought necessary and what outcomes to expect. Despite this, the Nurse Managers spoke about several workshops conducted in the unit by the product representatives, prior to the new dialyser being introduced, believing that the nurses were well informed. However, this did not reflect Sammie's experience:

The other day, for example, I was asking the nurses what was in the dialysers, the fluid in them, just to find out if they could do harm and what solution was in them. However, a lot of the nurses couldn't tell me (28/6, #7).

Monica was uncertain why a change had occurred, justifying the new product in terms of improving outcomes: Obviously the UF [ultra-filtration] rate would be equivalent to what we were using and the clearances better. Her understanding about the dialyser, at that time, was based on a belief rather than facts. In terms of the dialyser protecting the patients' red blood cells during dialysis, Monica's uncertainty continued: Now you're tricking me . . . I don't know... I' m not up to date. Similarly, Rosemary was also vague about the dialyser's protective claim, admitting that she had not given it much thought. When knowledge about every day products is limited and technology is not operating to achieve optimal effectiveness this can be considered wasteful and a constraint in maximising outcomes. Professional

accountability is not only about justifying actions but also resources used. This blind acceptance of technology appeared to correspond with the decision-making culture of satisficing (Simon, 1967) that the nurses had come to know. How this arose may be explained when addressing how technology was introduced and implemented within the unit.

Who informs whom?

Structures of domination can enable a person to coerce (force, intimidate) or induce (persuade, encourage, tempt) another person's behaviour (Giddens, 1984). In the renal unit, it was not unusual to see an educational session that informed (coerced/induced) nurses about the products used in the unit, resemble a 'tea-party'. However, the party inducements did not go unnoticed, nor their hidden intent unexamined:

But we all know that the reps *[product representatives*] want to sell a product. Not all reps are perhaps dishonest but as a Registered Nurse you need to look for guidance from your Clinical Nurses (Monica, 11/11, # 319).

The *reps* disseminated information, which favoured the technical rather than humanistic aspects of renal nursing. This may have been one of the reasons why some of the nurses described themselves as not *real nurses*; they worked in a *clinic*, *not a ward*. Technology and language shaped the nurses' perceptions that focused on the technology of dialysis *not nursing*. This in turn shaped how decisions were made. For example, the nurses spoke about managing dialysis technology that required specialised skill, possibly having constituted their perception of autonomy. At the same time, special knowledge can unintentionally, or intentionally, exclude other decision makers such as the patients and doctors. Emma, for instance, spoke about the nurses taking an *authoritative role*, while the patients were *receivers of care*, which inferred patient passivity, and therefore, exclusion during decision-making.

Nurses too felt excluded at times, particularly when trying to implement new ideas and technology in practice, which at times caused a mismatch between innovative practice and maintaining the *old ways:*

While you're listening to the in-service it makes sense and then you take it back and you try to use it in the workplace and some people who weren't

there say "Oh no, no, I don't want to do this because I think it is wrong (Sarah, 29/8, #16).

The product representatives were outsiders who may have undermined the official authority within the unit, creating an obstacle when implementing new technology or ideas. When a nurse was unable to attend the information session they spoke about being *disadvantaged* in terms of knowledge and, thus decision-making. In addition, not all the nurses appreciated technology; rather they saw it as a limitation:

The BVM [blood volume monitoring] can hinder in that the machine says this is happening and there is no alarm, yet when you see the patient, they are going flat [hypotensive]. It is limited in that it fails to respond to the fact that the patient is going flat, like automatically does a blood pressure or gives fluid or reduces ultra-filtration rate. I think this technology is coming (Emma, 27/8, # 38).

These 'shortcomings' made some technology expensive and were not always helpful when decisions had to be made:

It does help *[technology]* with decision-making but only as far as it is a tool . . . but often there is still guess work. This comes with experience. I suppose your guesses become more accurate (Emma, 28/8, # 11, abridged).

Benner (1984) writes about how experts acquire knowledge that becomes patterned over time, which then informs decisions as new but familiar situations arise. The problem, however, is knowing when *guesses* are accurate, and when they are not. In this unit, the more experienced nurses seemed to 'trust' their *personal judgment* and *experience* rather than the equipment. How this trust was evaluated in terms of best-practice and optimal outcomes was not so clear. When Rebecca, for instance, was asked about how she knew what she knew, she exclaimed, *I don't know, I just know!* Therefore, barriers to implementing new practices may not have been so much about technology failing, but more about some nurses wanting to preserve their control over the knowledge and material resources used in the unit, as one way of maintaining their authority.

When abnormal becomes normal

Despite some nurses' cynicism about technology, all the nurses in some way depended on it. Sarah, on the one hand, embraced technology but was also aware of the constraints as she explains: *we have come to a point where we use technology rather than our clinical skills*. As a result, technological trust could override common

sense when making decisions. For example, when an automated blood pressure gave an elevated, and therefore, abnormal result the nurses knew that *they should repeat the procedure manually* since this was considered *more accurate*. However, this required time. Moreover, deciding when a blood pressure was abnormal was not so clear since there was a mutual understanding that 'most' renal patients were hypertensive:

Now I just accept that a blood pressure of 200 plus is okay. I use to freak out but not now. "Oh yeah their blood pressure is up again" (Sarah, 13/8, # 14).

Hypertension is a familiar pattern seen in any renal unit. Therefore, *as a rule*, the once abnormal result becomes normalised producing what Kahneman and Tversky (1972) term representative bias and availability. This occurs when nurses judge a particular incident to be representative of a certain class. For example, renal patients as a rule *are hypertensive because they have fluid on*. This rule becomes established as a memory trace (Giddens, 1984) that is available for the nurse to draw from when making future decisions. Should this occur, appropriate interventions may not be implemented, and decision-making becomes ineffective as clinical judgment becomes clouded. When this transition of the abnormal becoming normal occurred was difficult to ascertain, although by the end of a nurse's 3-month induction period the idea was well established as Denise announced: *they all have high blood pressures. It's the fluid*.

Authoritative resources

When technology went wrong, particularly during dialysis, decision-making became urgent, necessary to preserve the patient's blood and maintain a safe environment. It was during these moments when nurses' knowledgeability, in terms of controlling and manipulating technology, separated the competent from beginners, and the proficient from the experts. At such times, the experienced nurses represented a voice for the less experienced nurses, making decisions on their behalf. Control of allocative resources enabled this authoritative voice which Giddens (1984) terms 'authoritative resources'. However, domination and control exist so far as they are produced and reproduced during social encounters across time-space (Giddens, 1984). This results in authority being welcomed at one time, and rejected at another. Thus, a person's control is always relative, and power alternates between autonomy

and dependency, constituting the dialectic of control (Giddens, 1984). In other words, nurses could decide whom they obeyed, and whom they did not, within the constraints of institutional sanctions. The more control a nurse had, or was perceived to have by their colleagues, the more authority they had (Layder, 1994).

Official decision-making authority within the organisation

When authority was officially bestowed on a nurse, both the organisation and the nurses themselves expected a certain level of professional conduct, although this had to be constantly renegotiated during encounters, in order to control daily events (Giddens, 1984). 'Mutual agreement' assumed that authoritative nurses controlled (more autonomous) subordinates who would follow and obey commands. This symbolises a type of bureaucratic order (Weber, 1947), in which surveillance by nurses on nurses ensured rules were enacted, thereby reproducing institutional patterns of practice.

The Nurse Manager's decision-making represented an authoritative voice that extended across time and space within the larger organisation. This enabled their decision-making capacity as they interacted beyond the renal unit context with other people in other departments, yet, constrained it when dealing with institutional hierarchies, formal communication pathways and limited access to significant authorities. In comparison, the nurses working in the unit tended to focus on internal unit concerns that could disrupt daily routines rather than organisational decisions, unless external decisions threatened the unit's internal milieu. For that reason, the nurses spoke about how they liked to be kept informed and was made possible by the Nurse Managers' open door policy. This also gave an appearance that decisionmaking at the unit level was efficient and effective. Consequently, there was a twoway decision-making approach; bottom-up and top-down, depending on the type of decision and where the decision originated (Marquis & Huston, 1998). Top-down decisions made within the larger organisation were not easy for the nurses to control and may have been a reason why they seemed more interested in bottom-up decisions originating within the unit. The upward movement of a decision only occurred if the Nurse Managers approved. This is one reason why the other nurses

spoke about the Nurse Managers as having power, although this did not necessarily mean that they were the most powerful nurses within the unit.

Perceived authority within the unit

Regardless of whether a nurse was a superior or a subordinate they had access to power in varying degrees, possibly assisted by persuasive or coercive strategies (Giddens, 1984). How domination was perceived during a decision-making encounter depended on what type of 'control' strategy was applied and how that strategy was understood:

I had a good understanding where the care was coming from so I did not feel threatened when she said, [senior nurse] "can't do it that way". I was given a lot of support (Sarah, 13/8, # 279).

Sarah believed that the encounter was supportive and caring, resulting in a positive outcome. However, dominating strategies can be used but not always acknowledged or are understood in a different way. For instance, at another time Sarah spoke about *fear of overstepping the mark*, which inferred rules of domination being applied. Nevertheless, both these encounters could have had the intent of protecting, or oppressing, Sarah. Deciding 'which is which' is very subjective and personal. Lynnette, for example, believed that nurses undermined her authority as a Clinical Nurse. In this case, Lynnette felt her authoritative voice was not heard and this was particularly problematic when making *collaborative decisions*. This meant that 'official authority' did not guarantee authority. However, one Registered Nurse acknowledged the Clinical Nurses' official position as one of authority:

The Clinical Nurses are quite dominant and don't really let the Registered Nurses walk over them (Denise, 15/11, # 572).

In view of this, Giddens (1984) explains how authority is not fixed; rather it is how it is perceived across time and space encounters, depending on who is doing the controlling and who is being controlled. Knowing the rules and access to material resources enables a nurse to exercise their dialectic of control, control that manifests in many ways.

Intermediate Nurses - not novices, nor experts

Registered Nurses who had worked in the unit for several years had created a powerful niche for themselves and this may clarify why Denise talked about the Clinical Nurses not letting the Registered Nurses walk over them. These nurses were not the official rule enforcers, yet were leaders in their own right, and described earlier by Katie as Intermediate Nurses. They were neither novices nor experts, yet had knowledge-power that facilitated their personal power as 'helpful' personalities in a charismatic way. Unlike Weber's (1947) application of charisma to define a leader based on personal qualities, and extraordinary powers, charisma can be used in less constructive ways. Howell and Aviolio (1993) explain charisma as a leader's ability to influence others' beliefs, values and behaviour to serve their own personal interests. This can be achieved through manipulation and persuasion strategies. Thus, a nurse who was perceived as charismatic did not always need official authority in order to influence some nurses' decision-making behaviour. Intermediate Nurses were described as fun to be with; helpful; and supportive, and may have been one reason why some Intermediate Nurses did not want promotion to Clinical Nurse since they exercised power in unofficial ways. Senior nurses did not always accept this apparent disinterest of 'official authority' as they perceived several Intermediate Nurses as still wanting control of the floor. These different views had the possibility of creating conflict and mistrust, particularly when knowledge, skills, and personal traits took precedence over official authority. In times of urgency, however, what a nurse knew and could do inevitably overrode status alone. For this reason, it was not always apparent who 'actually' in-charge was:

It was hard to sort out when I started in the unit, who actually makes those decisions and to know who to go to. Certain decisions to be made, I assumed, would be made at certain levels *[Registered or Clinical Nurse]*, but they weren't. There doesn't seem to be a level of decision-making but more by what level of decision-making a person felt they could make (Sammie, 28/6, # 1).

Deciding who is in-charge

The nurses recognised that an official position was not always sufficient in maintaining control during a shift. One approach in attempting to address this problem was the appointment of an official shift co-ordinator or 'team leader'. This meant that both Registered and Clinical Nurses could be appointed in-charge, temporarily shifting official power from one day to the next. Even though the official power-control was known, this did not necessarily mean the appointed team leader actually had the most power since all the nurses' dialectic of control (Giddens, 1984) were at play. In other words, following the team leader was not a given, rather this was assumed.

When a nurse was the appointed team leader they spoke about the decision process being easier because they felt they had the capacity to question decisions and give direction. However, when no longer in this position, legitimate surveillance was reduced. This changing level of authority appeared to constrain Joanne's professional development:

When designated to be the shift co-ordinator then I make decisions. When not, I am a nurse working on the floor. If told "this is how you do it", then I would follow this, as long as it is safe (19/11, #37).

This seems to contradict the nurses' shared understanding that many felt empowered when making decisions. Instead, certain nurses had this privileged position that alternated across time-space and depending on who else was present in the unit. What impact this may have had on patient outcomes remains unclear but when nurses follow legitimate authority as per institutional rules, agency is constrained. When feeling constrained in social practice, subtle coercive tactics can be applied, giving a sense that all is well. For example, the nurses decided the appointed team leader on a day-to-day basis and, when agreement was not achieved the Nurse Managers would intervene, although this was a rare event. One reason for disagreement, and perhaps the 'appearance' of agreement, was the assumption that a nurse who had worked in the unit for the longest time, and was a Clinical Nurse, would automatically be 'in-charge'. However, this was not always the case. Consequently, acceptance of the appointed team leader was not always evident; as Sammie recalls her experience:

When they came on the shift [*another nurse*], they were very annoyed that I had been asked to be the team leader (28/6, # 124).

As a result, Sammie believed that information was deliberately withheld, constraining her capacity to make informed decisions. Witnessing this happening to other nurses further reinforced this belief:

I know sometimes I have seen information withheld from the team leader and other nurses. Renal nurses are strong willed and like to be in control (Sammie, 28/6, #96).

Additionally, non-routine decisions were individually rather than collaboratively made, further undermining her authority. This can be considered as both unprofessional and a waste of resources. For example, one team leader, on phoning for medical assistance, learned that the doctor had just been called. This left the nurse feeling inadequate and despondent since the decision had bypassed her. This supports Lynnette's earlier claim of having no authoritative voice. Despite sanctioning rules, this behaviour appeared to be repeated. Understanding why was not a simple matter. The nurses' elevated sense of autonomy may have over-ridden common sense; hence, decisions were made independently. In addition, feeling constrained can facilitate despondent behaviour and lead one to question 'others' authority. Thus, some nurses were critical of one another, particularly across the nursing levels (i.e. Registered Nurse [level 1]; Clinical Nurse [level 2]; and Nurse Managers [level 3]). Some Clinical Nurses were criticised for not performing at their 'authorised' level, yet were being 'rewarded' in monetary terms. In response, some Registered Nurses used resistance and defiance as control strategies, but the nurse who was the target was not always aware of this:

I have seen them snigger, well not snigger but you know, they look at each other sideways and remark 'knew that was going to happen' between themselves, and they let it go and I do know they got their own way further down the track. When that particular Clinical Nurse went out, the blood flow rate went back to what the Registered Nurse wanted, so in that sense, yeah maybe they sit back and wait for something to go wrong (Denise, 15/11, # 102).

Sanctioning rules, through which power could be exercised during interaction, defined how nurses could enable or constrain actions of self and others. When a nurse did not feel they had the authority to enforce such rules, sitting back and *waiting for things to go wrong*, as the Registered Nurses allegedly did, had the potential of undermining the Clinical Nurse's decision-making capacity. This scrutinising and, at times, destructive behaviour may have occurred as the Registered Nurses gave an appearance of 'obeying' official authority and institutional rules, yet privately rejected such structures since some of these nurses were themselves more

capable and knowledgeable. As a result, when a nurse in an authoritative position was perceived as failing in their duty, their colleagues questioned the decisions they made, and ignored their authority. Bonner (2001) discusses similar findings, observing that when a Clinical Nurse was not recognised by others as having expertise, the trust and respect of colleagues was reduced, thereby limiting their practice. In this regard, Kosowski and Roberts (2003) mention the importance of nurses establishing meaningful relationships founded on respect and trust, necessary for maintaining authoritative positions.

Once a nurse had 'lost face' (Goffman, 1972) in the renal unit, their authoritative resource diminished, taking sanctioning power with it. At these times, power seemed to be redirected towards the subordinates. This supports Giddens' (1984) claim that every person, in every encounter, has relative autonomy and dependency. No one is truly ever dependent, the subordinate using his or her knowledge and skills to maintain some degree of control. Alice spoke about nurses *playing the game*, challenging official power holders, withholding information, going from one person to the next until the nurse gets the decision they want, and choosing not to make a decision. Choosing not to make a decision required someone else to make the decision, and did not always work, leading to further loss of control:

Sometimes I get like that *[take a passive position]*. It's like hitting your head against a brick wall and wonder why you continue doing it (Carol, 28/10, # 154).

Thus, the politics of decision-making meant that there were always winners and losers, suggesting a far cry from the assumption that the nurses worked as a team and were professionally empowered. Despite this, most nurses still believed they were autonomous and accountable decision makers, at least until something went wrong.

When things go wrong

When things went wrong, the technical aspect of dialysis that was often taken-forgranted separated those who knew, from those who did not. Technology had the capacity to lead practice away from familiar routines presenting a critical moment (Giddens, 1984). At these times, a person's authority was constituted through their practical know-how about dialysis since urgency demanded advanced knowledge and skills. For some nurses, their intuitive clinical mastery emerged (Benner, 1984; Bonner, 2001) representing a nondiscursive knowing. The less experienced nurses fell in line, obeying commands diligently. This was clearly a moment when nurses knew who were the leaders and who were the followers. Trusting that someone would be there was imperative, yet 'being there' was often taken-for-granted, until someone was needed:

. . . Coping is okay but it is more about someone knowing the technology and willing to share that knowledge with me. It is important to have back up should something go wrong (Emma, 9/9, # 16).

This is consistent with Spender's (2003, p. 266) observations that "knowledge suggests a degree of certainty . . .". When someone knows, uncertainty is reduced which creates a sense of safety, and thus, control. However, this may also produce overconfidence in what one knows, the certainty minimising doubt. Knowing that someone would be there was an important aspect for all the nurses when making decisions. This was often extended to the nephrologist, despite his absence, as there was a shared trust and understanding that he would be there for the nurses. However, certainty can be illusionary, "created and exploited as a tool for political and economic goals" (Gigerenzer, 2002, p. 14). Consequently, nurses, like any person, can create images that are useful but incorrect, yet important in providing a sense of feeling safe, or a sense of ontological security (Giddens, 1984), which, can serve the organisation. This, in turn, facilitates the patients, doctors, and larger organisation's trust that what nurses do is right. Codes of practice oblige nurses to do what is right, as accountable and responsible professionals. But trust too can be illusory, created and recreated to serve different people's needs at different times. Knowing when to trust, therefore, becomes problematic, and is part of reflexive monitoring (Giddens, 1984). Routinisation of practice enables this sense of trust but does not provide an answer when routines no longer serve critical moments that can undermine ontological security. In such cases, it appears that nurses blindly trust authoritative individuals in relation to their knowledgeability. However, if this trust is not critically examined, less than optimal practices may suffice and decisions constrained. Thus, for Emma, 'having back up' meant trusting that someone knew what to do, even if their actions were not correct. This 'back up' behaviour was also observed when nurses interacted with doctors.

Telling them what to do

Some nurses questioned just how authoritative junior doctors actually were when making renal decisions. According to Denise *nurses told them what to do:*

We have n't got a nephrologist for starters and em...and our GP [means medical officer] is really only a pen pusher for em... Well from what I have seen anyhow.... He doesn't really make decisions. Em decisions aren't normally made by him, but either the Clinical Nurses or the consultant, and I know that contradicts what I have said previously but em.... (15/11, # 482).

Despite this, the rules nurses drew from to 'tell doctors what to do' were often based on what *the nephrologist liked*. Therefore, one could question whether the nurses were more knowledgeable in terms of renal dialysis, or whether it was knowing the practice rules commonly used in the unit that gave an appearance that some nurses were more knowledgeable. Regardless which this was, their knowledge of rules and/or dialysis permitted close scrutiny of the doctors' decision-making. Manias and Street (2000a, p. 1473) write about a similar incident in which critical care nurses placed "the junior doctor's decision-making process under the gaze of the consultant". Furthermore, information dissemination in the unit was primarily through oral means, despite bureaucratic rules that required written documentation. Documentation makes it possible to shift the balance of power (Anderson, 2001; Meade, 1999), since nurses' practice also becomes under scrutiny in documented form. This may explain why nurses maintain oral traditions to deliberately, or unknowingly, continue a perception of control, and thus retain power because the doctors remain reliant on the nurses for patient information.

It was at the nurses' discretion what they wrote and when, despite organisational rules. Some nurses were known for *over writing*, while others seemed to neglect writing all together. Rebecca tended to write herself reminder notes separate from the official documentation. Private knowledge, such as these notes, although harmless, can be empowering as others are excluded. Brooks (1998) values written documentation as part of professional accountability, which for Bevan (1998) makes the invisible side of practice visible. Nurses' responsibility as health care providers can be undermined when documentation remains limited, making evaluation of outcomes a difficult endeavour, and further hindering nursing's quest for

professionalism. Consequently, control of information through oral means may have a short-term effect, but in the long term can constrain nurses' professional autonomy.

Chapter summary

Social structures, constituted during interaction, profoundly shaped nurses' decisionmaking choices in the unit. Mutual knowledge about structures was generated during interaction, which was largely maintained across time and space. Continuation of practice seemed to control how decisions were made and by whom. Predictable routines reduced uncertainty and played an important factor in enabling the nurses' autonomy. Knowing what to do when provided a sense of safety, or 'ontological security' that facilitated the nurses to make everyday decisions. However, familiarity and certainty in relation to day-to-day practice could produce and maintain a satisficing decision-making culture. In comparison, when uncertainty was present, routines and taken-for-granted norms had the opportunity of being questioned, bringing practical, tacit knowing to a discursive level. It was during these times that the potential for change occurred, while possibly optimising decision outcomes. Furthermore, when the nurses knew the rules, or had the capacity to change rules, and had access to the resources, they became knowledgeable about the context in which they worked (Giddens, 1984). Knowledgeability facilitated each nurse's agency, via his or her dialectic of control, and are concepts further explored in the following chapter.

CHAPTER SEVEN: KNOWLEDGEABILITY

To live in the universe of high modernity is to live in an environment of chance and risk (Giddens, 1991a, p. 117).

Introduction

Chenail (1997) recommends that the researcher 'plumbs up' a qualitative study towards the end as a way of tidying up the messiness of social life without losing meaning. This chapter serves this process of plumbing up by combining some of the concepts presented in the previous two chapters: contextuality and social structures. This has the overall aim of pulling the loose ends together to develop further insight into the decision-making culture of the unit and the nurses' perceived capacity as decision makers. Knowledgeability provides the central theme, although is not an entirely new concept in this thesis since it has been previously addressed in less deliberate ways. Exploring ordinary daily routines through dialogue and observation has helped to illuminate knowledgeability as part of every day life, providing opportunities for challenging taken-for-granted assumptions regarding the decisionmaking philosophy and practices within the unit. How the nurses exercised their agency as decision makers via the dialectic of control by knowing the rules and resources during time-space encounters is addressed. This chapter also takes into account the role of emotions, risk and uncertainty when making decisions and how these decisions were then evaluated in terms of outcomes.

Giddens (1984) claims that actors know a great deal about the circumstances of self and others' actions, including consequences of these actions in day-to-day life. He terms this *knowledgeability* and is presented as three levels of consciousness or awareness (Layder, 1994), "the unconscious lying at one extreme and the discursive at another" (Smart, 1982, p . 135). The unconscious, according to Layder (1994, p. 134) is the motivational level that represents emotions and desires, but does not mean that such desires are enacted; rather, they only provide outlines for potential action. For this reason, Giddens (1984) tends to focus on the discursive and practical levels of consciousness which actors are assumed to have some control over. Automatic reflexive monitoring facilitated nursing practice to proceed as a continuous flow, the nurses drawing from practical stocks of knowledge and routines (whatever is done habitually), some of which were not always able to be spoken about (Craib, 1992). Knowing what to do when was assumed to provide the nurses with a sense of safety or ontological security (Giddens, 1984). Once actions were rationalised, the discursive level of consciousness was at play, creating the possibility of change (Giddens, 1984). Wittgenstein (cited in Giddens, 1992, p. 193) claims that "stating rules as rules . . . alters their nature". Once rules become known this can assist in breaking away from routines and taken-for-granted practices that can transform social structures. Therefore, according to Giddens (1984), every person (nurse) has the capacity or agency to do and act differently.

The autonomy-dependence continuum of decision-making

Arnaud and LeBon (2000) claim that life is about making decisions, which can be viewed from three levels: first, a decision that has already been made; second, a decision that requires contemplation while options are explored; and finally, hesitancy in making a decision due to uncertainty. The nurses in this study were observed at these different levels although were positioned somewhere along an alternating continuum of decision-making rather than at distinct stages. This positioning also paralleled a nurse's perceived dialectic of control (Giddens, 1984), in which perceptions of agency or the capacity to make decisions alternated in relation to time-space, co-presence, and one's knowledge of, and access to, social structures. When social structures were known, for example routines and protocols that facilitated day-to-day practice, a nurse gave the appearance of making and implementing decisions independently. In contrast, when a nurse was unfamiliar with a situation, decision-making could be avoided, attempted with some degree of anxiety, referred to someone else, or made in collaboration with others.

Nurses' ability and capacity as decision makers

Initially, many of the nurses spoke about being autonomous in their work: *I am autonomous; we can make many independent decisions* and; *yes we do have a lot of control.* However, the nurses' actual degree of participation when making decisions

was perceived differently. For example, Emma, Rebecca, Alice and Sarah, when reflecting on their decision-making, initially believed that they were 'autonomous' decision makers within their scope of practice. As time progressed during this study, all (Rebecca, Alice and Sarah), with the exception of Emma, doubted if they were as autonomous as previously thought. This change in perception was a consequence of increasing the participants' awareness through dialogue aimed at identifying enabling and constraining decision-making factors within the unit. Emma, however, believed that time worked in the unit and her accumulation of specialised renal knowledge were major factors that enabled her decision-making agency. This may explain why Hoffman, Donoghue and Duffield's (2004) study reported professional orientation as the primary reason that enabled nurses decision-making participation, rather than experience (Benner, 1984; King & Clark, 2002; Watson, 1994) and education (Considine, Ung, & Thomas, 2001; Pardue, 1987; Prescott, Dennis, & Jacox, 1987) as the literature previously suggested. Education and experience, therefore, may possibly be prerequisites that constitute nurses' professional orientation as decision makers in the first place. This, in turn, may have also facilitated how others 'recognised' Emma as an 'expert' decision maker (Bonner, 2001).

Several nurses spoke about how their colleagues, such as Emma, were knowledgeable: *The clinical nurses are so knowledgeable and make complex decisions alone*. Nursing expertise was constituted across time-space, during social encounters and in collaboration with other experts during group agency. This resulted in decision-making knowledge constantly being defined and redefined as new insights became available. Even though nurses could speak about their perceived capacity as decision makers, they were not always as articulate when describing how they actually made decisions or provided rationales, as Sammie explains:

If I make a decision I make it because I can justify it and give a rationale behind it. At times I ask the nurses what their rationale is and if they can't tell me, and I find that difficult, so I tell them this is what I am going to do and why (28/6, #106).

For this reason, it was not uncommon to hear experienced nurses describe their knowledgeability in terms of *I don't know*, *I just know*. This may clarify why Lynnette expressed ambiguous feelings regarding nurses making 'autonomous'

decisions, as she believed that some nurses' knowledge and skills were limited to supporting their expected level of practice and was a *dangerous thing*. Knowledge for Lynnette was understood as *biomedical knowledge*; only then could nurses *fully contribute in multidisciplinary decision-making*. However, biomedical knowledge, at times, contributed to the nurses' sense of frustration when trying to engage in doctor-nurse decision-making. For instance, even though the nurses learned about renal anaemia management, they were not always able to apply their new knowledge in practice or be part of the decisions made (Hardcastle, 2002). In addition, biomedical 'dialysis' knowledge tended to take precedence in the unit dominating other types of knowing (Carper, 1978) as previously discussed.

Few nurses labelled their knowing as being 'intuitive'. Rather, the nurses spoke in terms of *recognising things*; or *once you've seen that look, you never forget it*; and *I don't know if that is intuition as it is something I've come to know*. Pixley (2002) comments on how a decision that is 'rationalised and calculated' appears to be more trustworthy, thus reliable. Therefore, nurses may have reflectively described decision-making in logical terms to justify clinical judgment and increase confidence in the choices they made, yet during dialogue they seemed to draw from intuitive experiences, discursively explained in terms of intuitive language as stated above.

Sarah, on the other hand, described her gut feelings in intuitive terms. She found intuition to be informative, drawing from an accumulation of knowledge when making decisions: *What you think will work, what you have learnt and what you know and experience with the patients in the past.* Consequently, intuition could lead to variations in practice and outcomes gained (Tinkler, Hotchkiss, Nelson, & Edwards, 1999). Pixley (2002) refers to gut feelings as anticipatory emotions. Trust in routines and knowing what to do next helps to decrease anxiety so that decisions can be made (Giddens, 1984) which, in turn, motivates action (Pixley, 2002). Giddens (1984, p. 281) indirectly refers to intuitive behaviour as part of tacit, practical knowledge that we cannot always speak about; a knowledge that "exhibits an extraordinary complexity - a complexity that often remains completely unexplored . . ." . Patterns of knowing, or gestalts, are learned and mastered, becoming so automated that they are no longer thought about unless asked about or a

critical event arises, guiding thinking-in-action (Benner, 1984). In this study, familiarity and pattern recognition were important aspects that facilitated clinical judgments, particularly in times of decision urgency and is a similar finding discussed elsewhere in the literature (Corcoran-Perry & Bungert, 1992; Elstein & Schwarz, 2002; Gerdtz & Bucknall, 2001).

Rasmussen (1993) defines intuition in statistical terms, in which experts learn statistical rules and ways to act, thus, become experienced and knowledgeable about daily conduct. However, instinctive application of rules can foster decision bias, such as conservatism or overconfidence, when making decisions, meaning that experts can still be wrong (Edwards & Elwyn, 2001). For example, Rebecca decided that a patient's tachycardia (fast pulse) was possibly due to anaemia and being satisfied with this decision failed to look for other causes. At a later time, the patient's newly prescribed hypertensive medication was thought to have caused the problem. Therefore, if intuition, understood in this study as pattern recognition, is to be considered a type of knowing, Lamond and Thompson (2000) argue that we must critically ask how this knowing might affect decision-making. Without this level of insight, possible opportunities for change will not be created (Giddens, 1984).

Acquiring decision-making ability

Sarah believed that she had learned decision-making as an *unconscious act* rather than something she learnt *with deliberate intent*. For the beginner nurse, this implicit learning process can be difficult to recognise, creating a barrier to optimal learning. Furthermore, this may have maintained authoritative structures whereby more knowledgeable nurses, intentionally or unintentionally, retained knowledge as a mechanism of control. For example, enduring practices may not have been a consequence of organisational constraints, as discussed in chapter six, but rather nurses constraining nurses in order to maintain practice status quo. People [nurses] can unintentionally participate in their own domination when common sense practice is not critically addressed (Giddens, 1984), reflecting Gramsci's concept of hegemony (Stillo, 1999). Beyea and Nicoll (1999) indicate that common sense or sound judgment is learned by nurses on the job through trial and error, experience and observation, therefore, has the potential of becoming uncritically repetitive, resonant with Giddens' (1984) notion that the nature of life is recursive. Critical consideration includes judging research studies and established organisational practices since dominant cultural values can continue, serving some groups more than others, particularly nurses who are assumed to be experts because of the length of time worked in a nursing specialty.

Sarah compared expert and novice decision makers. She assumed experienced nurses had a broader knowledge base to look at the whole picture, we hope. This infers that experts could address the past, present and future aspects of decision-making, unlike the beginner who appeared to be focused on the here and now aspects of decisionmaking as mentioned in chapter five. We hope also implies an element of trust that decisions made were sound, such decisions often referred to by the nurses as being okay. Sarah also believed that experience enables a nurse to know what they are aiming for (assumed to be learned as unit expectations and norms), to get the result they want (personal preferences), as they know B works so go straight for B suggesting potential decision bias (e.g. conservatism, satisficing). In comparison, Sarah spoke about the beginner nurse contributing as a decision maker since they made clear decisions with no preconceived ideas using objective data. This observation supports previous studies that discuss how novice decision-making is assumed to be more analytical; drawing from minimal information sources so that the decision process appears less complex (Fox, 1996; Kosowski & Roberts, 2003; Tabak, Bar-Tal, & Cohen-Mansfield, 1996). However, Sarah failed to recognise from where the beginner nurses learned their *ideas and objective data*. Learning what the unit expectations and accepted norms of practice were appeared to be an important aspect of a new person's initiation into the unit. Therefore, it is questionable whether the novice nurse had "no preconceived ideas" since decisions were often based on routine practices.

Consequently, knowing the routines and repetition of practice enabled the nurses to anticipate outcomes and make decisions at a practical intuitive level, which facilitated the appearance of efficient and effective decision makers. Furthermore, decisions made within prescriptive regulatory frameworks, such as the code of nursing conduct and hospital policies that are usually found in bureaucratic structures (Pixley, 2002), could also assist with generating renal nurses' decision-making authority. For this reason, outsiders generally bestowed the title 'renal nurse' to any nurse working in the unit, while internally this label was associated with *a nurse's level of competency*, which, according to Denise, *is earned over time*.

The outsiders' perspective of *all* renal nurses being highly technical and specialised may have fostered the nurses' shared understanding that they were autonomous and in control. What impact this had on nurses' decision-making was unclear. However, expectations placed on the nurses as being knowledgeable could also constrain decision-making, creating moments of anxiety. For example, I recalled a time when Rebecca and I entered the high dependency unit where we were enthusiastically greeted by a nurse who pointed towards the home-choice (peritoneal) dialysis machine stating, thank goodness you are here! . . . there's no way I am touching that, that's beyond me. This excitement puzzled me as I gazed around the room that was surrounded by technology, and wondered why this nurse perceived herself so different from Rebecca and me. Unbeknown to this nurse we were also unfamiliar with the home-choice machine. However, we were not about to 'lose face' (Goffman, 1959), so together we privately muddled through the manual book. This was necessary to maintain our social position as 'knowledgeable' renal nurses. Rebecca later spoke about how anxious she had been and not at all in control of the decisions she had made during this episode.

Routines: enabling and constraining

Giddens (1984) proposes that routine practices are incorporated into daily habits and regimes. For example, in chapter five, I referred to the nurses starting their day in predictable ways such as making a coffee, setting up the machines and organising documentation, yet these practices were always reflexively open to change. Rasmussen (1993) describes routines as a composition of sequenced subroutines or 'know-how' rules that enabled the nurse, even the beginner, to draw on minimal cues to help them decide on the action and survive in the context. Lynnette talked about this process within the unit, where the novice *learned set rules and practices as tasks*, because of *time limitations*. It could be argued that this may not have helped a

nurse in the long run to become an independent decision maker; rather they became products of institutionalised practice. However, prescribed practice served the renal unit since treatments had to be provided within organisational constraints. Risk associated with a decision was often lost or minimised within the 'routine-ness' of day-to-day practice (Giddens, 1984). For example, assessing a patient's ideal body weight, deciding how much fluid to remove during a dialysis session or how much anticoagulation to administer were not generally recognised by the nurses as being risky decisions:

Researcher:	Do you think about heparin and risk when using it?
Sarah:	I guess it could be seen as a risk but I hadn't really thought about
	it that way.
Researcher:	Do you think you don't associate risk with that, as it is part of
	every day dialysis?
Sarah:	Yeah. I don't see it as a risk.
Researcher:	Do you see it as a risk now that you reflect on it?
Sarah:	Yes I do because it is a chemical that can in a lot of ways be
	harmful as it can make things worst (13/11, #111-120 abridged).

The repetitiveness of these decisions from one day to the next may have increased the nurses' sense of certainty and predictability of what to expect, thus minimised risk perceptions. Furthermore, should an undesirable event have arisen most nurses spoke about managing the situation with relative ease or knowing someone else in the unit who could do this. This reinforces a nurse's sense of being safe (Giddens, 1984). Because of this, routines seemed to be rarely questioned as to where they had come from and what purpose they served. This may also explain why some nurses doubted their ability to perform out of hour dialysis once situated beyond established and trusted routines.

Donna recognised that many of the decisions the nurses made were *mundane* in nature, as they learned what to ask, while re-enacting repetitive stages and following care-plans. This re-enactment of routines seemed to generate a belief that the nurses could be trusted to make decisions alone with minimal interference. This in turn created an assumption that their practice was under less scrutiny resulting in the nurses talking about being able to deviate from routines, as Emma remarked: *We find our own way of doing things as long as the practice can be justified*. This can foster a sense of being in control and independent, while still part of the team.

When a decision was already known, as per routine, the nurses recalled past experiences, stored as subconscious memories, which may have often, unknowingly, been used for future decisions (Giddens, 1984). Memory information can be applied at a practical, tacit level, so cannot always be spoken about. Consequently, conscious attention to what one does, and why, is reduced over time as the nurses become familiar and confident with routines, representing experiential knowledge (Benner, 1984). For this reason, there was little evidence that problem solving was actually occurring, especially when routine decisions were made, as Sarah mentions during an observation episode:

"It is clinical judgment we use rather than the decision. The decision is routine, but need to find the evidence to help the choice be made and justify the decision. That is what really matters" (FN, Sarah, 22/8).

Clarke and Holt (2001) propose that critical thinking in nursing is associated with problem solving techniques. This may suggest that routines and rituals that quickened decision-making frequently replaced critical thinking. For the nurses who already *knew the ropes*, critical thinking may have occurred simultaneously while enacting routines so was not visible to the observer. Sammie and Sarah felt that as a group of nurses they were not so good at problem solving rather they worked within a familiar milieu that could constrain decision-making outcomes. This mirrors Simon's (Newell & Simon, 1972; Simon, 1967; Simon, Dantzig, Hogarth et al., 1986) decision theory that people tend to select known choices (satisficing), rather than look for, and generate, new options (optimising). In contrast, when uncertainty was present, this tended to result in different decision-making processes for the nurses that normally required more time and deliberation; time that was not always available. Even though routine decisions may have maintained satisficing decision-making, too many options can also be confusing, which, in turn, can slow down the decision process.

Nurses who took their time and appeared undecided were, at times, labelled as being *indecisive*. Hesitation should be explored, asking why this is occurring since taken-for-granted assumptions about practice can constrain the decision maker. Once these are exposed, change may occur (Giddens, 1984). Indecision, according to Arnaud

and LeBon (2000) acknowledges the complexity of decision-making providing a moment for critical thinking. When the nurses have time to stop, reflect and look at their decision-making practice, routine activities can be questioned for their purpose as part of this critique. Alternatively, nurses who are constantly unable to make a choice can constrain their own professional development and growth. Therefore, Arnaud and LeBon (2000) recommend that people find a balance between uncertainty and certainty when making decisions.

Informing decisions: ways of knowing

Obtaining evidence, as indicated in the previous chapters, was usually from one nurse to another as this saved time and was particularly important when inexperienced nurses were *on the floor* further reinforcing established practices. Routines enabled a sense of safety and trust so that the nurses could at least execute dialysis regardless of the nurse skill mix constraints. Nonetheless, several nurses still looked for opportunities to improve patient outcomes, even within enabling and constraining routines.

Windows of opportunity

Emma, Sarah and Rebecca, talked about changing patients' care-plans as they were presented with *windows of opportunity*. Windows of opportunity were usually referred to when trying to reduce a patient's weight, particularly when a patient presented with minimal fluid gain. For Emma, this minimal fluid gain between dialysis days was not always about a patient being compliant with strict fluid regimes, but rather *the patient may have weighed incorrectly, or lost body* [muscle mass/fat] *weight*. Thus, sometimes Emma tended to trust technology more than what a patient told her, when making decisions:

I can tell if they are not eating by their bloods or if not taking their medications the blood results provide information that can validate or go against what the patient is telling me. We can catch them out if you like. We are very bossy and controlling. Some patients like that, others don't (26/8, # 45).

Sarah further validated this doubting approach:

When someone comes in saying they haven't had anything to drink and yet, they went out the night before and suddenly they are three kilos heavier, then you say "yeah okay but the scales tell me this" (20/8, # 80).

Consequently, measurable data seemed to be a central source of information for the nurses that validated their personal knowing in terms of beliefs and opinions. Personal knowing, according to Rose (2000) should always be assessed with critical questions in mind, asking whether knowledge informs action or action informs In other words, does knowledge direct decision-making or does knowledge. decision-making direct knowledge? This was at times difficult to know, although most nurses recognised that knowing how to do dialysis was often more valued than knowing the whys. Technology, according to Barnard and Heron (2001), places increasing demands on nurses. This can necessitate nurses having to allocate time and energy to maintaining the technical aspects of conducting dialysis at the cost of consolidating theoretical aspects of providing dialysis care. Many nurses accepted this imbalance, appearing to have little motivation or energy in addressing the gap. Some senior nurses when asked about ongoing education believed that it's not my job; or I'm not the educator and; I don't have time for that. Whether these statements were avoidance tactics so that 'their' knowledge and decision-making authority remained unquestioned, I am unsure. However, knowledge deficit can constrain professional development regardless of a nurse's level or experience. Lynnette recognised knowledge as a key feature in her decision-making:

I think that I do find that decision-making depends on knowledge from years of experience and what I have gained from reading articles and books, updating myself with knowledge, conferences and seminars and reflecting on them which I think is important (26/9, # 2).

Spencer and Jordon (2001, p. 41) comment on how "the learning environment is widely regarded as one of the most powerful influences on motivation". When motivation is diminished, as these remarks would suggest, this can further constrain knowledge development and reinforce context knowledge, which further bounds human rationality (Simon, 1967). Context knowledge, that was bounded, served the purpose of providing sufficient knowledge so that decisions could be made, especially, when resources and nurse-skill mix were disproportionate. On the other hand, this imbalance also reinforced the necessity of making 'acceptable' decisions,

maintaining a satisficing culture. Moreover, experiential knowledge obtained while working on the floor seemed to be more user-friendly and accessible than knowledge constituted externally from the unit. For instance, Emma explained how knowledge generated beyond the unit context did not always address the needs and *uniqueness* of their unit. Uniqueness could be used to enable familiar routine practices to continue which, in turn, conserved nurses' time and energy within an already demanding work context. Regardless, the nurses assumed that the context specific knowledge they drew from was accurate and important in facilitating the decisions they made.

Giddens (Fitzgerald, ud; Giddens, 1999c) proposes that social practices are shaped by distant external events, as a "natural consequence of modernity" since people and events become extended across time-space zones, even when unacknowledged. Therefore, Giddens argues that areas of specialisation, or "expert systems", are not exclusively context specific because of time-space global knowledge (Fitzgerald, ud, para. 20). Giddens' idea contradicts the nurses' belief about the uniqueness of the unit determining context specific knowledge. One explanation for this discrepancy may be because knowledgeable nurses policed information entering the unit, who then decided whether to disregard or modify the information, a process assumed to serve the unit as a whole. The relatively confined space may have facilitated this policing process. As a result, maintaining stability preserved a sense of control, enabled by tradition, routines and a feeling of 'certainty', which reinforced the practice rules ascribed to in this unit. However, Giddens (1999b, para. 4) argues that maintaining stability can give the "appearance of institutional practices continuing", such as those observed in this study, yet they are constantly being shaped and reshaped as new knowledge arises from both external sources and internal insights. In addition, clinical decisions should, as far as possible, be evidence based (Thompson, McCaughan, Cullum et al., 2001). French (2002) challenges what this actually means within nursing when ambiguity and information overload can cause confusion rather than solve it. However, drawing from global information systems and evaluating decision outcomes made within the unit, can give some indication as to what may be considered as good evidence.

The 'evidence' informing decision-making

Lewis and colleagues (1998, p. 397) claim that "many nursing research findings are not incorporated into clinical practice or used effectively to improve outcomes". Instead, Thompson et al. (2001) found that nurses utilised other nurses as a useful resource in reducing uncertainty in clinical decision-making. Barriers to research utilisation have been discussed elsewhere (Funk, Champagne, Wiese, & Tornquist, 1995; Thompson, McCaughan, Cullum et al., 2001; Thomson, Angus, & Scott, 2000) and were unot uncommon in this study, the nurses speaking about having *limited skills in accessing and interpreting the data* and organisational constraints such as *insufficient time* and *little power to implement changes into practice*. Thus, research utilisation requires changes in behaviour that cannot always be possible within multidisciplinary teams and large organisations.

Barnard and Heron (2001, p. 218) write about evidence as "principles of practice embedded in actions". This is particularly problematic in renal nursing where the evidence is often undocumented since, in historical terms, renal nursing is still considered to be at the pioneer stage of development (Bevan, 2000; Mitchell, 2002). Therefore, documenting knowledge as it develops, including accidental trial and error is essential, so that practice can be critically reviewed. The nurses in this study resembled scientists charting unexplored waters in less methodical and organised ways. However, this produced moral and ethical concerns that were not always acknowledged. For example, when the nurse used her appointed authority to obtain blood tests 'out of curiosity', rather than her decision rationalised in clinical terms. Another nurse hypothesised whether a pattern would emerge with regard to vancomycin (antibiotic) levels post dialysis. As a result of this hypothesising, and her acknowledged and unquestioned 'expert' position within the unit, the nurse concluded that she did not always follow a doctor's order as she now recognised that these patterns informed her clinical judgment: Now if the doctor requests a test and the patient's level was previously low, I withhold the test. This demonstrates how renal nurses 'blurred their professional boundaries', as discussed by Bonner (2001), which over time, in this unit, seemed to have become a normal and accepted practice, or at least unquestioned practice.

'Normalised' incidents, such as these, further validated the silent nature of dialysis, in which many nursing actions could be concealed, modified or presented as something else. Trial and error that informed decision-making often remained secret and hidden from peer review. However, even documented scientific experiments produce disparities and ambiguity in terms of nephrology research and knowledge. Perhaps this public disagreement provided the nurses with a subconscious justification as to why some of them acted as they did. Ritter (2001, p. 63) comments on how "many aspects of clinical practice have not been adequately tested", and renal nursing is no exception. Deciding what is 'evidence' is therefore a difficult enterprise. The CARI guidelines (Australian and New Zealand Society of Nephrology and the Australian Kidney Foundation, 2001), for example, even with the levels of significance, remain a consensus document. Scientific uncertainty, may have required the nurses to use clinical discretion, which, in turn, may have demanded clinical diversity in practice (Balsa, Seiler, McGuire et al., 2003). This diversity within the unit was perceived as inevitable by senior nurses and may have been a reason why practices seemed ad hoc and inconsistent. What matters, therefore, is recognising when and why nurses use discretion that results in diversity, and how their beliefs can control how discretion is used in practice (Balsa, Seiler, McGuire et al., 2003).

As information becomes more complex, so does institutional complexity, which Giddens (1984) proposes is maintained by administrative power and bureaucratic relationships of surveillance and control. Even though the nurses gave a convincing account about *being in control* of information entering the unit, because of increased surveillance and monitoring within the larger health care organisation, information leaving the unit, in terms of productivity and overall outcomes, gradually became under closer inspection. This had not escaped the Nurse Managers, who were involved with decision-making beyond the renal context, referring to the increased surveillance technology as the *big brother* effect. This may have been more problematic than first acknowledged since the issue of productivity, although appeared silent, was present, often expressed indirectly as *working within budget*, thus controlled practice. This creates a contradiction since quality decision outcomes had to be achieved within financial boundaries that may have influenced

the satisficing culture frequently observed (Simon, 1967). Consequently, the nurses had a tendency to direct blame towards the health care organisation when inadequate care was provided and sub-optimal outcomes obtained, with less critique on internal structures that were knowingly, and unknowingly, generated and maintained via their own nursing practices. Because of this, most nurses believed that they had little control over such work constraints. Giddens would argue against this deterministic and defeatist approach, claiming that when people acknowledge and interact with external demands they can then begin to control them (Giddens, 1991), particularly since internal structures become transformed. Sieler (2000) refers to this process as emotional learning that involves people consciously taking control of external factors so that control becomes internal to them. With this understanding, the nurses' belief that they restricted and controlled external factors entering the unit, by avoiding or rejecting them, may explain why they felt constrained in the first place. Had the nurses interacted with external elements in a more purposeful way, established structures may have had a less determining aspect on their decision-making capacity. This is not to say that this had not occurred, but if it did, it remained unacknowledged.

Giddens (1984) claims that modernity destroys tradition, yet, tradition is embedded in time-space relations, producing and reproducing history that transmits knowledge for safekeeping from one generation to the next. Therefore, we should not totally discard traditional nursing practices but accept this as historical knowledge that has previously enabled and constrained renal nursing. By trying to understand what modernity and globalisation means for nursing, only then can nurses begin to have some control of it.

Expert systems and specialisation

External information and influences may have controlled unit practices more than the nurses had previously recognised. This is a consequence of science and technological advances which Giddens (1991a) terms modernity. This describes a social organisation or culture in which social practices become 'disembedded' (Fitzgerald, ud) from a position of tradition and certainty to one of uncertainty, further complicating nurses' decision-making. According to Giddens, this results in expert

systems and specialties being produced (Fitzgerald, ud). However, in this unit, knowledge and decision-making founded on technology did not seem to disturb the nurses, rather, technology predominantly drove the decisions being made and was a principal reason cited as to why the nurses choose to work there.

Technology - advances and dilemmas

Advances in technology and its increasing presence is not only isolated to renal units, but nursing generally as Seaton, James and Mitchell (2002, p. 4) comment, "Queensland nurses are riding the wave of new technology". This assumes that nurses are on top of the wave, in control, and steering technology's direction. Where nursing care is situated within this wave is less apparent. They add that "Clinical practice is alive with high-tech equipment, and information and communication technologies" (Seaton, James, & Mitchell, 2002, p. 4). They infer that technology is beneficial for the consumer, improving standards of living; a belief that Sutton (1992) refuted a decade earlier. Hence, as the technological 'wave' increases, the demand on more energy and specialised skills is unavoidable if nurses are to 'ride the wave' and not fall off. In this sense, technology can become another form of medical dominance (Sandelowski, 1997), which increases work demands often at the cost of nursing care (Bevan, 1998). How technology is learned and valued within the work context may not necessarily serve nurses' interests or reflect best-practice principles. Rather technology directs practice and professional development yet is not necessarily acknowledged as such, therefore, remains unchallenged. As a result, technological common sense becomes overridden by technological domination. This can produce tension between caring and curing, with over-emphasises on procedural aspects of care rather than psychosocial human interaction. Nurses enjoy, and appear to want, technological know-how status, which according to Stevens and Crouch (1998) mirrors medicine's values and responsibilities. Nonetheless, without technological know-why, this can become detrimental to patient care and nursing development. Therefore, nurses' use of technology should not always be equated with nurses being more autonomous.

Technology, according to Barnard and Heron (2001, p. 221), "influences professional values, practices, skills, respect, knowledge and the environment of

care". Without understanding the impact of technology on care, including how renal dialysis is conducted and delivered, quality care may not necessarily be implemented. In addition, despite increased technology demanding nurses to become more involved in decision-making (Hawthorne & Yurkovich, 1995; Oxtoby, 2003; Snelgrove & Hughes, 2000), the types of decisions to be made are not necessarily nursing decisions. This can have an empowering effect for some nurses who have access to specialised skills and knowledge maintaining an elitist structure. This exclusion is also transferred to patients and families. In light of this, technology should be seen as an adjunct to nurses' practice rather than a dominating, controlling feature. Nurses must maintain a balance between different ways of knowing that incorporates technology that is not at the expense of humanistic qualities of caring. In other words, the 'surfboard' that rides the 'wave' (Seaton, James, & Mitchell, 2002) should take precedence, as the surfboard symbolically represents the institution of nursing that exploits technology, not vice versa, in order to benefit patient outcomes, serving nursing rather than medical interests.

Thus, the unavoidable complexity and increasing presence of technology within the unit may have further facilitated the nurses' justification for adopting trial and error as an acceptable decision-making option. Giddens (1999d) claims that we learn through taking chances, from failures and successes, further supporting the nurses' investigational nature. However, because of increasing specialisation, the nurses too have had to become more reliant on one another, including other disciplines. The nurses recognised this increasing interdependency, which challenged traditional domains of work. Monica and Rebecca mentioned how renal technicians now maintained the mechanical aspects of dialysis technology that once the nurses had controlled: pulling the machines apart and putting them back together again. Giddens (Fitzgerald, ud) emphasises how specialisation can increase the social distance between professionals and consumers, and become a subtle mode of control. For this reason, interdependency requires trust and fairness between expert systems in that one group will serve another equally as a collaborative process. When trust cannot be established the system fails. For example, although trust was inferred during doctor-nurse interactions, not all the nurses trusted the doctors decisions and would, at times, attempt to revert to a decision by going through the more senior

nurses or the nephrologist himself. Trust was not only an essential key in-between specialised systems but between the nurses themselves. A nurse *seeking approval* was not always in terms of self-made decisions, but also decisions made by other nurses. Thus, *seeking approval* was, sometimes, more about *seeking disapproval*, signifying distrust in some decisions made.

As a result of increasing technology that demands decision-making complexity, pockets of specialised knowledge related to the specialty of renal nursing are also produced. For example, knowledge related to pharmacology (e..g. anticoagulation, antibiotic therapy) peritoneal dialysis, transplantation, predialysis care and renal anaemia management, to name a few. This 'subspeciality' knowledge, therefore, required the nurses in this unit to be knowledgeable about each of these domains since they were all expected to be responsible and provide comprehensive care. This created the possibility of losing knowledge depth, for breadth, which, in turn, compromised optimising decision outcomes, particularly when nurses were already *stretched for time*. Thus, being multi-skilled did not necessarily mean that the nurses were multi-competent (Percival, 1992), and recognising this was the challenge.

Smith (1997) claims that comprehensive specialised knowledge is not usually something one nurse can acquire, so necessitates a multidisciplinary approach to renal care. However, collaborative decision-making cannot be assumed to produce better outcomes. For example, renal anaemia decision-making, although perceived by the nurses as a collaborative doctor-nurse encounter, frequently left the nurses despondent and dissatisfied, believing that best-practice principles did not direct judgments and choices (Hardcastle, 2002). When collaborative decision-making was not accepted as a joint venture, this reduced the nurses' perceived ownership of decisions, which in turn, seemed to result in less nursing commitment to follow through on decision outcomes. Additionally, inadequate knowledge can lead to poor quality decision-making and may require nurses to work beyond their professional roles without the advantage of specialised training or recognition This added responsibility may be considered as professional development that empowers nurses, but can also become another form of nursing oppression if nurses are not adequately prepared and supported within the larger organisation.

Appearing not to make decisions

Some nurses consciously decided not to make a decision, passing it to another person. This was sometimes because a nurse was aware of possible sanctions had they overstepped the mark or made an incorrect decision, as discussed in chapter five. This may have reinforced the approval seeking behaviour that was repeatedly observed, which in turn, produced and reproduced a cultural appearance of reliance and dependency for some nurses. At other times, decision avoidance was because of official authoritative structures within the health care system, including knowledge deficits. This made a nurse look as if they were avoiding a decision when in fact a decision had already been made. For instance, even though capable of making decisions, Rebecca was sometimes reluctant to question medical decisions or at least partake on an equal footing, as the following edited field note illustrates:

Rebecca asks the doctors if they want tobramycin (antibiotic) blood levels taken. They reply 'no' but agree with Rebecca that they should be done the next day. Later I notice the doctors in great discussion with the patient's chart in their hand. They proceed to cross out the tobramycin and prescribe another antibiotic. Rebecca is informed about the change and the doctors leave. Rebecca smiles as she comments "I must have jerked them by asking about the levels as I felt that was too high a dose" (points to tobramycin) (FN, 1/7).

This left me puzzled as to why Rebecca had not directly questioned what she believed was an inappropriate medication prescription. Whilst reflecting on this event with Rebecca, she revealed that she was uncertain about the antibiotic yet knew that this would not have been *the nephrologist's preferred choice*. I understood this to mean that rather than lose face with this vague explanation she decided to say nothing to the doctors at that time, but rather choose to refer the issue to the nurses in the unit whom she trusted had the issue not been resolved. Consequently, Rebecca was assumed to play the doctor-nurse game (Stein, 1967), yet this appearance of subservient behaviour was predominantly due to knowledge deficit; that is, a scientific/biomedical knowledge deficit. Hence, Rebecca was limited in applying medical/technical terminology, which may have excluded her, unintentionally, from participating in the decision process. Despite this, her understanding about the antibiotic was right even though she could not articulate her concerns.

Irrespective of decisions being or not being made, the ritual of the decision process brought a sense of order and control, while reinforcing unit and group norms. Helman (1994) claims these rituals are necessary for any functioning group and emphasises social solidarity (Wolf, 1988). Conferring with colleagues provided a 'safe middle ground' during decision-making (Arnaud & LeBon, 2000), and the nurses sought approval as a form of validation and possibly part of the ritualistic behaviour that maintained social solidarity. On the other hand, conferring may have unintentionally produced and reproduced co-dependency when making decisions, even routine decisions. Collins (1975), for example, claims that routines and social interaction are created to arouse emotions that reinforce beliefs and a sense of solidarity through which power can then be exercised. In this case, there appeared to be an unwritten rule and expectation that consensus, and thus seeking approval, was a norm which had to be observed if a nurse wanted to feel part of the team. Whose purpose this was assumed to serve, I was not so sure. Alternatively, defending decisions and gaining consensus, according to Marquis and Huston (1998), is an important part of validation so that inappropriate decisions can be changed prior to implementation. This encourages nurses to make decisions even when decisions are debatable, and instills confidence as the nurse moves from novice to expert status. In addition, as nurses' intentions become public through this process, deficient judgments can be minimised, while decision choices questioned (Dwight et al., 2002). This situation exemplifies Giddens' claim that social structures help minimise risk, and when social routines are challenged, the "protective cocoon" (Giddens, 1991a, p. 114) necessary for ontological security, is momentarily threatened, creating the potential for change.

Risk, uncertainty and decision-making

Giddens (1999d) proposes that decisions take action into the future and the unknown. This creates uncertainty, which Thompson and Dowding (2001) claim is a fact of social life that nurses cannot avoid. Aristotle (cited in Gigerenzer, 2002, p. 244) referred to the world as either one of certainty and established regularity that humans prefer, or uncertainty resulting from change, creating messiness in social life. However, Gigerenzer (2002) claims that certainty can be an illusion created as an adaptive response, since people tend to wander in-between certainty and uncertainty with little reflection. Such an illusion can control how decisions are made since risks may not be appreciated. Giddens (1999d) talks about risks being managed in a disciplined way so that progression can occur. This can be a particular concern when nursing practice remains hidden and unevaluated therefore risk remains unacknowledged.

Day-to-day practice minimising risk

There were a couple of decisions the other day I had to make. There's been a lot out here [peritoneal dialysis] that I didn't know. Not that they are risks involved but they were decisions that I was making but not sure about (Rebecca, 25/8, # 94).

The nurses' levels of uncertainty and risk alternated depending on who was predicting future decision outcomes. Lynnette believed that all decisions carried calculations of risk as nothing could be certain, although inexperienced nurses did not always have enough experience to anticipate potential risks, rather risks came to light as problems unfolded. For instance, the beginner nurses, Donna and Denise, had not given patient cramping much thought in terms of clinical judgment error, rather they saw this as a consequence of dialysis treatment. This limited understanding may have masked how they perceived and judged uncertainty when making routine decisions. When the nurses spoke about unexpected decision outcomes, this was usually because of bad luck on the day or the nature of dialysis. Few nurses spoke about clinical decision error or recognised uncertainty when routine decisions were made. For instance, Denise stated: I would make a routine decision, as I feel safe if there is a predictable outcome. I don't see risk and uncertainty in many of these decisions. However, nurses instinctively used words that indicated degrees of uncertainty, even for routine decisions, as they tentatively spoke about outcomes in terms of being unpredictable; maybe; perhaps and; I'm unsure. Giddens (1999b) proposes that risk incorporates aspects of time-space in relation to future possibilities and uncertainty. If there is 100 percent certainty that an event will arise, for example, the Sun will rise each morning, then there is no risk associated with the prediction. In contrast, predicting rainfall has some element of uncertainty and doubt; therefore, the risk of making an incorrect prediction occurs, albeit in varying degrees.

Consequently, all decisions that nurses made had some element of risk even though many nurses saw routine decisions as risk-free.

The nurses also spoke about how undesirable events could generally be managed and controlled within the unit context. Thus, nurses consciously modified their risktaking behaviour largely based on how they perceived their ability and capacity as decision makers and where they were located in time and space. For example, when working in the satellite unit locale, the nurses talked about being more conservative when making decisions since there was minimal medical backup, unlike the main unit. This inferred a safety in numbers mentality (Beech, 1997) in which only two nurses worked in the satellite unit compared to several nurses working on the floor in the main unit. Furthermore, the nurses learned how to manage undesirable outcomes that may have resulted from over-ambitious or risky decision-making; yet, these were more than often described in terms of inevitable consequences of dialysis. Giddens (1999d) recognises society as a 'risk society' where tradition is dominated by science and technology, producing new sources of risks and uncertainty, that he terms 'manufactured risks' (Giddens, 1999b; Fitzgerald, ud). Consequently, nurses coped with such risks as part of daily routines until eventually risks were no longer acknowledged as risks, but rather unavoidable consequences of 'manufactured risks' associated with dialysis.

Risk and unacknowledged errors

As a result, the *nature of dialysis* and the 'routine-ness' of the work (Giddens, 1984) may have constrained the nurses' perceptions of risk-taking associated with decisionmaking within this context. The nurses had the ability to manipulate technology that may have possibly enabled their perception of autonomy, particularly since errors or unintended outcomes could be controlled. Therefore, the nurses did not always identify constraints and risks but rather opportunities and possibilities in which heuristics (decision rules) were applied to reduce uncertainty; nonetheless, they could also result in biases and poor outcomes. When decision rules were not recognised for their limitations, errors could be reproduced yet, initially unacknowledged, as Carol came to learn. Carol believed her patient's cramping was because of the patient's condition rather than inadequate or poor clinical judgment, although still felt partially responsible for. However, while reviewing the patient's documentation at a later time, I discovered that there was an error regarding the patient's weight. I conversed with Carol about the documentation discrepancy. When discovering this error Carol realised she had unintentionally reinforced the error by the decision she made, thus, reproduced the same negative outcome because she had *trusted the documentation*:

If something is not documented correctly and it had a negative outcome then you are just reinforcing this negative outcome by doing it again (Carol, 17/9, # 12).

This unacknowledged error had unintentionally increased the decision risk yet, was not acknowledged until now. Carol had based her decision on the initial information she had been exposed to 'anchouring' the decision (Thompson, 2002) without searching all possible options. Consequently, accumulating 'accurate' information becomes essential if outcomes are to be optimised, rather than reproducing and sustaining satisficing practices (Simon, 1967). Utilising all the evidence available when making decisions can help to reduce uncertainty, minimise error, and maximise outcomes. However, when attitudes and beliefs such as being stretched for time and get them [patients] on quickly predominate, the issue of decision-making is further complicated. Rational, analytical decision-making, as suggested by prescriptive models, is no longer a realistic option within institutions that have to be productive and feasible. Nonetheless, descriptive models, too, remain limited should decisionmaking remain uncritically explored and accepted as 'just is'. Routines, traditions and rituals can trivialise risk and uncertainty, which, in turn, can jeopardise patient outcomes and nursing development, leaving a sense of accomplishment when, in fact, nothing may have been gained:

Clinical Nurse:	The only outcome for me is if they are on their ideal body
	weight or not, or if they had a problem during the day with
	another thing.
Researcher:	How would you know if they had a problem?
Clinical Nurse:	If I'm interested enough then I will ask somebody what their
	body weight was. I say "oh what was that weight?" but most
	times I don't even think about it (25/8, #146-148).

Nurses' over and under-confidence as decision makers

When risks were not acknowledged, the nurses could be over-ambitious and confident in both their capacity as clinicians and decision makers. For instance, a

nurse could make incorrect judgment regarding where to locate the needles in a patient's fistula (cannulation). Anna, an experienced nurse, judged her cannulation competency against the other nurses, her perception alternating from one day to the next depending on who else was working on the floor: If I feel there is no one better than me to do the cannulation that is difficult, then I will do it. Some nurses gained self-assurance as they conquered difficult cannulations with minimal assistance and would proceed to more complex cannulations without approval or supervision. Kissinger (1998) claims that this over-ambitious behaviour is a form of selfdeception, in which actual ability is over-estimated. As a result, inexperienced nurses who deviated from their expected practice boundaries could create problems such as removing too much or too little fluid, over-estimating their ability in cannulating a 'difficult' fistula, or not acknowledging medication problems. The experienced nurses described this as running into problems. At these times, the senior nurses had to rectify the problems, adding to their already stressful and demanding workload. Nurses who were aware of these issues and were realistic about their own clinical ability and capacity tended to be the nurses who sought approval from their colleagues yet, could also be labelled as indecisive or lacking confidence. This may further explain the approval seeking behaviour observed not only as a means of not overstepping the mark, but also about being responsible, working within safe practice boundaries. Consequently, seeking approval may have been a reflexive process similar to 'thinking aloud' about what we do and why (Aitken & Mardegan, 2000). Thus, under-estimation of one's ability was as damaging as over-estimation and may have been why some nurses felt under pressure to do more.

A nurse, either with good intention or deliberate malice, could overrate another nurse's ability. This may have been why some nurses talked about being *set up to fail.* For example, Jane spoke about *being asked* to cannulate a patient she considered was beyond her ability, and understood this as an official *order*, which she felt obliged to follow. Despite Jane's lack of confidence and uneasiness with the task, she successfully completed the cannulation. Whether the Clinical Nurse had *ordered* Jane to do this as part of professional development and growth, or to undermine her confidence, is hard to ascertain. Regardless, both Jane and the Clinical Nurse had an obligation to one another and to the patient to provide safe care within a safe context.

This raises the question whether asking (or *ordering*) was about professional development or abuse of power. When uncertainty is present, as in Jane's case, anxiety and doubt are produced (Giddens, 1984), which may constrain a nurse when making decisions. Kissinger (1998) mentions that people can under-estimate their capabilities, which result in decreased confidence with increased dependency on others. Therefore, uncertainty can be caused by a perception of self-doubt rather than external threats. Either way, collective decision-making was one method adopted by the nurses in managing risks and reducing overall responsibility.

Trust and collaboration

Giddens (1992, p. 138) proposes that trust has to be developed through intimacy by people "investing confidence in one another". This involves trusting that the other person has the capability of managing events as they arise and acting with integrity. Intimacy is facilitated through emotional communication where feelings are expressed and shared. This was particularly apparent in the renal unit when the nurses spoke about *fitting in* and *being part of the team*. Pixley (2002) mentions that when mistrust is present this can lead to self-blame and re-examination of structures, which can undermine the group's decision-making capacity. In this study, urgency and unfamiliarity made trust and confidence in others, including unit structures, more evident, the nurses coming together as a team. Working together was assumed to provide and maintain the nurses' sense of ontological security (Giddens, 1984).

Several nurses spoke about how collaboration provided a safety net, particularly when making decisions beyond their own perceived scope of practice. This involved planned risk-taking that developed trusting relationships, in which both facilitated group decision-making. At times, decision-making collaboration resulted in increased risk-taking. The nurses spoke about *sharing the overall responsibility* of decisions being made and is a finding described in other decision-making studies (Beech, 1997; March, 1988; Orasanu & Salas, 1993). At other times, risky decisions were directed to someone who was either perceived as more knowledgeable, or had the official authority, to make such decisions, reproducing bureaucratic processes and structures.

The nurses understood collaboration, or team decision-making, as a democratic process. Giddens (1999a) refers to democracy as an acceptance of social obligations and rights sanctioned in laws, assumed to enable trusting relationships in which positions for power are negotiated, mediated and compromised, from one moment to the next. This implies that even democracy has varying degrees of autonomydependency. Even though the nurses spoke about democratic decision-making it was clear that equality was not always apparent, yet democracy was defined in this way. Even the majority vote principle was, at times, over-ruled. Consequently, the alternating shift between nurses' autonomy and dependence when making decisions required a corresponding shift of obligations and rules that, at times, constrained the nurses rather than enabled them. For instance, Lynnette spoke about how medical and organisational structures at one time would give the nurses a *free rein in making* decisions, while at another time they had to gain official approval. This switching between responsibility and accountability is not unique to nursing and is embedded within historical medical and institutional hegemonic structures, where the rules of practice are constantly changing (Grbich, 1999). This change, however, is rarely in accordance with nursing's ability and competence, but occurs rather out of necessity to serve the larger organisation in a particular place, at a particular time. In light of this, nurses must question what professional development and extended roles mean for them today and what they might mean tomorrow. When inconsistencies continue, the development of nursing practice remains constrained and with little decisive direction.

When democratic processes failed to achieve group consensus, autocratic decisionmaking styles resulted. Some senior nurses translated non-consensus as a direct challenge to their authority causing them to take autocratic positions, possibly as a defense mechanism. This may further clarify why several nurses spoke about *unconstructive feedback* during these times. The feedback was understood as being unconstructive because of the bluntness of a decision being made that left little space for deliberation or people to voice their concerns. This misinterpretation may also explain why several nurses choose to be passive, silent contributors during some group encounters: I've seen instances in people coming into the unit and made waves. And it is hell for them. You know em. . . whether you are better off being quiet (Denise, 15/11, # 412).

This alleged behaviour was assumed to constrain a nurse's capacity to act and do otherwise, thus reduces their overall agency (Giddens, 1984). However, agency could also be exercised via silence. Quietness, although it may be taken as a sign of agreement, can also be a message of resistance that things may not be fair or just, silence representing either a way of coping or possibly employed as a strategy of change (Rothschild & Miethe, 1994). Denise and Sarah, for example, believed that some nurses gave a public appearance that they agreed to a decision, by not disagreeing, yet in practice, the nurses act contrary to what had been apparently 'agreed'. This may suggest that an individual sometimes overruled group agency, and even though this decision may have been a better decision, this could also generate suspicion. However, making disagreement public in an unconstructive context required a certain degree of risk, since traditional roles, authority and rules were indirectly challenged. Thus, exercise of one's agency was not without risktaking when rule-followers questioned rule-makers, and rule-makers no longer had rule-followers. The perceived level of risk-taking may explain why inconsistencies were noted between what nurses publicly agreed to and what was privately thought or done. In other words, even when a nurse seemed dependent on the group for making decisions, once away from the group a nurse could exercise their own freewill or agency, enabled and constrained by social structures. Whether this exercise of individual agency means a nurse is still accountable and responsible for what they do remains unclear. A person choosing to act otherwise can be a means of social control. What matters is recognising when, and why, this occurs.

During the clinical meetings, the nurses, as a group, appeared to be more unified when interacting with the doctors. Conflict and disagreement was managed in less obvious ways, possibly with the intent of minimising risk-taking should disagreements have arisen. Even though the nurses perceived the doctors to be making many of the final decisions, it was the nurses who actually controlled the meeting. Topics for discussion, information presented, and patient cases selected, could inadvertently, or deliberately, be withheld to control the flow of decisionmaking. Knowing which was which was difficult to know. For that reason, the nurses had the power to choose what decisions *they felt* required attention now, and what could be deferred for another time or be completely ignored.

When the nurses were asked about this power and control during the clinical meetings, they did not explicitly talk about wanting control over a person or group, rather they wanted control over their practice. Tannenbaum (1968) wrote about nurses' perceptions of power and control and found that nurses seemed more interested about self-control rather than dominating others, mirroring how the nurses felt about control in this study. When a nurse felt control of self, this created a sense of being autonomous, part of the team and a capable decision maker. This may be further understood by Giddens' (1984) explanation that social life is constructed and reconstructed based on the meanings people attach to their actions. However, control over practice could sometimes entail unintended, or intended, control of others, particularly patients, during decision-making encounters. Therefore, while control was understood in terms of a nurse's practice, what this meant in broader terms may have been underestimated or seen as an unavoidable consequence of dialysis. Nevertheless, when the nurses felt constrained, their meaning and understanding about this constraint had negative outcomes that could produce an array of emotions, such as anxiety and mistrust.

Emotions and decision-making

I guess most of us do at some point, whether we are sat down having a coffee with their partner and say "Hey Hun, I've had a really bad day". That's probably at its most basic form as the other person probably can't give professional input but can be there as a support person (Sarah, 30/8, # 52).

Giddens (1991a) depicts anxiety as being essentially fear created within a person's internalised subconscious thoughts rather than something caused externally. In contrast, trust entails commitment during social interaction that is a "leap into the unknown", a willingness to take on new experiences (Giddens, 1991a, p. 41). In light of this, anxiety and trust are closely associated. Barbalet (1996) suggests that emotions, such as trust, become important in forming social structures and institutional practices. Consequently, knowing daily routines and rituals can be

understood as a "coping mechanism" providing a sense of safety and certainty (Giddens, 1991, p. 46). Reflexivity enabled the nurses to recalculate and revise trust each time a decision was to be made. Even experience nurses liked certainty that was constituted and reconstituted through predictable order and routines that enabled a sense of trust as the nurses went about their day. Anxiety and trust were not the only emotions that could control how decisions were made.

Other emotions included isolation, guilt, sadness, anger, frustration, love, happiness, passion and desperation; all that can impact on decision-making in different ways:

Not intentionally making them cramp but they probably will cramp, as I am desperate to get this fluid off them today. I am desperate and I'm not being an overachiever, but if I do believe this person is going to cramp, I can't help that. Tough bickies, that's it. That's the treatment you're getting because we've got to get the fluid off (Clinical Nurse, 25/8, # 76).

Knowledge and decision-making are part of self-identity and so are inevitably shaped by emotions (Spender, 2003). Emotions are considered by Giddens (1992, p. 202) as part of life, enabled or constrained by "communication, commitment and cooperation with others". Spender (2003) proposes that emotion is like another sense for recognising and judging values that can affect cognitive processes and social behaviour. Human reflexivity enables this recognition and judgment by comparing self with others (Giddens, 1984), suggesting a level of cognition required to make judgments about what we value and why. Spender (2003, p. 276) therefore refers to emotion as a "type of knowing that complements explicit knowing". However, emotions are not always acknowledged, or easily spoken about, making this type of knowing elusive and may explain why emotions and decision-making have often been overlooked (Arnaud & Le Bon, 2000).

When uncertainty is present, a nurse's awareness of emotions can be increased, providing extra information to motivate optimising behaviour that enhances decision outcomes (Ivancevich & Matteson, 2002). For example, Sarah recognised that she could not make decisions without personal values and opinions becoming part of the process. Not all the nurses had this awareness at the practical level as they went about their day. Nor did this mean that they did not think about what they did at a discursive level. Giddens (1992, p. 200) citing Freud, states that "nothing disturbs

feelings ... so much as thinking" which, in turn, can generate a range of emotions. Through dialogue and reflexivity applied in this study, the nurses' beliefs, values and attitudes had the possibility of being revealed (Thompson, 2003), bringing practical everyday knowledge to a discursive level (Giddens, 1984). Values, beliefs and attitudes can guide and direct peoples' desires or wants (Ivancevich & Matteson, 2002) and are often learned and passed down from one generation to the next by means of the *longue durée* or institutional time (Giddens, 1984). When values, attitudes, and beliefs are not reconsidered they can constrain nurses' decision-making and patient outcomes.

Johnstone (1990, p. 14) distinguishes between "judgments of facts" and "judgments of values", urging nurses to base decisions on patient preferences rather than their own preconceived desires and values. In this unit, patient preferences could not always be addressed. The nurses recognised this as an issue, which was perceived to be beyond our [their] control. Organisational structures such as limited time, nurse skill mix and machine availability, were identified by the nurses as constraining. Accordingly, neither the nurses' nor the patients' preferences were considered as being met; rather the organisational goal of providing dialysis was thought to be the main controlling factor. On the other hand, the nurses did not speak about their own contribution in defining and achieving this goal. Had they acknowledge their participation in this, then they may have felt a sense of control, creating an opportunity of redefining the goal, thus, transform constrains into enabling structures. Moreover, several nurses used organisational constraints and advanced technology as reasons to justify their necessity in dominating, or managing, patients' decision-making, particularly in haemodialysis. Consequently, organisational constrains may have been deliberately named to give an appearance of nurse dependency and subordination, when in fact, the nurses had control. Therefore, these constrains, could in fact, have been enabling (Giddens, 1984) from a nursing perspective.

Most nurses felt comfortable enough to share emotions and describe how this may have controlled the decisions they made. For instance, one day Sarah spoke about how some patients made her *feel responsible for why they were there* as if she was making them attend dialysis. When patients had negative attitudes and were reluctant to attend the clinic, the nurse-patient encounter was problematic. Not all nurses knew how to handle this situation effectively, and seemed to avoid negative incidents altogether. Furthermore, blame for unexpected outcomes were sometimes because of the patients' negative attitude to treatment and noncompliance, rather than nurses addressing other possible issues. In this sense, emotions had the ability of superseding nurses' objectivity. Arnaud and LeBon (2000) use the analogy of snakes and ladders to represent emotions and decision-making like a game of moves that have to be recognised and negotiated, rather than attempted as rational acts or prescriptive analytical steps. In light of this, when nurses tried to rationalise emotions in logical ways, there was the potential of biasing clinical judgment. Lynnette exemplifies this process when she justified a patient's inattention to patient education in biological terms, caused by *electrolyte and fluid imbalances*, rather than in psychosocial terms, such as depression or treatment acceptance. Sammie recognised how the physical aspects of patient care within the unit tended to over-rule psychosocial aspects. Minimal medical presence may explain this inequity in which nurses undertook a de facto medical role, a role further compounded by the technical side of dialysis. Technology presence and medical absence had the capacity to overlook the humanistic aspects of nursing care. Therefore, nurses need to periodically step back and ask what cost expanded nursing roles and extended practice have on both patient care and nursing development.

Meers and colleagues (1995) suggest that knowing a patient combines physical, social and emotional elements of both patients and family. Even though the nurses spoke about knowing the patients, this was generally in terms of knowing the patients within the unit context. The nurses who were asked about visiting haemodialysis patients in their homes as a future option to assist decision-making generated mixed feelings although, most tended to agree that this would not provide extra information. Joanne felt that this would further add to *intrusion* on patients' who were already exposed to scrutiny several times a week. Alice believed this would *cloud her judgment and lead towards other issues . . . particularly, if a patient dies.* Whether Alice used distancing from patients as a coping strategy to minimise over involvement is not so clear, but this had the possibility of creating

impersonal care. This may have also been another reason why the technical aspect of dialysis seemed to dominate the caring aspect; the nurses primarily focused on machines and resources rather than people and emotions.

Despite nurses being affected by patients in different ways (positively and negatively), these feelings were not generally discussed in deliberate constructive ways; rather this was often the subject of tearoom chat or dealt with at home. This frequently required the nurses to privately manage their personal beliefs and emotions, which could be mentally and physically draining:

At home, I should switch off but I don't. I do reflect what I've done and the decisions I have made, what could be done differently (Lynnette, 26/9, # 2).

In view of this, it is essential that nurses are encouraged to safely speak about how they feel and what they think. Without conscious reflection, emotions may have a detrimental controlling effect, often unknowingly, during decision-making encounters. Therefore, renal nurses need to be prepared when dealing with the complex moral and, at times, emotional problems, posed by renal care practices.

Unspoken concerns

Several nurses claimed that they rarely blamed themselves for past decisions and outcomes. One explanation may have been that nurses sought approval, validating with colleagues prior to implementing a decision that was assumed to reduce total responsibility. However, this did not stop moments of self-doubt once at home, as Sarah recollects: *Oh I should have done that and that*. I asked her if this was not part of blame, and thus guilt, to which she responded, *yes but I had not recognised this as such*. This is not to say that this is what Sarah actually felt. Rather my interviewing technique may have unintentionally persuaded Sarah to agree during the researcher-participant encounter. However, what was important was the commonalty of silent suffering and concern that the nurses experienced away from the renal unit setting. Lack of sleep, emotional stress and anticipated anxiety can have detrimental effects on nurses' well- being. What this meant in terms of making effective decisions the following day is less clear. However, not all the nurses felt guilty about the decision they made:

Sorry, some people feel guilty taking someone's body weight down and they cramp. They feel guilty about that. I don't. That doesn't mean much to me. It's right, okay, as I now know this is their ideal weight. Sometimes they have to come down a little to cramp, I mean not enough to kill them (Clinical Nurse, 25/8, # 194).

When this nurse was asked about other ways in assessing a person's ideal weight she claimed she did not know of any, adding *watch them carefully and monitor. Blood volume monitoring would be a good new way I suppose*. Burnett and Lunsford (1994, p. 36) state that "guilty feelings are more likely when an individual has some degree of control over the outcome". Perhaps this nurse's perception about *the nature of dialysis* and her sense of not being able to control the outcome in any other way relieved her of a sense of guilt. Furthermore, the common belief that there was no else to make certain decisions in the unit may have reduced how some nurses felt about decision outcomes despite their increased decision-making responsibility, and assumed control. This may also explain why many nurses preferred to share decision-making, based on the assumption that the overall responsibility for outcomes was also shared.

In addition, the nurses could misunderstand or misinterpret their emotions resulting from decision-making. Denise, for instance, talked about lying in bed at *3 o'clock in the morning* as she mentally *revisited the decisions* she had made, yet, did not speak about this revisiting in emotional terms. This left me wondering whether it was anxiety that kept Denise awake at night as a novice nurse *learning the ropes*, and perceived what this meant in terms of responsibility. In chapter 5, Denise spoke about not having any decision-making responsibility, yet, clearly away from the unit this perception may have changed. When asked about this discrepancy, Denise was also unsure. In contrast, Joanne recognised the role emotions played in decision-making, which could be lessened through routines. When unfamiliarity was present, the chance of error or unexpected consequences increased:

I beat myself up at times, really badly, if I've missed something like antibiotics. I felt responsible, as I had put the patient on. It wasn't a routine thing so it got missed and this leaves me feeling bad (Joanne 19/11, # 23).

Peters and Slovic (2000, p. 1466) discuss how emotions can change future decision behaviour as the person learns from bad outcomes that cause regret and which automatically leads to "conditioned avoidance of the same choice in the future". Poor outcomes causing regret, resulting from inappropriate decision-making, may have curb some nurses' decision-making capacity. Therefore, emotions cannot be underestimated for their learning potential if, and when, acknowledged and addressed.

Emotions were also important in producing a nurse's sense of empathy for the patients in his or her care. When a nurse empathised with a patient, for instance during a cramping episode, Anna spoke about giving a *quick fix*. This is a time when an emotional response could cause an improper action, the emotions over-ruling logic or reason. This may have been why nurses decided to administer intravenous fluids for cramping as a first line treatment rather than take more conservative steps such as stopping the ultra-filtration rate, which had a slower response.

Not all emotions limited how decisions were made but rather could enhance potential outcomes by motivating decision-making behaviour (Arnaud & LeBon, 2000). For that reason, emotions could be enabling and constraining as the nurses' awareness increased about personal and collective values, creating a deliberate reflexive moment asking 'what are we doing and why?' However, exploring other possible options slows the decision making process. This can result in a decision being passed to someone else as an avoidance strategy or to quicken the decision process. Acknowledging 'which is which' is important if nurses are to understand decisionmaking within their own practice contexts. Self-trust, as well as trust of others, becomes important in understanding one's emotions in decision-making. If we cannot trust and give meaning to our emotions, decisions would not easily be made since anxiety would diminish ontological security restricting how we go on from day-to-day (Giddens, 1984). Confidence to enable ontological security is, therefore, gained through knowing one's self and those with whom one interacts. When a nurse in the renal unit expressed confidence in what they were doing they appeared more willing to make sole decisions, which fostered a sense of autonomy and control.

In summary, being able to make decisions is a powerful tool for nurses but this must be clearly defined. Making a decision for the sake of making a decision, based on emotions, personal values and beliefs is not enough and can lead to undesirable outcomes. In light of this, nurses need to be deliberate in their purpose when engaging in decision-making. When purpose is clearly defined, articulated and documented, outcomes can undergo critical appraisal. Prescriptive, normative and descriptive decision-making theories inform this process so that the 'oughts' and 'actuals' of decision-making become intertwined, which, in turn, inform judgments made about decision outcomes and nursing practices.

Evaluating outcomes

Blegen, Goode and Reed (1998) comment that recent studies have indicated how nurses have contributed to patient outcomes, although this is often indirect and difficult to measure. The nurses in this unit were observed contributing to patient outcomes in acceptable and less acceptable ways. How a nurse knew what an acceptable or unacceptable outcome should be depended on who the patient was, unit expectations, the locale where the decision was to be made, the resources available and the nurse's personal expectations. Each of these played a part in controlling the decision-making process and outcomes obtained. The nurses appeared more knowledgeable about the process of decision-making, in comparison to identifying the constraining and enabling variables of decision-making. For example, several of the nurses seemed to know when a decision had to be made and how to go about it, yet seemed less aware about how they were informed to make decisions and how these decisions were then evaluated. Therefore, it could not be assumed that the nurses were knowledgeable about evaluating outcomes, nor was this action observed as an explicit daily event. Reasons for this apparent absence, proposed by Lynnette, included lack of time, the unit was busy; lack of knowledge for junior staff; lack of time to teach evaluation skills and; lack of continuity, as clients come into unit as out-patients. Additionally, how nurses evaluate outcomes depends on the unit's cultural values and recognition of unacceptable results. When beliefs such as, bad luck on the day and that's the nature of dialysis persist, self-reflexivity, thus evaluation, can become constrained (Giddens, 1984).

Comparing us with them

Evaluating decision outcomes is required at the unit level and as part of the larger health care organisation (Biddle, Firanek, Browner, & Nardini, 2001). Queensland Health's collaborative for healthcare improvement (renal) (Nicholas, 2001) and benchmarking were two methods applied at the organisational level. The renal collaborative for healthcare improvement is a statewide network of clinicians that collaborate to improve health care by sharing learning, resources and projects to measure and optimise clinical outcomes. Benchmarking is the process of identifying, understanding, and adapting current practices to improve performance. Feedback gained from comparing patient outcomes with other Queensland Health renal units indirectly assisted the nurses in gauging their overall decision-making effectiveness. In this study, benchmarking provided positive feedback to the nurses on their performance outcomes, which had the possibility of limiting improvement since many nurses were left feeling satisfied with their practice as they commented, we are doing okay and we must be doing something right. This reinforces a satisficing approach (Simon, 1967). One explanation why a satisficing culture may prevail despite systematic evaluation is because a limited number of evaluation criteria are selected which can result in decision outcomes being satisfactory, but not necessarily the best (Scheiwe & Hindson, 1996). As a result of benchmarking, premature judgments can lead to performance overconfidence and cannot take into account the different variables that control outcomes acquired, making it problematic. Like any tool, nurses must critically explore what this means for them and their practice and understand not only the strengths, but also the limitations.

Despite this, Collier (2001, p. 5) describes benchmarking as "a new approach to empower nurses in their practice, although nurses must be humble enough to admit that someone else may be doing better, therefore, willing to change". Katie was humble enough to question unit data proposing that it did not always support what was actually going on in practice. For example, the data indicated that patients were receiving pre-dialysis preparation³ but this did not reflect Katie's reality. Collard (1998, p. 346) cautions nurses to evaluate results as a totality rather than isolated

³ Pre-dialysis preparation (e.g. education regarding types of dialysis, the creation of a fistula prior to starting treatment, blood monitoring and medication therapy)

"desirable results". Thus, Katie was able to challenge the assumptions and address actual nursing practice that, in turn, questioned decision-making with the potential of implementing change.

Internal evaluation of decision outcomes

Evaluation mechanisms, internal to the unit, were sometimes assisted by technology that combined patient information with nurses' judgments. For example, the 'Finesse' program calculates dialysis adequacy for long-term outcomes. In contrast, short-term outcomes, from one dialysis day to the next, tended to be measured in less deliberate and often subjective ways. There was an assumption that if the patient could walk out of the unit then they were okay. At times, unexpected outcomes remained unacknowledged and unexplored as to why they had arisen. For instance, Carol believed that the unexpected outcome of her patient cramping was a patient consequence rather than the possibility of clinical judgment error. When incorrect documentation was brought to her attention she added we did not know. Even though Carol made this decision alone, and then sought approval for what she wanted to do, the decision was perceived as a 'shared decision'. Where this positions the nurse 'sharing the decision', and the nurse 'who gave approval', in terms of accountability, remains unclear. Accountability is not a new concept in the current nursing climate and involves nurses becoming answerable for the actions they take, including decisions made (Holden, 1990; O'Rourke, 2003; Wade, 1999). Decision-making, however, involves social interaction implying that no one nurse ultimately makes decisions alone. Therefore, identifying decision outcomes for which an individual nurse may be held accountable is a challenge (O'Rourke, 2003). This may have been one reason why poor outcomes appeared to be ignored, unacknowledged or the responsibility directed elsewhere. Carol further accentuates this point:

There's not so much evaluation. We weigh them to see if they achieved their ideal weight and check their blood pressure. If that is okay then they go home. Checking with the Clinical Nurse is a form of evaluation to see if it is okay to reduce their weight (12/9, # 8).

Several nurses agreed with Carol that there were times when their decisions caused poor outcomes, although such occasions were rarely discussed or addressed

collectively. For Joanne, this appeared to be a solitary affair, learned accidentally from one day to the next in that *we only perceive outcomes since we learn it* [evaluation] *as we go along*.

When unexpected outcomes were acknowledged the nurse who made the decision generally claimed responsibility as in Carol's experience, *I feel bad and responsible for the outcome*. This could result in blame being directed to one person, which Reason, Carthey and Leval (2001) say is part of human nature. Owen (2000b) recommends that health care providers should not wait for unexpected outcomes to arise, rather they should systematically measure all outcomes. Conceding whether a blaming culture exists is the challenge, since practice rules can be changed aimed at constructive risk management that fosters nurses' acceptance of accountability and responsibility in a safe and professional manner.

The hidden side of nurses' decision-making - unsung heroes

Sellman (2003, p. 22) proposes that "professional discretion and judgment" is necessary when making decisions, "approaching each decision as if it was the first time such a decision was encountered". In practice, most decisions were not approached as if encountered for the first time. Rather familiarity enabled the *durée* so that the unit goals could be achieved (Giddens, 1984). It was during the *durée*, the flow of day-to-day social life, where many decisions were made that often went unnoticed, particularly good decisions.

Rebecca believed that nurses could *recognise outcome deviations*, while good outcomes were not so easily distinguished. The nurses described a good outcome as an expected outcome judged against unit norms and values, so created less attention when attained. This did not guarantee that the outcome was optimal, yet for this unit, this was the standard for which they aimed. Inviting a nurse to talk about positive decision-making practices was not as problematic as them articulating such experiences. In fact, most of the nurses required time to reflect on positive decision-making outcomes in terms of self, although all could talk about another nurse whom they had observed and clearly admired. This left many nurses' decision-making outcomes hidden and contributions unrecognised. It was taken-for-granted that the

nurses would always be there, making decisions - the unsung heroes. Goodfellow (2002, para, 13) claims that "there is a strong association between artistry and wisdom"; the knowledge generated from this association is not necessarily about what is known, but how that knowledge is exercised and distributed. Jane, for instance, appreciated Emma's wisdom and artistry, metaphorically referring to Emma as the *Oracle*. Emma also recognised her contribution to patient care and unit life as a decision maker, yet, this level of practice was an almost invisible process. I observed Emma interacting with patients in a seemingly effortless way, even though she left each encounter with an abundance of information about the patient and their care that informed the decisions she made.

Sarah defined an expert nurse as one who could *balance the technology with humanistic caring* and was something she aimed for. In this study, I observed this balancing; but this could have easily escaped my attention without Sarah's insight, because it manifested in subtle and ill-defined ways. This represented the 'excellence in practice' that Benner (1984) specifically captured. For example, deciding the location of the Tenckoff catheter (on the abdomen) prior to commencing peritoneal dialysis was a decision that was easily overlooked for its importance. The peritoneal dialysis nurses, in consultation with the patient, decided this location, addressing patient preference, lifestyle and clothing, to name a few. Getting this decision right had significant implications for the patient's quality of life and long-term outcomes.

Similarly, a nurse could decide where to place the needles when cannulating a fistula, depending on their ability, where the last needles had been and what appeared to be an easy option. This was usually the case for less experienced nurses, particularly when left unsupervised. However, an experienced nurse could spend more time assessing the patient's arm, with the intent of maximising the fistula's potential and increasing haemodialysis effectiveness. This required careful and deliberate decision-making, considering many aspects of care, even when a nurse was constrained by time and resources. These few examples only represent a small percentage of excellent⁴ decision-making practices, observed in the unit, but must never be

⁴ excellent as perceived by the nurses in terms of good or satisfactory patient outcomes

forgotten. Without such excellence in renal nursing, renal dialysis would not be what it has become today. In my opinion, these nurses are often unsung heroes that the health care organisation cannot afford to lose or neglect.

Gigerenzer (2002, p. 22) speaks about courage when making decisions which can bring liberation and autonomy or punishment and pain. The nurses in this study experienced both these limits when making-decisions. Decision-making should not be about bravery but rather about feeling confident and supported when making choices. Bravery is only necessary when doubt prevails and structures are seen as failing. Hopefully, by addressing failures and recognising doubt, nurses will be autonomous and accountable for the decisions they make. However, this thought caused some reservation during the study in terms of how autonomous and in control the nurses really were, and who actually held the power, especially when nurses talked about their powerlessness and inability to create change.

Questioning autonomy - can or can't do?

Little power to implement changes into practice seemed to contradict the nurses' mutual belief that they were autonomous and in control of their practice. This left me reflecting whether concepts such as 'autonomy' and 'control' had been used deliberately, or inadvertently, to reproduce a belief that they were in control creating a sense of independence within a relatively powerless context. Giddens (1984) emphasises that people are very knowledgeable about their context and use this to their advantage, enabling their dialectic of control. For example, all the nurses spoke about being autonomous, yet, at the same time seemed reliant on others to decide what research evidence and best-practice principles the unit should ascribe to. This was left to the nephrologist and Nurse Managers, with exception to one or two Clinical Nurses. One nurse, when asked about implementing research evidence into practice that was assumed to inform how decisions were made, remarked *can't do!* This infers that some of the nurses' decision-making autonomy was isolated to certain types of decisions.

Beliefs can be reproduced across time-space encounters until they eventually become common sense and a truth, which, in turn, becomes mutually, shared knowledge that the nurses draw from (Giddens, 1984). Regardless of what informs common sense, Zolin (2003) cautions us to be weary of it since this knowledge is founded on subjective feelings and experiences that requires effort in articulating. A can do or can't do belief that has minimal critique or reflection as to what this actually means, appeared to have a controlling effect on how the nurses' perceived their decisionmaking capacity and depended on whose, or what, interests were being served. This can do/can't do tension may have constituted the very constraints nurses spoke about when making decisions. In other words, some nurses may have gained discrete control by speaking about what they could not do, giving an impression of organisational domination and repression, yet were silently empowered. Thus, belief expressed as common sense may have contributed to the nurses reproducing enabling (and constraining) routines that were valued and desired to not only promote a sense of safety (Giddens, 1984), but to also maintain subtle structures of power and control. Nurses who claimed that they could not do, that inferred an element of powerlessness, may have actually been the ones in control, unwilling to reveal their intentions or motives. This exemplifies Giddens (1984) idea that the dialectic of control is always at play and can manifest itself in numerous ways. Change, the *can* do, required risk-taking since new knowledge and ways had the potential of redistributing power along the dialectic of control. Sarah talked about old habits die hard suggesting that change was constrained by the nurses themselves as they went about their day. Consequently the status quo and hegemonic processes seemed to be maintained, reinforcing common sense truths that were perpetuated secretly by those whose interests the belief would mainly serve (Lye, 1997; Whitehead & Davis, 2001). Likewise, acquiring information from nurses in this study may have further contained some nurses' agency as 'traditions', 'routines' and 'preferences' were reproduced that reinforced the 'rule-makers' positions. This had not gone totally unnoticed since Carol, during researcher-participant reflexivity, began to recognise how nurses contributed to the very things that constrained them. Addressing these constraints was the challenge. Once social structures that can enable and constrain a nurse's agency become known, then there is the possibility for change, in which agency itself, creates new social structures. This is the *duality* to which Giddens refers.

Chapter summary

Mullally (2002) reminds us that the risks associated with errors of judgment and faulty reasoning must be addressed to protect both the nurse and the patient. This process must begin today if nurses want to accept accountability and responsibility for decisions they make. Therefore, nurses themselves must take control and become aware of the outcomes arising from the decisions they make. Determining nurses' overall involvement in decision-making and patient outcomes was difficult, at times. However, without acknowledgement in the first place, there is potential for errors to continue, while excellence dismissed. Giddens (1999b, para. 20) claims that 'structure has no existence independent of the knowledge that agents have about what they do in their day-to-day activity'. Exploring nurses' knowledgeability in terms of perceived ability and capacity as decision makers, and what this meant for patient outcomes, was necessary to understand the decision-making culture of the unit.

Overall, most decisions appeared to be positioned at the centre of the decisionmaking continuum between perceived certainty and uncertainty (Arnaud & LeBon, 2000). This position often facilitated interdependent decision-making that enabled ontological security for individuals, which required negotiation along the continuum with others, closely paralleling Giddens' (1984) concept of the 'dialectic of control'. Despite group agency, expressed as interdependency, many nurses still perceived many of the decisions they made as being independent decisions. Routines and predictable outcomes may have assisted with this belief. Furthermore, the nature of dialysis that could be manipulated and controlled may have further validated their perceived capacity as being autonomous clinicians. However, during the researcherparticipant encounter, the nurses' perceptions began a transformation as their practical level of awareness became discursively shared.

The researcher-participant sharing process, or double hermeneutic loop (Giddens, 1984), assisted with my own understanding about the renal unit's decision-making culture, in which 'consensus' was revealed as a predominant controlling feature. Consensus, in this sense, was not only in terms of agreeing collectively on a particular decision, but rather agreeing, or appearing to agree, to the social patterns

of behaviour that enabled the nurses to go about their day-to-day activities so that decisions could be made in the first place. It was how consensus was achieved that became the critical event in this study. Therefore, understanding the context where decisions were made was crucial when explicating nurses' decision making. In light of this, individual agency, necessary for autonomous decision-making and professional accountability, was not always evident. The nurses at times appeared caught up in the very web of nursing practice that they themselves constituted, knowingly or unknowingly which, although constraining to agency, was also enabling. Social interaction required group agency which questions how much of independent decision-making is an illusion of self-control. Therefore, how nurses perceived their degree of agency and knowledgeability when making decisions may have controlled how they perceived themselves as independent clinicians within the renal context.

CHAPTER EIGHT: CRITICAL REFLECTIONS

The social sciences necessarily draw upon a great deal that is already known to the members of societies they investigate, and supply theories, concepts and findings which become thrust back into the world they describe (Giddens, 1984, p. 354).

Introduction

Critical theory attempts to leave no stone unturned. However, when social forces are embedded in daily routines that become an extension of social life, and are trusted and safe, knowing when a stone is a stone to be questioned, hence turned, is the challenge. This looking, turning, questioning and reforming ideas is not isolated to the subject material under exploration, but the research process as a whole. This chapter will discuss some of the issues arising from this study, including a summary of the findings, my personal reflections as the researcher, and study limitations. Finally, recommendations are made in light of the findings. Conclusions are drawn 'tentatively' as the very nature of qualitative research studies can draw no final conclusion as the researcher works within a world of multiple realities, including her own. For this reason conclusions presented in this chapter are not fixed truths, rather one perspective, therefore are expressed in terms such as 'may be', 'perhaps' and 'possibly'. To do otherwise robs the very voice of each participant and the reader. Street (1992) makes reference to this issue drawing from Habermas's thoughts in that language can be a medium for domination that can cause deception as easily as interpretation. Consequently the way the thesis has been structured, the data presented and conclusions 'tentatively' drawn still have the potential for bias, although this has been a concern that I have attempted to address throughout. Finally, Simon's (1967) concept of bounded rationality neither escaped me as the researcher, since I could not possibly know and understand everything.

The overall aim of the study was to explore renal nurses' decision-making within a regional renal unit. Observing social interactions when decisions were made provided a useful approach to show the diverse conditions of practice that could constrain or enable the nurses' perceptions of control, as originally identified in the

preliminary study (Hardcastle, 2002). My researcher intent was to increase nurses' awareness about their decision-making practices and perceptions of autonomy. The nurses frequently spoke about their autonomy in terms of *being in control*. Initially, many of the experienced nurses' perceived themselves, or were perceived by others, as being autonomous decision makers, very much in control of practice within the unit. By utilising the principles of dialogue and reflexivity, during the researcher-participant encounter, practical, or tacit, everyday knowing was brought to a discursive level that could be spoken about (Giddens, 1984). These methods were assumed by me to facilitate nurses' professional development and improve patient outcomes by changing practice, or at least expose conditions that shape practice as new insights emerged. However, just because decision-making awareness may have been increased, changes in practice were not guaranteed.

Revisiting the questions

Revisiting the study's initial questions can assist in summarising the findings and is part of Chenail's (1997) 'plumbing up' analogy:

What aspects of nursing practice in this renal unit control how nurses make decisions? and; What aspects of nursing practice, in this renal unit, control how nurses perceive their decision-making capacity?

Providing a summary of the findings, supported by diagrams, may help to further clarify ideas arising from this study. Critical ethnography was the methodology selected to answer the questions, assisted by the theoretical lens of structuration theory, in which agency and structure are understood as a duality; like two sides of the same coin (Giddens, 1984). Following the initial stage of data collection, concepts from structuration theory were adopted as part of the analysis, providing headings for the three finding chapters, namely, contextuality, social structures and knowledgeability. The dialectic of control, another feature central to structuration theory was threaded throughout each chapter in terms of how nurses' autonomy-dependency alternated across time-space encounters when making decisions. These concepts are illustrated in the diagram below (figure 8.1)

Knowledgeability: practical/discursive/subconscious

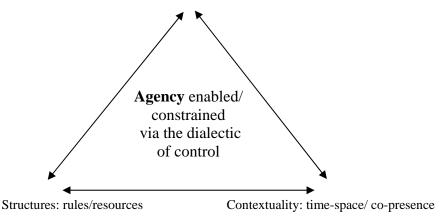


Figure 8.1 Concepts adopted from Giddens' structuration theory (1984)

Adopting structuration theory as an analytical framework was at times challenging, yet assisted in sensitising me to aspects of agency-structure duality that I would have not normally been attuned to. Although this had the danger of filtering out other aspects of decision-making, structuration theory's eclectic approach provided a broad foundation that incorporated the nurses' agency, or capacity to do, with structures that can determine or shape nurses' agency. This provided a multidimensional rather than reductionist approach. Furthermore, the dialectic of control acknowledged alternating power differentials across time and space, whereby the oppressed could become the oppressor (Bryant & Jary, 1991). Giddens (1984) understanding that power is constantly changing and renegotiated during interaction was the reason why I selected structuration theory for this study during the analysis stages.

Investigating agency, the nurses' capacity to act and do otherwise (Giddens, 1984), assisted in understanding what 'autonomy' meant to nurses within the context of their work, particularly when making decisions. How the nurses' perceived their degree of autonomy within the renal unit could both enable and constrain their decision-making experiences. Social structures and contextuality played a crucial part in how the nurses' perceptions about clinical practice were created and recreated across time and space, constituting knowledgeability, which, in turn, established the nurses' decision-making authority. Thus, knowledgeability about social structures and contextuality appeared to facilitate some nurses' capacity as decision makers and

their sense of control, though, control did not guarantee optimal decisions were made. Figure 8.2 illustrates how knowledgeability, contextuality and social structures shaped the agency-structure duality resulting in predominantly recursive decisionmaking practices.

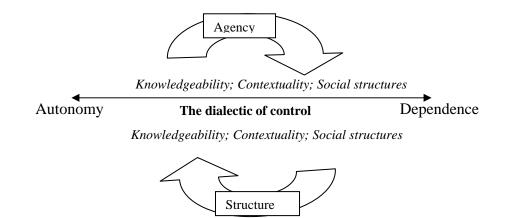


Figure 8.2 The agency-structure duality and its affect on the dialectic of control

Knowledgeability also facilitated group agency and reinforced a mutual perception that nurses were autonomous. Giddens (1984) does not specifically speak about agency in terms of groups but rather individuals who are constantly negotiating and redefining their position along the dialectic of control from one encounter to the next. The nurses' shared belief that they made autonomous decisions created and recreated rules for clinical practice and authoritative structures, which, in turn, continued to shape how nurses understood decision-making and autonomy within this context. This then effected where nurses positioned themselves, and others, along the dialectic of control when making-decisions. As a result, a nurse's perception about being in control was repeatedly supported and maintained through routines, rules and resources, which were assumed to be based on group consensus and norms that prescribed what was, and was not, acceptable unit practice. For example, knowledgeability about routines produced a sense of trust that enabled nurses to exercise their agency to make decisions in the first place. This then, deliberately or inadvertently produced and reproduced relatively stable practices, with sporadic episodes of change. This may possibly explain why a satisficing decision-making culture (making decisions based on minimal cues) appeared to prevail in this study, as nurses worked within routines and aimed for expected

outcomes. This finding is hardly surprising given that the nurses had to practice within a confined bureaucratic environment with limited resources, yet at the same time had a context that demanded productivity and efficiency. Routine practice assisted the nurses with their ever increasing and demanding workloads, making the work more manageable and predictable which, in turn, required less time, energy and creativity. Thus, routines must never be underestimated for their importance within complex working contexts that are precariously embedded within larger organisational structures. In view of this, it could not be assumed that decision-making was occurring with best intentions in mind. Social structures may have constrained the nurses' ability and capacity so that best intentions could not always be achieved.

Giddens (1984) speaks about the *knowledgeable social actor* being a central feature of structuration theory, and is particularly concerned with peoples' intentions. However, people can be misguided since structures can constrain agency, hence intentions. Simon (1967) terms this 'human bounded rationality'. This means that people can not possibly know everything when making decisions, and may explain why the nurses in this study tended to go for what sounded the best option (satisficing), based on the available information (Simon, 1967). Even when information was presented, social interactions could supersede rational, logical reasoning. For example, the health care organisation could have knowingly, or unknowingly, bounded the nurses' rationality by restricting access to information. This may have obstructed the nurses' efforts to achieve and exercise autonomy in the unit. However, it did not seem to matter who, or what, had control of practice, rather the nurses feeling part of the team and contributing to decision-making were seen as important, which, in turn, fostered a sense of commitment and responsibility for decision outcomes. Giddens (1984) proposes that decisions are affected by, and have an affect upon, the structures of a group so that people *create* their work environment rather than merely discover it. The structure-agency duality meant that social structures affected the decisions nurses made, while at the same time, the nurses affected social structures by drawing from them, thus created the unit's decisionmaking culture. According to Giddens (1984), neither agency nor structure has a greater affect and this has been exemplified in this study, whereby the nurses' agency

was enabled and constrained by the very rules and resources they drew from, which were created and recreated because of their agency. Once constraints and enabling factors became known, then there was the possibility for change.

Revisiting decision-making theory

Nurses' decision-making has been described as complex, and often concealed, making it difficult to research (Buckingham & Adams, 2000b; Cioffi, 2001; Fonteyn & Ritter, 2000), and this study was no exception. A large volume of nursing literature has addressed *descriptive* decision-making models when exploring how decisions are actually made within the natural context. Descriptive decision-making includes information processing and skills acquisition where a person progresses from novice to expert level. Within these descriptive models nurses are assumed to be accountable and responsible for decisions made and outcomes achieved (Benner, 1984; Benner & Tanner, 1987; Cioffi, 2000b). This infers an element of independence and autonomy when making decisions, as observed in this study. However, when exploring decision-making within the natural context, such as the renal unit, it was found that many other factors controlled how decisions were made and who made them. Prescriptive models are another approach to decision-making that addresses the ought and should when making choices (C Thompson & D Dowding, 2002). This approach tends to address decision-making as a logical, analytical process where statistical predictions are allocated probability outcomes. However, this calculating approach has limitations when making decisions in terms of patients and unpredictable circumstances. Nevertheless, it could be argued that routines, as well as evidence-based policies, have prescriptive characteristics about them, which nurses 'ought' or 'should' follow, based not on scientific evidence, but rather accepted and ascribed rules that naturally transpire during daily interactions. Routines, for instance, enabled the nurses to get the work done, which, in turn, reduced the nurses' uncertainty as they predicted possible outcomes. This predicting behaviour suggest prescriptive principles at play, albeit, in less explicit or statistical terms. This implies that both prescriptive and descriptive decision-making models were simultaneously at play and supports previous studies that suggest nurses use an array of cognitive reasoning processes when making decisions (Hamm, 1988; Hammond, 1978; Harbison, 2001; Thompson, 1999).

As well as descriptive and prescriptive decision-making models, another less visible feature controlled decision-making within this unit; namely power. Communication and power differentials played a dominant role in how decisions were made, agreed to, and implemented. Power was generated during interaction, as the nurses drew from and reproduced social structures, shifting power from one moment to the next. The sanctioning of rules, for example, could enable some nurses' exercise of power, and constrain others. However, according to Giddens' theory, any nurse at any time could exercise their dialectic of control. For example, deciding not to follow a rule could enable their agency, although the consequences associated with this bold act could also be constraining. For this reason, agreement to rules could be deceiving, whereby practices appeared consistent, yet there was always the threat that the status quo could be challenged. The relationship between the diverse reasoning styles and the dialectic of control is theoretically illustrated in figure 8.3 solely for explaining decision-making in diagrammatic terms. In addition, the nominated term, 'opinion', for the purpose of clarification, signifies a subjective, value-laden approach to decision making, in comparison to 'methodical' that implies more orderly and deliberate thought.

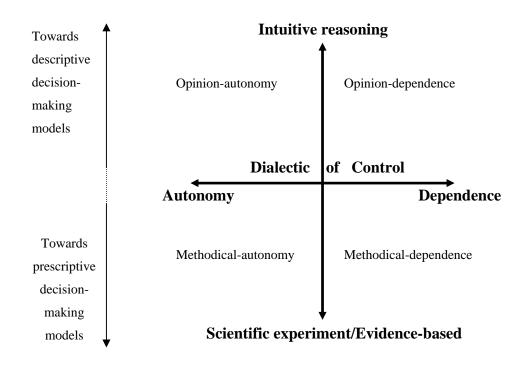


Figure 8.3 The interface between the cognitive continuum and the dialectic of control

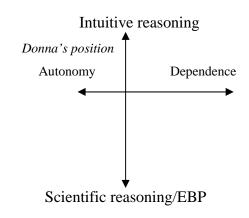
Note: Adapted from structuration theory (Giddens, 1984) and the cognitive continuum (Hammond, 1978; Hamm, 1988).

What this diagram attempts to show is how the nurses constantly positioned and repositioned themselves in terms of reasoning and agency via the dialectic of control when making decisions. The cognitive continuum model (Hammond, 1978; Hamm, 1988) suggests that reasoning is neither purely rational nor intuitive; rather people tend to move along the continuum depending on the time available, the task at hand, and the number of information cues (C Thompson & D Dowding, 2002). Furthermore, social variables such as individual knowledge (knowledgeability), power (agency) and social structures (rules and resources) can affect where a person is situated along the cognitive continuum (Hamm, 1988). This was evident in this study in which the dialectic of control (Giddens, 1984) was as important in controlling where, and how, a person was positioned along the decision-making continuum; a position that was constantly evolving across time and space from one encounter to the next. Thus, how a nurse was positioned in terms of decision-making was not only in relation to cognition and experience, but also social interaction that addresses who else is present during the decision-making encounter (presence and co-presence), and what else is going on (decision-making across time-space). Giddens (1984) refers to these collective elements as 'contextuality'.

Individual decision-making

A nurse within the *opinion* position made decisions informed by personal discretion, experiential knowledge, intuition, peer-judgment, routines, unit rules and expectations, to name a few, which reproduced established behaviours, beliefs and practices. This reflects descriptive decision-making principles. Furthermore, what a nurse 'knew' positioned them in relation to the dialectic of control. The more knowledgeable a nurse was, one assumed the more autonomous they were when making decisions. However, knowing something did not mean it was correct, or that a person wanted the responsibility and control.

For example, Donna confidently referred to the *golden rule* when deciding the percentage of dextrose in the dialysate fluid for a diabetic patient (see p. 184). Her understanding about this *golden rule* was mainly guided by what she had heard and observed others doing, enabling her to now make an independent decision. Therefore, for analytical purposes a snapshot of decision-making is presented, placing Donna within an *opinion-autonomy* position as shown in figure



8.4.

Figure 8.4 Opinion-autonomy position

Advantages for descriptive (opinion) decision-making are that decisions could be made quickly, based on familiarity, which reduced uncertainty and increased a sense of trust. The disadvantage was that the information and reasoning processes applied by the nurses could prejudice decision-making (i.e. anchouring, conservatism, overconfidence), minimising optimal outcomes. Furthermore, when practice was routinely or habitually followed with little debate or discussion this could unintentionally maintain a satsificing decision-making culture, and reinforce authority for a select few. Despite this, all the nurses spoke about routines as being enabling yet were not always aware of how routines could constrain their practice. Had Donna, for example, deliberately questioned her understanding about the golden *rule*, she may have become more aware of the misapplication of the rule, moving her from a satisficing decision-making position, to an optimising one. This repositioning may have also facilitated her capacity as an effective decision-maker, optimising outcomes. However, until one acknowledges the need to question a belief (or understanding), practice cannot intentionally be changed. In contrast, Monica referred to the same golden rule as a written policy that she believed was evidencebased, founded on scientific reasoning that prescribed what 'ought' to happen, momentarily placing Monica within a *methodical-autonomy* position as shown in figure 8.5.

Knowing the policy enabled Monica to be autonomous as she also confidently applied the rule. However, Monica's belief that the policy was evidence-based may have been misinformed. Should she have acknowledged this was the case, this may have resulted in her deliberately, or inadvertently, being repositioned in terms of the dialectic of control and the cognitive continuum.

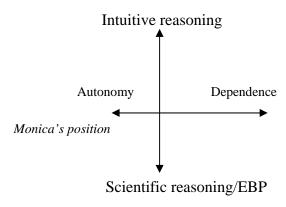
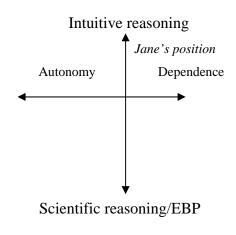


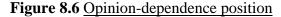
Figure 8.5 Methodical-autonomy position

Giddens (1984) advocates that people need to bring practical, tacit knowledge to a discursive level so that it can be examined, and if necessary, revised. This is the transformative capacity of daily practice to which Giddens refers. For this reason, a nurse may be perceived as being positioned in one of the above quadrants when, in fact, through dialogue and reflexivity, or what Giddens (1984) terms reflective monitoring, this positioning is constantly changing and reformed in light of new understanding and information. This re-looking, with the possibility of causing change, was attempted in this study.

A nurse positioned towards the *dependence* end of the dialectic of control was as important as an autonomous one. When a nurse was dependent on others for decision-making this was usually because they were *learning the ropes* as they were socialised into the unit and became familiar with day-to-day routines, or when a nurse encountered an unfamiliar situation. When nurses were uncertain, and their ontological security (Giddens, 1984) challenged, they tended to refer to their colleagues for information. Nurses spoke about this as *being told what to do* which may infer an *opinion-dependence* position, as shown in figure 8.6. This is satisfactory for nurses who come across a new concept or skill, but they must be encouraged to reposition themselves as confidence and knowledge is gained, justifying their decision-making through evidence-based rationales, as well as context specific knowledge. This was not always evident in this unit in that nurses encouraged a culture of waiting to be told for different reasons.

Jane for example, (refer to figure 8.6), regularly asked *The Oracle* for decision-making information (see p.178). The practice of 'asking' is expected within the constraints of the health care organisation, but periodically nurses need to consciously reflect on what they do and why, bringing the practical, tacit level of practice to a discursive one. By doing so, 'opinions' can be judged for their rationality and optimising qualities. Furthermore, *The Oracle* may have been why Jane felt dependent in the first place when making decisions.





A *prescriptive* (methodical) approach to decision-making was not as evident on a day-to-day basis, although the nurses employed decision-making tools (computer program, algorithms), particularly when estimating dialysis adequacy and/or when deciding renal anaemia treatment. Most nurses acknowledged the limitations of prescriptive decision-making models that required time, correct data entry of patient information, and common sense when interpretating the findings. Acknowledging and managing these limitations moved the nurses' reliance on decision-making tools, to one of controlling them that served their needs. This then had the possibility of repositioning the nurses into a *methodical-autonomy* position. Therefore, dependency, like autonomy, can enable and constrain nurses' decision-making across time and space. The challenge is to ask in what ways things are enabling and in ways constraining. Doing so creates opportunity for change (Giddens, 1984).

Group decision-making

With the exception of one or two nurses, most decisions were 'shared'. Unit norms and routines, agreed practice and power differentials were made known, and reinforced, during encounters. Consensus about routines, rules and resources enabled many of the nurses in this study to make decisions in the first place. Knowing what to do, and when, fostered a sense of safety or ontological security (Giddens, 1984) as the nurses went about their day and was another important factor that facilitated

nurses' decision-making and sense of control. Any nurse deviating from these prescribed and established norms of practice could face sanctions that manifested in overt and subtle ways. This implied that group agency was a powerful controlling feature and something that seemed to be accepted with little reflection as to what this meant in practice. Furthermore, many nurses perceived themselves as being autonomous because of the group's agency and unit structures, and this gave an appearance that decisions were made efficiently and effectively. However, this very belief about *being in control* may have itself been a constraint. Failure to explore the origins of prevailing social structures could maintain degrees of reliance, in which interdependent decision-making had the possibility of constraining when, the significance of interdependence was unquestioned. Figure 8.7 illustrates how *I generally perceived* the nurses' decision-making position; a position centralised at an interdependent level, favouring an opinion-autonomy position.

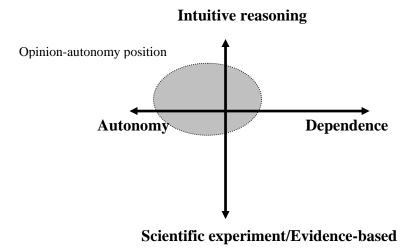


Figure 8.7 The nurses' collective decision making position and control

(Note: Adapted from structuration theory (Giddens, 1984) and the cognitive continuum (Hammond, 1978; Hamm, 1988).

When nurses begin to recognise where they are individually, and collectively, positioned in terms of decision-making, enabled by the methods of intentional reflexivity and dialogue, optimising decision-making becomes a possibility. Repositioning necessitates time, risk-taking and change, which requires professional commitment if nurses want to achieve control and be autonomous.

Application of structuration theory – friend and foe

The abstract nature of structuration theory emphasised the ambiguity, vagueness and interconnectedness of agency, structures and the social practice of decision-making. Such a framework attempts to provide social order to social complexity, yet at the same time, its abstract nature made it difficult to master and apply. An analogy to such a framework could be Neapolitan ice cream. If Neapolitan ice cream is not stored at a low temperature, the three colours and flavours that define its uniqueness become one. This liquefied confusion of colours and flavours is symbolic for the messiness and involvedness of social life where agency and structure interact as a duality, rather than as neat separate concepts. Despite this, structuration theory attempts to make sense of social life by arranging concepts into separate categories, thus attempting to reorder the liquefied Neapolitan ice cream back into its original colours and flavours, making this a difficult and abstract task to do as reflected in chapters 5, 6 and 7. Thus, contextuality, social structures, and knowledgeability (colours and flavours) are extracted from social practice (i.e. decision-making) purely for analytical reasons. Therefore, structuration theory requires a constant 'to and fro' when making sense of the data so that the distinct aspects can be isolated. This assists in generating new understanding about social practices that are further facilitated by reflexivity and dialogue during the research-participant encounter. These combined methods applied in this study brought the fuzziness of nurses' decision-making from a practical, tacit level to a discursive one. By speaking about decision-making practices in terms of contextuality, social structures, and knowledgeability, new insights could be developed. The 'to and fro' process also helped to maintain rigour throughout the study.

Ensuring trustworthiness throughout the study

As discussed in chapter four, recommendations proposed by Morse, Barrett, Mayan, et al. (2002) contributed in ensuring trustworthiness and rigour throughout the study. Establishing rigour was sometimes challenging due to the amount of information accumulated during data collection and analysis. Although this was assumed to help with verification, as part of data triangulation, this often required time and limited the process since participants' interpretations and understanding intrinsically changed from one moment to the next (Giddens, 1984). Validation of the transcripts and

findings arising was predominantly my responsibility. These were research skills I had to learn and paralleled the nurses' learning style of trial and error observed in the study. In fact, at times, I felt this process almost consumed me to a point of over checking, which may have been why I eventually acquired so much data that did not always clarify issues but rather opened new possibilities for exploration, adding to my confusion. Furthermore, I had also planned to continue data collection until the point of 'saturation', that is, until no new themes appeared (Creswell, 2003; Guba & Lincoln, 1985). Fortunately, the nurses' involvement, and their common sense, assisted with closure of the study in terms of data collection as they asked me: Isn't it time you finished? In hindsight, had I aimed for data saturation I doubt I would be writing this concluding chapter today! In this sense, the data was not saturated but rather the participants and researcher were. Investigator responsiveness to the participants and research conduct was another feature applied as part of the research process (Morse, Barrett, Mayan et al., 2002). Therefore, I appreciatively took my leave, returning to the unit sporadically for participant feedback. These visits, I believed, were welcomed or, at least, tolerated.

Investigator responsiveness

Street (1989) proposed that the 'ideal' role of the researcher is to act as the facilitator of change and record the change processes. I envisaged my role as being active, serving the purpose of increasing the nurses' awareness about decision-making. However, I was aware that although this was my goal it may not have necessarily been shared with the other nurses. Therefore, I was open and flexible to the nurses' responses and involvement, particularly as the nurses' stories unfolded. This required constant reassessment about *my* personal beliefs in terms of decision-making in the unit, which at times were supported, reformed or relinquished altogether. This is part of the researcher being responsive to the dynamic and evolving nature of qualitative studies (Creswell, 2003). I embraced this unpredictable existence, which, at times, posed more questions than answers. As a result, I frequently returned to the initial questions that anchored the overall aim of the project. This enabled me to constantly reflect back and forth during analysis and synthesis to ensure congruence between the questions and methods. Morse, Barrett, Mayan et al. (2002) refer to this as methodological coherence.

Asking the right questions, looking in the right places

Methodological coherence asks if the questions fit the methods (Morse, Barrett, Mayan et al., 2002). Peacock (1986) tells a story about a Russian man who was stopped everyday at the factory gates to check the content in his wheelbarrow to establish that he was not stealing. Despite this daily practice of checking, it was many months later before it came to light that it was in fact the wheelbarrow that was being stolen. I constantly recalled this story, unsure if I should have been looking in or *at* the wheelbarrow. Consequently, asking the right questions and knowing where to look and what to look for were vital aspects. This, in turn, produced feelings of anxiety that rarely escaped me as I doubted whether I was asking the right questions and looking in the right places. Reading about similar researcher experiences (Gates & Lackey, 2000; Maloney, 1996; Pellatt, 2003) helped to relieve some of my 'doubting Thomas' fears as I discovered that I was not alone. Whether it was my anxiety that elevated my sense of uncertainty about doing research or whether the uncertainty increased my anxiety, I do not know. However, while analysing the data I recognised similarities with the nurses' experiences of uncertainty and anxiety when making decisions. I too had emotions that at times may have unintentionally controlled how I went about the research. Then again, I used this element of doubt to my advantage as it led me to become a cautious researcher who tried to take nothing for granted. This resulted in the checking and double-checking behaviour that may have compounded the accumulation of collected data. Nevertheless, this also optimised the research conduct, seeking all possible options and explanations rather than being satisfied that all was all right. This does not mean that all was or is well, but my intentions were true, working within my bounded rationality (Simon, 1967). Still I had to determine whether I should have been looking *in* or *at* the wheelbarrow.

A Participatory approach

Engaging participant involvement encouraged dialogue, which, in turn, provided essential feedback regarding data collection and interpretations made. Giddens (1984) and Carspecken (1996) advocate researcher-participant sharing since this facilitates the creation and recreation of insight and meaning via the double hermeneutic loop (Giddens, 1984). The two-way process enabled the knowledgeable nurses to rethink and relook at their daily practice at a discursive level. This method

provided a critical approach as new insights had the prospect of generating new action. However, Meyer (1993) questions if this is actually possible since change does not impact the researcher, who does not permanently work within the study context, which makes working *with* nurses difficult in reality. Furthermore, the worlds of the researcher and the participants can be far apart; the researcher's world often unfamiliar to nurses working in the clinical setting (Meyer, 1993).

Having worked in the unit and assumed to know the nurses quite well as a group, I was aware of a possible research-practice chasm. This was not only in terms of knowledge and skills about how to do research, but also interest in research per se. Wellard (1996, p. 240) encountered this issue in her doctoral research in that the nurses initially found being a co-researcher "quite foreign". Similarly, Street (1989) wrote about her naivety in terms of nurses engaging in collaborative research. Therefore, it was always my intention to approach nurses' involvement with an open mind and invite levels of participation. Most of the nurses were happy to talk with me and share their experiences but none wanted to write or do much more than that. Feedback on issues was generally verbal and usually, while the nurses went about their usual routine tasks. This made deliberate reflection with the intent of creating change a difficult endeavour, with the exception of the four key participants. This is not to say that change did not occur at some point but, it was perhaps in subtle ways that went unnoticed. Typically, intentional change occurred at an individual rather than group level, but this still opened opportunity for new possibilities (Giddens, 1984).

Increasing awareness: actors are inherently reflexive

Giddens (1984) claims that until something is acknowledged it cannot be changed. Reflexivity and dialogue enabled agency, with the nurses and myself consciously looking and relooking at social life and daily practices. This dialogical design assumed that the nurses were able and willing to reflexively critique their practice and articulate meanings discursively. However, a critical review of individual, group and organisational practices required time, theoretical demand and risk-taking. Gergen (1991) questions how necessary reflexivity is when in reality time, economic and social demands continue to saturate individuals in the modern world leaving less time for reflection and discussion. This position was certainly echoed in this study as nurses talked about being *stretched for time*. Therefore, when the nurses decided to engage in the research at a more involved level, this increased their time and energy demands on an already busy day. This may further explain why many of the nurses did not seem too eager about being collaborative researchers when invited.

Increasing nurses' awareness was not only in terms of nurses' decision-making in the unit but included how the research was generally conducted. Carspecken (1996) comments that the researcher must be careful not to disempower the participants through the research process and by what is actually reported. Therefore, constraints and enabling factors operated not only in terms of how decisions were made in the unit, but also about the research process itself and what it meant for researcher-participant encounters. It was difficult to know what any other person was truly ever thinking or feeling, but I encouraged participants to verbalise any issues that worried them, including my conduct in the unit as a researcher.

As Carspecken (1996, p.207) reminds us "Remember that, morally, social research will either hurt or help people: it rarely has purely neutral effects with respect to human welfare". Changes in some of the nurses' perceptions of autonomy had the potential of causing job dissatisfaction. One approach in dealing with this was asking the nurses themselves to find ways of becoming more in control and autonomous in the decisions they made. Clearly there were times when a nurse acknowledged a constraint that then altered their agency; thus acted in a new way, recreating new rules of practice, such as gaining more knowledge or not being so reliant on others. This required a change in decision-making practices. However, there were also times when the nurses identified factors beyond their control. This resulted in either a sense of being defeated (which most nurses, I believe, already had knowledgeability of prior to the participant-researcher encounter), or a nurse would create new opportunities to gain control, even though, at times, in less desirable ways. Thus the doctor-nurse games, for instance, continued to be produced and reproduced, the nurses themselves part of this constraining process. Despite this awareness, it did not mean that the nurses wanted to change decision-making practice as even constraints had enabling elements for them.

From time to time I too felt vulnerable as I collected information from a context known to me. How this has affected the overall study is difficult to know. Sometimes this served me well as an insider exposed to privileged information. At other times, loyalty to the nurses, the culture and the system may have clouded my analytical approach to the data and conclusions drawn. Moreover, sharing doubts and concerns may have assisted in exposing my susceptibility, which may have possibly strengthened mutual trust between colleague-participants and myself as feedback was provided as a form of verification. However, I constantly questioned who, and what, this verification process actually served. In some ways seeking feedback seemed to parallel the seeking approval behaviour I had observed in the unit, which may have unintentionally been mimicked during my interactions. Being part of the team and fitting in were still important values that I may have inadvertently transferred from the colleague to researcher role. As a result, I can never be totally sure how much of a controlling aspect this actually played but I dare say that acceptance is something that all researchers would like to achieve, as a basis for ontological security (Giddens, 1984).

Finally, I never lost sight that this project served the purpose of obtaining a doctoral degree. The nurses too were very aware of this potential outcome. Despite this, many of them seemed to receive and/or endure my presence in the unit and recognised the importance of gaining such a qualification. Because of this I felt the nurses took more of an interest in my personal learning journey rather than the research study itself. This indirect link was perhaps the link that made this study successful.

Other concerns

As mentioned in chapter seven, there were many unsung heroes making decisions within the unit. Like the nurses, I found it was often easier to see the abnormal rather than the normal. Therefore I was more sensitive to unexpected decision practices that may have biased the findings in a negative way. This was not my intent, but being attuned to contradictions often revealed outcomes that worked against daily routines and expected norms. This may also explain why the nurses themselves tended to pay less attention to outcomes when expectations were attained. This is precisely why

nurses need to begin documenting not only errors, but also how they positively contribute to favourable patient outcomes. As long as nurses are depicted as unsung heroes, I believe, little will change. A hero for me represents the nurse who carries and protects others, including the health care organisation. They are a champion to the cause and a conqueror. However, without a voice the hero may go unnoticed or continue as a myth.

This study has looked at nurses' decision-making, 'the good, the bad and the ugly', as a way to illuminate how nurses assumed autonomy, yet in this study there often seemed to be unstructured sustenance to support this level of responsibility and accountability. Only when nurses begin to speak out and negotiate work structures to support their expanding and increasingly taxing positions, will they be able to truly talk about *being in control*. Without critique the problems renal nurses face will only be accentuated. The future demand of renal health care services, in particular for the Indigenous population, requires the establishment of renal units in more isolated areas. This, in turn, may open up new possibilities for renal nursing, but nurses must first ask 'at whose and what cost?'

Recommendations and potential opportunities

Critical theory can produce undeniably dangerous knowledge (Kincheloe & McLaren, 1998). It is how this new understanding and knowledge is used to improve patient outcomes, nursing practice and development, and how resources are managed, that is of concern. This study has highlighted the different ways in which nurses make decisions and has presented several implications for nursing practice, education and further research that are now addressed. Recommendations and strategies are interconnected across the findings; supporting Giddens (1984) argument that the agency-structure duality is one entity. Although these recommendations are site specific they can be applied across various nursing contexts. The current economic climate poses challenges for nurses, although recently the Queensland government has planned an extra two million dollars for additional renal resources where this study was conducted (Teambeattie, 2004). Nurses need to be part of the negotiation table when deciding how this money will be allocated. For example, arguing for renal education and clinical proficiency programs

in order to provide quality care, particularly when new units are opening away from larger medical centers. Nurses need to create these opportunities for themselves, firstly by recognising the social structures that both enable and constrain their very agency. Being part of policymaking and budget planning is a start.

Findings and recommendations in nursing practice and education

Finding 1: Nurses' perceptions of decision-making autonomy and actual decision-making autonomy did not always correspond.

Observations related to findings:

- Individual perceptions about decision-making autonomy were mainly fostered through group interaction and unit structures, such as routines, rules, and resources, although the nurses did not always acknowledge this.
- Many of the decisions were made jointly with other nurses, or a nurse sought approval for the decisions they made prior to implementation, questioning individual nurse control and autonomy at a practical conscious level.
- Nurses were frequently observed not contributing equally to decision-making during nursing and multidisciplinary meetings, even though at a discursive level most nurses felt they did.
- Even though group decision-making reduced nurses' anxiety that enabled decisions to be made, group consensus was often misleading, serving some nurses' interests more than others.
- Although reflexive practice is not a new concept to nursing, many of the nurses in this unit were vague as to what reflective practice meant and how this could contribute to nursing and patient outcomes

Implications from these observations include: (a) nurses can only make judgments about their level of autonomy if they understand what this actually means and consciously reflect on it; (b) when nurses are not autonomous then they are limited as

patient advocates and contributors to patient outcomes and quality of life; and (c) when nurses cannot contribute to decision-making, holding them accountable and responsible for decisions made is difficult and unrealistic.

Recommendations:

- (i) Nurses need to ask what autonomy means for them and in what ways they achieve this in practice;
- (ii) Nurses must accept the responsibility and accountability that corresponds with autonomy by actively engaging in decision-making and demanding educational resources that foster knowledge and skills to support advanced decision-making levels.

Strategies to help accomplish recommendations include:

- Planned individual and group discussions/evaluations about decision-making are necessary in order to raise practice awareness and increase opportunities for change.
- As part of self, peer and unit appraisals, nurses themselves must create time via the structures (rules and resources) that enable reflexivity, particularly when monitoring and measuring patient outcomes. Thus, time becomes allocated and utilised in new ways.
- Invite education resources, external to the unit (i.e. staff development, university), to facilitate reflexivity, staff appraisals and decision-making assessments with the aim to improve outcomes.

Finding 2: Nurses generally perceived their decision-making, and subsequent patient outcomes, in a positive light.

Observations related to findings:

- Daily evaluation of patient outcomes was predominantly limited to subjective opinions rather than quantifiable data.
- The nurses were not always aware of patient outcomes or the unintended consequences arising from their actions.

- When less desirable outcomes occurred, the nurses usually identified constraints related to the larger organisation and resource limitations rather than their own practices.
- The nurses faced many challenges (i.e. social interactions, organisational constraints) when making decisions, which may have limited, as well as enabled, their actual capacity as decision makers.
- Decision-making risks were not always recognised or acknowledged by the nurses in terms of everyday routine decisions.
- Quality, efficiency and effectiveness were measured and valued in different ways based on different beliefs that changed across time and space.

Implications from these observations: (a) Mismatches between what nurses think they do, and outcomes obtained, can lead to ineffective decision-making and minimal appraisal and; (b) without evaluation, nurses' time and energy as decision makers may be unproductive.

Recommendations:

- Nurses must consciously reflect on their individual, group and organisational beliefs, values and aims in order to work collaboratively. A shared understanding is therefore necessary in order to have common goals that address patient interests; and
- (ii) There needs to be more systematic evaluation of outcomes conducted by the nurses themselves.

Strategies to help accomplish recommendations include: (a) Fortnightly peer review and random audits can be applied as teaching-learning strategies to benefit the unit as a whole, rather than isolated to certain individuals; (b) the patients could be involved more by providing feedback in a structured, safe and meaningful way. A tick box information sheet may assist with this action that patients fill in, or are assisted in filling in, as part of the predialysis assessment. This will provide written documentation to help nurses plan future care and treatment; and (c) it cannot be assumed that nurses know how to evaluate outcomes, therefore, this requires ongoing

educational support where quantitative measurements compliment qualitative, and vice versa.

Finding 3: The nurses identified organisational constraints as a major constraint on decision-making before their own practice.

Observations related to findings:

- The nurses' perceived themselves as being constrained by organisational structures such as limited time, inadequate nurse-skill mix and increasing technology which demands ongoing education that was not always accessible or available.
- The nurses frequently referred to organisational constraints as reasons why decisions appeared to be made in an 'ad hoc' fashion, based on routines, what had gone on before, and trial and error.
- Sometimes a constraint could be deliberately or inadvertently created by the nurses themselves as they uncritically explored what they did and why, reproducing routines and manipulating their work environment to avoid change.

Implications from these observations include: (a) When bureaucracy aims for excellence, efficiency and effectiveness, this places nursing in an economic and political paradigm, often in conflict with, and at the expense of, caring. This cannot be ignored within the present health care climate where costs have increased, human resources are limited, and technology places further demand on health care delivery systems. This may have been the reason why nurses' demonstrated a satisficing decision-making culture as a matter of 'survival'.

Recommendations:

- Nurses need to be encouraged and supported to critically reflect on their current nursing practices and acknowledge areas of knowledge deficiency that can impair their decision-making.
- (ii) Nurses must review what time means for them in their practice and how this could be redefined to serve their work demands and optimise patient outcomes.

(iii) Nurses need to recognise enabling and constraining factors at an individual, professional and organisational level so that strategies can be implemented. Without awareness of these factors the possibility for change may not be presented.

Strategies to help accomplish recommendations include: (a) One way in achieving these recommendations is by evaluating decision outcomes at the different levels (i.e. individual, group, organisational) in order to establish the conditions that affect the decision process and where improvements can be made. This process requires both nurses and the organisation to implement this level of thoughtful discussion and evaluation as a priority, and valued tool.

Finding 4: Although the nurses used a combination of decision-making models, most favoured a descriptive, rather than a prescriptive style.

Observations related to findings:

- For routine decisions, the nurses favoured personal, peer and unit structures to inform the decisions they made but this appeared to reinforce a satisficing decision-making culture.
- When a decision was unfamiliar, a more analytical approach was applied or the decision was passed to more authoritative and/or knowledgeable persons, including the doctors.

Implications from these observations include: (a) Evidence-base practice was not always being utilised to maintain, support and improve decisions made; and (b) adopting a combination of reasoning strategies may have facilitated collaborative decision-making, although even this may not necessarily result in decision optimisation.

Recommendations:

(i) Nurses must be taught about the spectrum of reasoning processes that extend from intuitive, personal knowing through to scientific and evidence-based practice and think about what this means in their daily practice.

- (ii) Nurse education needs to teach clinical reasoning based on the cognitive continuum that balances prescriptive and descriptive models as complimentary approach to decision-making.
- (iii) Nurses must methodically think about what the potential options are when making choices and closely reexamine the decisions they make or are about to make.
- (iv) Nurses can form decision-making groups that address issues such as decision risk-management, evidence-base decision-making and practice discrepancy review, so that prescriptive approaches can be used to support actual decisions made and further promote nurse autonomy.

Strategies to help accomplish recommendations include: (a) Appropriate educational support is required to help nurses become aware of different information sources to facilitate decision-making and generate possible options, then judge these options in terms of feasibility and expected outcomes. This can be achieved within the educational institution and within clinical areas. A combination of reasoning styles can maximise choices fostering an optimising decision-making culture; and (b) recognition of the need for appropriate dedicated time to implement reflexivity and evaluation practices. This is aimed at improving outcomes, while recognising constraints that may hinder the decision-making culture. Nurses need to ask if the decisions they make are based on routines and norms of accepted practices, or if their decision-making autonomy challenges taken-for-granted practice and embraces new knowledge and new ways of thinking.

Finding 5: How the nurses were socialized into the unit played a significant role on how they were informed to make, implement and evaluate decisions.

Observations related to findings:

- Novice and new nurses learned the ropes by watching then doing, repeating standard and acceptable practices endorsed within the unit.
- Length of time spent in the unit often denoted an experienced nurse rather than formal qualifications and skills.

Implications from these observations include: (a) Mentoring is assumed to assist a new person entering the system, or unit, to become a functioning 'team-member', who learns the unit norms, rules, values, authoritative structures and decision-making behaviour. When these are inflexible to change and improvement, innovation and creativity is limited, reinforcing stable, yet often out-dated practices. Understanding and challenging this process is essential so that practice remains current and information accessible to all nurses regardless of how long they have worked in the renal unit context.

Recommendations:

- (i) Individual learning needs must be incorporated into a person's transition program that balances theory, practice and professional development.
- (ii) The process of acquiring competency, and eventually expertise, should not be through informal methods but have deliberate intent that is planned, evaluated, reviewed and documented.

Strategies to help accomplish recommendations include: (a) Nurse education and mentors need to readdress the function of mentoring new nurses into the working context, in which agreed goals and objectives are documented and assessed; (b) regular evaluation of the mentors by an independent person who can provide ongoing feedback to improve the program; and (c) provide weekly staff education, run by the nurses themselves, identifying areas of knowledge strength and limitations, as part of nurse performance appraisal.

Finding 6: Renal nursing incorporates multidimensional aspects of care that requires some nurses to make decisions beyond their scope of practice.

Observations related to findings:

- Increasing work and patient demand sometimes influenced nurses to knowingly and unknowingly make decisions beyond their professional role without the added advantage of specialised training or recognition.
- Inadequate education, support, time and access to resources often created a barrier for nurses to maintain and up-skill their qualifications and knowledge that resulted in satisficing rather than optimising decision-making behaviour.

Implications from these observations include: (a) The conditions that can enable and constrain decision-making are generally created by institutional practices and group interaction such as norms, language, hierarchies, temporal-spatial properties, skills, and technology. This has particular implications for renal units external to metropolitan and regional centres that have no, or minimal, nephrology medical and nursing specialists. This places extra demands on the nurses working in such contexts where patients often present in acute conditions with several associated comorbidities, and (b) it cannot be assumed that nurses possess the knowledge and skills in order to optimise decision-making.

Recommendations:

- Nurses must consciously address how decisions they make can impact on patient care and outcomes.
- (ii) Nurses need to recognise the complexity of decision-making and feel able to decline making individual decisions if, and when, they consider these are decisions that they are inadequately prepared for.

Strategies to help accomplish recommendations include: (a) Collectively nurses should review what context specific knowledge means for them, who decides what this knowledge is, how it has come to be and how this knowledge can be periodically appraised. Without this understanding, decision-making can remain constrained and out-dated. By acknowledging limitations, and perhaps out-dated practices and beliefs, the nurses can then justify their need for educational support that prepares them for advanced decision-making roles; (b) policies, procedures and clinical pathways are some examples of formalised documentation that should incorporate best-practice principles that can be evaluated for their usefulness and modified as necessary. This encourages congruency for complex decisions, yet provides flexibility for clinical judgment and discretion as required; (c) purposeful discussion can commence this process bringing the practical, everyday know-how, to a discursive level of understanding why. This can be undertaken at undergraduate levels extending beyond prescriptive-descriptive models but also address power and organisational aspects on decision-making processes. Nursing education can also be extended at the post-graduate level challenging nurses' perceptions about intuition

and expertise. This can occur within the university or work setting; and (d) using actual decision-making exemplars can highlight both good and not so good decision-making experiences as an effective teaching/learning tool.

Future Research

Renal health care is relatively new. Because of this, there are many shortcomings and discrepancies in the literature and the scientific world about how to provide renal nursing care. Trial and error appeared to be an accepted approach when making decisions, particularly for experienced nurses who knew their limits of practice and capabilities. However, this did not guarantee safe and ethical practice. Without systematic planning, evaluation and peer review, it is difficult to know if trial and error was generating better knowledge to inform decision-making. Furthermore, unreported errors and unintended consequences were also lost opportunities to enhance renal nursing knowledge. In light of this, any research into renal nursing and patient outcomes is of value as any findings impact directly or indirectly on nurses deciding what are best-practice choices.

In terms of decision-making, future research needs to address:

- How different nursing contexts impact upon how decisions are made, who are the decision makers and what this means for patient outcomes and nursing professional development. This is particularly of interest in terms of attitudes/beliefs, routines, ethics, emotions and decision risk/uncertainty.
- How decisions are evaluated in relation to patient outcomes, which to date, has been poorly studied in terms of nurses' actual contribution, and is often still inferred. In this study, the nurses' perceptions of how they contributed to patient outcomes was addressed, which tended to be favourable. However, this did not necessarily mean outcomes were favourable.
- How high presence (face-to-face) and low presence (communication technology extended across time-space) availability of decision makers, including consumers, can influence decision-making, and the outcomes achieved. This is a particular concern in terms of resource accessibility and distribution.

Many 'actors' other than nurses are part of decision-making; therefore, nurses need to be aware of how consensus and contradictions are managed. Regardless what the research study addresses, issues of power relationships and how these alternate across time-space encounters must be acknowledged. Nurses' decision-making capability, and capacity, in one place and time, for example, does not necessarily mean the same in another. Furthermore, how decisions are made between professions in terms of language and social rules can provide further information about the nursedoctor game which may itself be the dialectic of control at play, the nurse more in control than originally assumed. However, misunderstanding of social structures during interaction may limit nurses' full participation when making decisions. Investigating consensus and conflicts (Giddens, 1984), or mismatches in the data, can provide further insight into how nurses' constitute their working context. It may be this very process of constitution-reconstitution that can delay nursing's progression. Reforming beliefs, opinions and values in terms of where a nurse, or nurses, positions themselves along the dialectic of control could be a reflective tool that liberates nurses from their own constraints.

Final reflection

How nurses experience the world, will influence how they see and understand the world, therefore, how they come to act in that world (Giddens, 1984). For nurses to claim autonomy within their professional role, and be accountable and responsible for what it is they do, they require practical and discursive knowledgeability. This requires more than knowledge of how to go about from day-to-day (practical), but demands deliberate reflexivity that questions (discursive) why a nurse decides to go about a certain action in a particular way. This behaviour can either be reproduced, or produces new action 'into the emerging pattern of history' (Shackle, 1961, p. 2). Regardless, both have consequences for the future. We cannot always know the future but can learn from the past, which helps to inform the present. Such wisdom cannot be ignored, for it is through agency of making decisions that power exists in nursing.

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APPENDICES

Appendix 1: Rigour in qualitative studies

Validity and Reliability	Trustworthiness
(Germain 1993; Morse et al., 2002)	(Guba & Lincoln 1981, 1985; Creswell 2003)
Constructive procedure- verification during the stud	<i>Evaluative procedure- post hoc verification</i>
• Internal validity - <i>Face</i> validity established by selecting informants whom have sound knowledge of phenomenon and <i>Content</i> validity established through verification with many informants.	• Credibility/truth value/authenticity by: Triangulation, negative case analysis, member check, persistent observation, peer debriefing, sampling strategies Saturation of data.
• External validity or generalisability - in depth study of situation over a long period of time, understanding situation from informant's perspective and truth rests on direct experience of individuals.	• Transferability/applicability/fittingness by: Prolonged time spent in the field, rich, thick description journaling.
• Reliability - achieved by asking the same questions of different informants over a long period of time and in different circumstances; obtaining	• Dependability/auditability/consistency by: Audit trail, external auditor, coding/ categorising check patterns of themes.
repeatable data overtime from each key participant; carefully matching what is said with observed behaviour and seeking out discrepancies (Germain 1993, p.263-4).	Confirmability by: Qualitative summaries, informant confirmation, clarify bia through researcher-reflection.
*Investigator responsiveness by: being open, flexible, creative, listening to data, synthesise data, deductive/ inductive reasoning, strategic decision making.	* Triangulation Data- triangulate time, space and person Investigator – when one of more researchers involved Theoretical – use of several hypothesis or frameworks Methodological – use of two or more data collection methods
*Verification strategies by: methodological coherence, appropriate sampling, simultaneous data collection and analysis, thinking theoretically, theory development.	*Saturation of data No new findings emerge from the data.

Pseudony	n n=23	Years registered	Years renal nurse	Renal certificate	Position in unit
Sarah	1,2,3	+ 10 years	3	No	RN
Carol	1,2,3	5	3	No	RN
Emma	1,2,3	+ 20	+ 10	No	CN
Rebecca	1,2,3	+ 20	+ 15	No	CN
Jane	1,2	+ 15	1	No	RN
Sammie	1,2	+ 10	+ 5	Yes	RN
Joanne	1,2	+ 15	+ 10	No	RN
Alice	1,2	+ 10	+ 5	No	RN
Denise	1,2	+ 15	1	No	RN
Donna	1,2	+ 3	1	No	RN
Anna	1,2	+ 10	+ 5	Yes	CN
Rosemary	1,2	+ 20	+ 15	No	CN
Lynnette	1,2	+ 20	+ 15	No	CN
Julie	1,2	+ 15	1	No	CN
Monica	1,2	+ 20	+ 15	No	CN
Katie	1	+ 20	+ 15	Yes	CN
Shelley	1	+ 15	+ 10	Yes	RN
Jenny	1	+ 15	+ 5	No	RN
Bobbie	1	+ 15	+ 10	No	RN
Veronica	1	1	1	No	RN
Elizabeth	1	+ 10	+ 5	No	RN
Laura	1	+ 15	+ 10	No	RN
Diane	1	+ 15	+ 10	No	RN

Appendix 2: Profile of Nurse Participants and allocated Pseudonym

NOTE: RN (Registered Nurse); Nurse Managers signified as CN (Clinical Nurse)

Total 26 nurses in the unit; 23 participated at some level

Appendix 3: Consent to observe practice (Participant)

CONSENT TO OBSERVE PRACTICE IN THE RENAL UNIT (PARTICIPANT)

SCHOOL:	School of Nursing Science
PROJECT:	Nurses' clinical decision making in the renal unit
CHIEF INVESTIGATOR:	Miss Mary-Ann Hardcastle
CONTACT DETAIL:	School of Nursing Sciences
	Room 219
	James Cook University
	Douglas Campus, Townsville, QLD 4811
	Ph: (07) 4781 5319
	E-mail: Mary-Ann.Hardcastle@jcu.edu.au

DESCRIPTION OF THE STUDY:

From phase one of the study it became apparent how complex decision making is within the renal unit. Therefore, phase two will look beyond clinical decision making related to renal anaemia, but also incorporates all decisions made by the nurses. This part of the study involves ethnography, looking at the culture within the unit and how this impacts on nurses' clinical decision making.

Initially observations of daily practice will be undertaken. This consent form is required to inform all nurses that a research project is being conducted in the renal unit. Although only six to eight nurses will be key participants in this study, it is necessary for the researcher to gain consent from all the nurses within the unit since nursing practice will be observed. This also protects the rights of individual nurses should they be concerned that their practice is being observed, and can ask that certain observations be excluded from the data if necessary.

It is the intention of the researcher to spend several hours a day in the unit over a nine month period, and includes both haemodialysis and peritoneal dialysis. Data collection may occur at any time during the week for a few hours a day across both shifts, as deemed appropriate by the key participants, shift supervisor and unit managers themselves.

CONSENT OF THE NURSE ACKNOWLEDGING THAT A RESEARCH STUDY ON CLINICAL DECISION-MAKING IS BEING CONDUCTED IN THE RENAL UNIT

The aims of this study have been clearly explained to me and I understand what is required of me. By signing this consent I agree that the researcher can observe clinical decision making within the renal unit to gain a whole perspective, and that I am not agreeing at this time to be a key participant in the study. I know that taking part in this study is voluntary and I am aware that I can stop taking part in it at any time and may refuse to answer any questions. I understand that any information I give will be kept strictly confidential and that no names will be used to identify me with this study without my approval.

Name: (printed)	
Signature:	Date:

WITNESSED BY RESEARCHER OBTAINING CONSENT

Name: (printed) M Hardcastle

Signature:	Date:

Appendix 4: Consent to be interviewed (Informant)

CONSENT TO BE INTERVIEWED (INFORMANT)

SCHOOL:	School of Nursing Science
PROJECT:	Nurses' clinical decision making in the renal unit
CHIEF INVESTIGATOR	R: Miss Mary-Ann Hardcastle
CONTACT DETAIL:	School of Nursing Sciences
	Room 219
	James Cook University
	Douglas Campus, Townsville, QLD 4811
	Ph: (07) 4781 5319
	E-mail: Mary-Ann.Hardcastle@jcu.edu.au

DESCRIPTION OF THE DATA COLLECTION FOR PHASE TWO:

From phase one of the study it became apparent how complex decision making is within the renal unit. Therefore, phase two will look beyond clinical decision making related to renal anaemia, but also incorporates all decisions made by the nurses. This part of the study involves working closely with selected nurses to understand decision making within this context.

Additionally, I would like to gain a broader perspective and interview other people who work in the unit. This form is asking if you would consent to being interviewed. I anticipate that the interview will take approximately 30 minutes. It will then be transcribed and returned to you for further comment and to validate it's truthfulness. This consent also protects your rights as a participant in this study should you want to terminate the interview at any time or ask for data to be withdrawn.

CONSENT OF THE NURSE

The aims of this study have been clearly explained to me and I understand what is required of me. By signing this consent I agree that the researcher can observe clinical decision making within the renal unit to gain a whole perspective, and that I am not agreeing at this time to be a key participant in the study. I know that taking part in this study is voluntary and I am aware that I can stop taking part in it at any time and may refuse to answer any questions. I understand that any information I give will be kept strictly confidential and that no names will be used to identify me with this study without my approval.

Name: (printed)	
Signature:	Date:

WITNESSED BY RESEARCHER OBTAINING CONSENT

Name: (printed) M Hardcastle

Signature:

Date:

Appendix 5: The Key Participant consent form

THE KEY PARTICIPANT CONSENT FORM

SCHOOL: School of Nursing Science **PROJECT**: Nurses' clinical decision making in the renal unit

CHIEF INVESTIGATOR: Miss Mary-Ann Hardcastle CONTACT DETAIL: School of Nursing Sciences Room 219 James Cook University Douglas Campus, Townsville, QLD 4811 Ph: (07) 4781 5319 E-mail: Mary-Ann.Hardcastle@jcu.edu.au

DESCRIPTION OF THE STUDY:

Phase two of the study will explore in-depth how a nurse applies renal anaemia management within the clinical setting. The researcher will work closely with four to six nurses for approximately six months, several days per week collecting information on how the nurses manage renal anaemia, how they access information and make meaning to decide on appropriate nursing interventions and how they then evaluate patient outcomes and clinical practice. Additionally factors that promote or hinder those processes will also be investigated, looking at possible options in overcoming such barriers.

Data collection includes fieldwork; participant-observation, conversations within the clinical setting and written documentation, while semi-structured interviews will further focus on issues that may have arisen throughout the day; the interview will be audio-taped and then transcribed. The renal anaemia assessment tool will also be discussed as a more structured interview with the nurse's agreement. Throughout the data collection phase the researcher and participants collaboratively discuss the data and findings, initially on a one to one basis, while towards the end, a group discussion will be undertaken to further clarify the issues that arise. This has the intention of providing consensus of the findings rather than based on the researchers interpretation alone or focused on one particular nurse's practice. Any data collected regarding the nurse's personal practice will be analysed and produced in narrative form for their access only. Themes evolving from this data will then be presented for discussion to maintain confidentiality. All participants have a final say in what data may or may not be used.

For this reason consent is an on-going process that will be asked of the nurse each time they meet with the researcher, with the understanding that the nurse can refuse at any time to be observed or withdraw from the study. Additionally parts of information that the nurse does not wish to be included can also be withdrawn at their request. The data belongs to the nurse.

CONSENT OF THE NURSE

The aims of this study have been clearly explained to me and I understand what is wanted of me. I know that taking part in this study is voluntary and I am aware that I can stop taking part in it at any time and may refuse to answer any questions. I understand that any information I give will be kept strictly confidential and that no names will be used to identify me with this study without my approval. Any data prior to use within the thesis will be brought back to me for final consent and approval.

Name: (printed)	
Signature:	Date:

WITNESSED BY RESEARCHER OBTAINING CONSENT

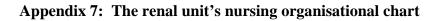
Name: (printed) M Hardcastle	
Signature:	Date:

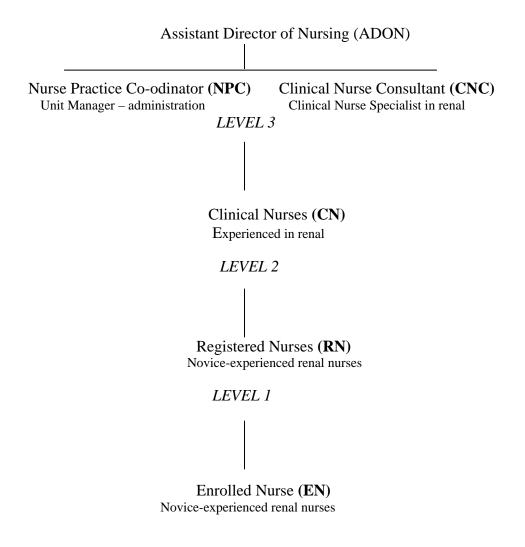
Appendix 6: Glossary of terms

Adequacy	Refers to dialysis efficiency measured via Kt/V and URR. Inadequacy can be caused by many factors including insufficient dialysis time, poor blood flow, incorrect dialyser, and infection.
Access	Access mode to the blood stream to initiate dialysis. E.G. via fistula, subclavian or tenckoff catheter.
Agency	Agency refers not to the intentions people have in doing things but to their capability of doing those things in the first (Giddens, 1984, p. 9).
Anticoagulation	Blood thinning agent to prevent clotting E.G. heparin.
Arterial pressure	Pressure measured in the blood tube (dialysis circuit) taking blood to the dialyser.
Blood flow rate (BFF	R) The rate the blood flows through the dialysis circuit measured as mls/minute.
Cannulation(needling	g) Placing of needles into the fistula.
CARI guidelines	Caring for Australians with renal impairment guidelines - consensus practice guidelines.
Contextuality	The situated character of interaction in time-space, involving the setting of interaction, actors co-present and communication between them (Giddens, 1984, p. 373).
Dialectic of control	The two way character of the distributive aspect of power (power as control); how the less powerful manage resources in such a way as to exert control over the more powerful in establishing power relationships (Giddens, 1984, p. 374).
Double hermeneutic loop	A process of translation and interpretation achieved through participant-research dialogue (Giddens, 1984).
Duality of structure	Structure as the medium and outcome of the conduct it recursively organizes; the structural properties [rules- resources] of social systems do not exist outside of action but are chronically implicated in its production and reproduction (Giddens, 1984, p. 374).

Dialysis	Involves the separation of substances via a semipermeable membrane, such as wastes or toxins from the blood, and adjusts fluid and electrolyte imbalances.
Dialysate	The fluid used in dialysis to draw unwanted solutes from the blood as it passes through the dialyser.
Dialyser	Artificial kidney made of semipermeable membrane.
Fistula	Artificially created Arterio-venous blood vessel to accommodate large bore needles (cannula) to establish sufficient blood flow for the purpose of haemodialysis.
Haemodialysis	The process of removing blood from an artery (fistula), by dialysis, adding vital substances, and returning the blood was purified back into a vein (fistula), known as a fistula.
Hypertension	High blood pressure.
Hypotension (flat)	Low blood pressure.
Ideal Body weight:	The ideal body 'fat' weight (target or dry weight) aimed for once excess fluid volume is removed.
Knowledgeability	Everything which actors know (believe) about the circumstances of their action and that of others, drawn upon in the production and reproduction of that action, including tacit as well as discursively available knowledge (Giddens, 1984, p. 375).
Kt/V	A formula to calculate dialysis adequacy - clearances of urea removed from the blood (K) over a period of time (t) from the total body volume (V). CARI guidelines recommend Kt/V 1.2 or higher.
No-show	Patient who misses a scheduled dialysis treatment.
Ontological security	Confidence or trust that the natural and social worlds are as they appear to be, including the basic existential parameters of self and social identity (Giddens, 1984, p. 375).
Optimising	Looking for all possible options or choices with the intent of maximising the decision outcome.
Peritoneal dialysis	Dialysis performed in the peritoneal cavity in which

	the peritoneum acts as the semipermeable membrane or artificial kidney.
Phosphate binders	Medication taken when a person with renal impairment is eating that binds phosphates to prevent bone disease.
Potassium bath	The amount of potassium in the dialysate fluid. Can be added prior to dialysis to increase the potassium bath concentration.
Rule of 7	A rule used by some nurses when deciding a potassium bath for stable haemodialysis patients, although this is not a rule based on documented evidence.
Routinisation	The habitual, taken-for-granted character of the vast bulk of the activities of day-to-day social life; the prevalence of familiar styles and forms of conduct, both supporting and supported by a sense of ontological security (Giddens, 1984, p. 376).
Satisficing	Making decision based on minimal information without looking for all possible options
Subclavian catheter (Central line)	A catheter inserted into the subclavian vein as a temporary access for dialysis.
Structuration	The structuring of social relations across time and space, in virtue of the duality of structure (Giddens, 1984, p. 376).
Structure	Exist only as memory traces that are recursively instantiated in day-to-day practice, expressed as "rules-resource sets" that can be enabling and constraining (Giddens, 1984, p. 377).
Tenckoff catheter	Inserted into the abdomen for peritoneal dialysis.
Ultrafiltration (UF)	Rate at which fluid is removed.
Venous pressure	Pressure measured in the blood tube (dialysis circuit) as blood leaves the dialyser back towards the person.





NOTE: Titles used during data collection phase (2002-2003).