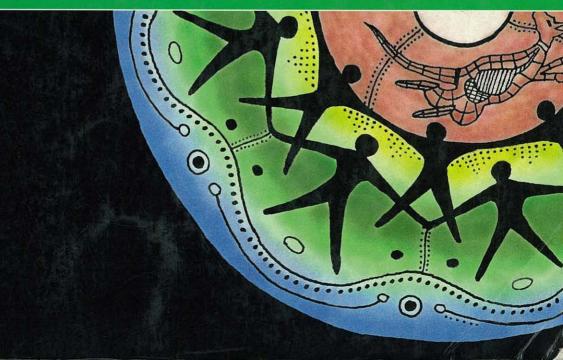
# Aboriginal Primary Health Care

An Evidence-based Approach
THIRD EDITION

# SOPHIA COUZOS AND RICHARD MURRAY

for the Kimberley Aboriginal Medical Services Council



# Aboriginal Primary Health Care

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# Aboriginal Primary Health Care

An Evidence-based Approach

THIRD EDITION

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### Dedication



This book is dedicated to the memory of Dr Puggy (Arnold) Hunter, one of Australia's outstanding Aboriginal leaders and former Chair of the National Aboriginal Community Controlled Health Organisation, whose vision strongly informed the development and revision of this work. Puggy died shortly after reaching his 50th birthday, in September 2001. His image and his name are used throughout this book in accordance with the express wishes of his family.

Puggy inspired thousands to question and reform Australian efforts to improve the health of Aboriginal peoples. He was awarded an Honorary Doctorate in April 2001 from James Cook University and a posthumous Human Rights Medal for 2001 from the Human Rights and Equal Opportunity Commission in recognition of his exceptional contribution to the advancement of human wellbeing. In 2001, the Puggy Hunter Memorial Scholarship Scheme was established by the former Federal Health Minister, the Hon. Dr Michael Wooldridge, to support Aboriginal and Torres Strait Islander students in their health studies.

Puggy's moderate voice of influence over the political agenda, his witty intellect and moral authority will continue to echo in the hearts of those who knew him. To honour Puggy, each chapter is prefaced with his often humorous and always poignant words.

#### Foreword

#### TO THE FIRST EDITION

This guide was a culmination of the work of many individuals—Aboriginal and non-Aboriginal workers, Aboriginal governing committees—from the Aboriginal Community Controlled Health Services (ACCHSs) of the Kimberley region of Western Australia over the past two decades. The Kimberley ACCHSs, like others around the country, arose through a process of Aboriginal community struggle in response to the perceived failure of mainstream health services to meet health care needs.

The achievements of the working partnerships between Aboriginal community members, local Aboriginal workers, and non-Aboriginal health professionals with technical expertise is an example of the sort of practical grassroots movement for reconciliation being called for by the National Council for Aboriginal Reconciliation. The experience of most ACCHSs is that self-determination in Aboriginal health care, far from contributing to community division, is a powerful force for community cohesion, understanding, and genuine reconciliation between Aboriginal and non-Aboriginal Australians.

Like other ACCHSs, we have operated in a climate where the health care needs of our people are great and the resources scarce. It is precisely this type of environment which demands a concentration of effort on what has been shown to do more good than harm and to do so in the most organised way possible. We needed to ensure that there was not unnecessary variation in health care practice among members of the health care team, so standardisation of approach became important. Members of the health teams required the support of practical problem-based clinical guidelines. These considerations led to the development of standard treatment guidelines and systems for their application in an Aboriginal primary health care environment.

The work in development and systematic application of management guidelines (initially paper-based, then computerised) was initiated by Dr Ian Wronski and Maggie Grant in 1988. The guidelines were updated in 1993 by Dr Stuart Garrow and, in 1995, Dr Garrow conceived the idea to further develop the guidelines as a resource manual for use in the Kimberley. The aims were to explore primary health issues relating to important Aboriginal health problems to remove uncertainty in the delivery of preventive health care, to make service approaches consistent across the Kimberley, to inform the implementation of information systems and the use of performance indicators for quality enhancement, and to promote the integration of health care approaches and enhance program sustainability.

The 'Best Practice Project', as it became known, was possible with the assistance of the Commonwealth Department of Health and Family Services, GP Divisions and Grants Program. Work on the project commenced in August 1996 with the support of the Kimberley Aboriginal Medical Services Council, comprising Aboriginal community members representing local health boards across the Kimberley. The development of National Health and Medical Research Council recommendations for guidelines, the Cochrane Database of Systematic Reviews, the evidence-based medicine paradigm, and the National Aboriginal and Torres Strait Islander Health Clearinghouse (Edith Cowan University) considerably influenced the format, methodology, and content of the review.

Following discussions with the Office of Aboriginal and Torres Strait Islander Health Services during the course of the project, the value of applying the systematic review principles to Aboriginal primary health care issues at a national level was explored. Dr Ian Anderson and Ms Alison Dell from the Office worked to develop formal national systematic reviews of a range of Aboriginal health issues. The diabetes and ear health chapters of this book were expanded for two of these reviews and thus represent shortened versions of the Systematic Reviews of Existing Evidence and Primary Care Guidelines on the management of diabetes and otitis media in Aboriginal populations (which are also currently available). The important role of the Steering Committees in the development of these documents is acknowledged.

This book should help the health staff of ACCHSs, other primary health care providers (particularly remote area practitioners), and medical students to understand the reasons for interventions and the need for certain approaches to health care that differ for the Aboriginal population. It should also strengthen the application of 'what has been shown to do more good than harm', as often there is considerable delay before best practice is implemented.

In Aboriginal health, the experienced primary health care practitioner and Aboriginal Health Worker will generally have a much better appreciation of the technical health care needs of the Aboriginal community than other medical providers. This book may help lessen a sense of isolation and empower these practitioners, particularly those working in remote areas, to feel confident dealing with health problems about which they may have had little formal training and for which information may be poorly accessible. Hopefully, this book will help to disseminate the valuable research and experience that health professionals working with Aboriginal people have acquired over many years.

Finally, I hope that this work will have a real impact on the health of my people from the Kimberley, and Aboriginal people across the country who bear so great a burden of sickness and grief.

#### Puggy Hunter

CHAIRPERSO

MAY 1998

NATIONAL ABORIGINAL COMMUNITY CONTROLLED HEALTH ORGANISATION (NACCHO)
AND KIMBERLEY ABORIGINAL MEDICAL SERVICES COUNCIL (KAMSC)

#### Foreword

#### TO THE SECOND EDITION

Following the success of the first edition of this book, the Kimberley Aboriginal Medical Services Council is pleased to endorse this second edition, developed with the assistance of Dr Sophie Couzos and Dr Richard Murray. This edition includes many additional chapters as well as revisions to the current chapters.

I am confident that this book will better equip health professionals with the information and knowledge needed for best practice in the delivery of primary health care to Aboriginal communities and help achieve the healthy outcomes we are all seeking.

The book is a technical resource, to assist you in dealing with some of the more common obstacles and tasks that you may face every day when working in Aboriginal health. It shows what we know works, in a best-practice and culturally safe way, and can be used in the clinic, home, or school context. I am proud of this book, which has been entirely developed, produced, and published to improve the delivery of health care to Aboriginal people.

Aboriginal health has been ignored or suppressed in the health system for too long now. In recent years, however, thinking has started to change. Aboriginal health is now taught at various levels in many educational training centres around Australia, and there is more interest than ever among health professionals who want to understand how to deal with health problems and the process of delivering health care to Aboriginal people.

I would recommend that all health professionals and others involved in the design and delivery of primary health care services to Aboriginal communities become familiar with this book. It provides key tools for ensuring all health professionals meet the needs of our culturally and linguistically diverse society.

Lastly, I am honoured to acknowledge Dr Arnold Puggy Hunter for his life-time contribution in ensuring Aboriginal people have access to the best possible health care.

YOURS IN HEALTH.

Henry Councillor

CHIEF EXECUTIVE OFFICER
KIMBERLEY ABORIGINAL MEDICAL SERVICES COUNCIL INC.

SEPTEMBER 2003

#### Foreword

#### TO THE THIRD EDITION

Following the success of the first and second editions of this book, the Kimberley Aboriginal Medical Services Council is pleased to release a third edition. We are grateful to the editors and authors Dr Sophie Couzos and Associate Professor Richard Murray as well as many other contributing authors who are widely respected in their field.

This landmark text includes several new chapters on antenatal care, respiratory infection (including bronchiectasis), and asthma, as well as extensive revisions of every chapter. The book is a crucial resource for health care providers in prevention, diagnosis, and effective treatment of health problems among Aboriginal populations. It will help support best practice, not just in clinical care, but in broader aspects of policy and the historical, cultural, and social dimensions of Aboriginal primary health care.

A strength of the book is that it is based on best evidence as well as the realities of Aboriginal health care as informed by health professionals with extensive experience working in the field. Many publications and reports claim to promote best practice, but lack grounding in the complexities and diversity of Aboriginal community experience.

Our aim is to enhance the personal and professional competence of all health care providers in working with Aboriginal communities to ensure that practice is both culturally appropriate and technically effective. I strongly recommend that all health care providers and anyone involved in the design and delivery of primary health care services to Aboriginal communities become familiar with this book.

YOURS IN HEALTH,

#### Henry Councillor

CHIEF EXECUTIVE OFFICER KIMBERLEY ABORIGINAL MEDICAL SERVICES COUNCIL INC.

CHAIRPERSON
NATIONAL ABORIGINAL COMMUNITY CONTROLLED HEALTH ORGANISATION
NOVEMBER 2007

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ESKD (1992-2001)

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# **Abbreviations**

ABS Australian Bureau of Statistics

ACAM Australian Centre for Asthma Monitoring

ACCHS Aboriginal Community Controlled Health Service

ACD anaemia of chronic disease

ACEI angiotensin-converting enzyme inhibitors
ACIR Australian Childhood Immunisation Register

ACR albumin-creatinine ratio
ACS acute coronary syndrome
ACT Australian Capital Territory
ADA American Diabetes Association

ADGP Australian Division of General Practice

AF atrial fibrillation
AFB acid-fast bacilli

AGPS Australian Government Publishing Service
AHMAC Australian Health Ministers' Advisory Council

AHS Australian Hearing Services
AHW Aboriginal Health Worker

AIDS acquired immunodeficiency syndrome
AIHW Australian Institute of Health and Welfare

AI/NA American Indian/Native Alaskan
ALRI acute lower respiratory tract infection

AMA Australian Medical Association
AMI acute myocardial infarction
AMS Aboriginal Medical Service

ANZDATA Australia and New Zealand Dialysis and Transplant Registry

AOM acute otitis media

APSGN acute post-streptococcal glomerulonephritis
ARB/ARA angiotensin II receptor blockers/antagonists

ARF acute rheumatic fever ARR absolute risk reduction

ASCO Australian Standard Classification of Occupations

**ASOT** anti-streptolysin O titre

ASPREN Australian Sentinel Practice Research Network

ASVS Australian Standard Vaccination Schedule

ATSIC Aboriginal and Torres Strait Islander Commission

AUDIT Alcohol Use Disorders Identification Test

AusDiab Australian Diabetes Obesity and Lifestyle Study

Aust Australia

BCG Bacille Calmette-Guérin

**BEACH** Bettering the Evaluation and Care of Health

BIT Burrow ink test
BMI body mass index
BP blood pressure

BRAMS Broome Regional Aboriginal Medical Service

BSE breast self-examination
BTR bilamellar tarsal rotation
BV bacterial vaginosis

BV bacterial vaginosis
CAD coronary artery disease

CAP community acquired pneumonia

CAPD continuous ambulatory peritoneal dialysis
CARI Caring for Australians with Renal Impairment
CARPA Central Australian Rural Practitioners Association

CBE clinical breast examination

CCCH Centre for Community Child Health

CDC Centers for Disease Control and Prevention, Atlanta, USA

CDEP Community Development Employment Program
CDHAC Commonwealth Department of Health and Aged Care
CDHFS Commonwealth Department of Health and Family Services

CDT carbohydrate-deficient transferrin

CESCR Committee on Economic, Social and Cultural Rights

CHD coronary heart disease

CHINS Community Housing and Infrastructure Needs Surveys

CHIP Community Housing and Infrastructure Program

CHSP Commonwealth Hearing Services Program

CI confidence interval

CIN cervical intraepithelial neoplasia

CKD chronic kidney disease CKMB creatinine kinase-MB

COAD/COPD chronic obstructive airways disease/pulmonary disease

COAG Council of Australian Governments
CQI Continuous Quality Improvement

CR cardiac rehabilitation

CRCAH Cooperative Research Centre for Aboriginal Health

CRF chronic renal failure

CSLD chronic suppurative lung disease
CSO Community Service Obligation
CSOM chronic suppurative otitis media

CT computerised tomography

CTN 'call to needle time'
CVD cardiovascular disease

CXR chest X-ray

DAA Department of Aboriginal Affairs

DCCT Diabetes Control and Complications Trial

DNA deoxyribonucleic acid

**DOT** direct observation of treatment

DSM-IV Diagnostic and Statistics Manual of Mental Disorders

ECG electrocardiogram
EIA enzyme immunoassay

**ENL** erythema nodosum leprosum

EPC ear, nose, and throat enhanced primary care

EPDS Edinburgh Postnatal Depression Scale

**EPO** erythropoietin

**ESKD** end-stage kidney disease

ETS environmental tobacco smoke

FACSIA Department of of Families, Communities Services and

Indigenous Affairs

FASD fœtal alcohol spectrum disorders

FBE full blood examination

FDA US Food and Drug Administration

FCAATSI Federal Council for the Advancement of Aborigines and Torres

Strait Islanders

**FEV1** forced expiratory volume in 1 second.

FPG Fasting Plasma Glucose

FTT failure to thrive FVC forced vital capacity

GAD glutamic acid decarboxylase

**GAPP** Guidelines for Addressing Postnatal Problems

GAS group A streptococci

GBHC gamma-benzene-hexachloride

GBS group B streptococcus
GCT glucose challenge test
GDM gestational diabetes mellitus

GET Global Elimination of blinding Trachoma

GFR glomerular filtration rate
GGT gamma-glutamyl transferase
GINA Global Initiative for Asthma

GNP glomerulonephritis
GP general practitioner
GTT glucose tolerance test

**HAHU** Heads of Aboriginal Health Units

HD haemodialysis

HDL high density lipoprotein
HFL Healthy for Life program

HFP Aboriginal and Torres Strait Islander Health Performance

Framework

Hib Haemophilus influenza type b HIV human immunodeficiency virus

HKML heat-killed M. leprae

HLA human leukocyte antigen

HMG CoA Hydroxymethylglutaryl coenzyme-A HPF health performance frameworks

HPV human papilloma virus

HRCT high resolution computed tomography
HREC human research ethics committee

HSV herpes simplex virus

HTLV-1 human T-lymphocytic virus type 1
ICCs Indigenous Coordination Centres
ICD International Classification of Diseases

ICESCR International Covenant on Economic, Social and Cultural

Rights

ICS inhaled corticosteroids

ICT information and communication technology

IDDM insulin dependent diabetes mellitus
IDF International Diabetes Federation

IHD ischaemic heart disease

ICD-10-AM International Classification of Diseases, 10th Revision, Australian

Modification

**IFG** impaired fasting glucose

IGRAs interferon-γ release immunoassays

IGT impaired glucose tolerance

IM intramuscular

IM/IT information management/technology

IMPAKT Improving Indigenous Patient Access to Kidney Transplantation

INR International Normalised Ratio
IPD invasive pneumococcal disease
IRIS Indigenous Risk Impact Screen

ISTC Interational Standards for Tuberculosis Care

IT information technology
IU international units

**IUGR** intrauterine growth retardation

IV intravenous

IVP intravenous pyelogram

KAMSC Kimberley Aboriginal Medical Services Council

KCAT Kidney Check Australia Taskforce

xxxix

KSDC Kimberley Satellite Dialysis Centre

LBC liquid-based cytology
LDL low density lipoprotein

LDL-C Low density lipoprotein-Cholesterol

LBW low birth weight
LFT liver function test
LIFE Living is For Everyone
LMP last menstrual period
LTBI latent TB infection
LV left ventricular
MB multibacillary

MBS Medicare Benefits Schedule

MCDS Ministerial Council on Drug Strategy

MCV mean cell volume

MDG Millennium Development Goals

MDI metered dose inhaler

MDRD modification of diet in renal disease

MDT multi-drug therapy

MGRS Multicentre Growth Reference Study

MI myocardial infarction

MIC minimum inhibitory concentration

MIMS Monthly Index of Medical Specialities

MMR maternal mortality ratio

MRSA methicillin-resistant Staphylococcus aureus

MSU mid-stream urine

NAA nucleic acid amplification
NAC National Asthma Council

NAAT/s nucleic acid amplification testing/tests

NACCHO National Aboriginal Community Controlled Health

Organisation

NAGATSIHID National Advisory Group on Aboriginal and Torres Strait

Islander Health Information and Data

NAHS National Aboriginal Health Strategy

NAIHO National Aboriginal and Islander Health Organisation

NAT nucleic acid based tests

NATSIHC National Aboriginal and Torres Strait Islander Health Coucil
NSFATSIH National Strategic Framework for Aboriginal and Torres Strait

Islander Health

NATSIHO
National Aboriginal and Torres Strait Islander Health Official
NATSIHS
National Aboriginal and Torres Strait Islander Health Survey
NATSINSAP
National Aboriginal and Torres Strait Islander Nutrition Strategy

and Action Plan

NATSISS National Aboriginal and Torres Strait Islander Social Survey

NSDS National Chronic Disease Strategy

NCHS National Centre for Health Statistics

NDOQRIN National Diabetes Outcomes Quality Review Initiative

NDSS National Diabetes Services Scheme

NFI nerve function impairment
NGO non-government organisation

NHFA National Heart Foundation of Australia

NHMRC National Health and Medical Research Council

NHS National Health Survey

NIASH/S National Indigenous Australians Sexual Health Strategy

NICE National Institute for Clinical Excellence non-insulin dependent diabetes mellitus

NIHIP National Aboriginal and Torres Strait Islander Health

Information Plan

NIPII National Indigenous Pneumococcal and Influenza Immunisation

Program

NIPS National Immunisation Program Schedule

NNDSS National Notifiable Diseases Surveillance System

NNT number needed to treat

NPHP National Public Health Partnership
NRF National Reporting Framework
NSAIDS non-steroidal anti-inflammatory drugs

NSFATSIH National Strategic Framework for Aboriginal and Torres Strait

Islander Health

NSHSVH National Strategy for Heart, Stroke and Vascular Health in

Australia

NSIF National Service Improvement Framework
NSMPI Nuclear Stress Myocardial Perfusion Imaging

NSP needle and syringe program
NSTEACS non-ST-segment elevation ACS

NSTEMI non-ST-segment elevation myocardial infarction

NSW New South Wales
NT Northern Territory

NTEHP National Trachoma and Eye Health Program

NTM non-tuberculous mycobacteria

NZ New Zealand

OATSIH Office for Aboriginal and Torres Strait Islander Health

OM otitis media

OME otitis media with effusion

OTC over the counter paucibacillary

PBS Pharmaceutical Benefits Scheme
PCI percutaneous coronary intervention

PCR polymerase chain reaction PCV pneumococcal vaccine

PEF peak expiratory flow

PHAA Public Health Association of Australia

PHC primary health care

PHCAP Primary Health Care Access Program

PHE periodic health examination

PHOFA Public Health Outcome Funding Aggreement

PID pelvic inflammatory disease
PIP Practice Incentives Program

PIRS Patient Information and Recall Systems

POC point of care

**PPD** purified protein derivative

PPV penicillinase producing neisseria gonorrhoea
ppV polysaccharide pneumococcal vaccine

PPV polysaccharide pneumococcal vaccine
(A)PSGN post-streptococcal glomerulonephritis or acute PSGN

PY person-years Old Queensland

RACGP Royal Australian College of General Practitioners

RAD reactive airway disease

RAWG Research Agenda Working Group (Aboriginal Health)
RCIADIC Royal Commission into Aboriginal Deaths in Custody

RCT randomised controlled trial
RDH Royal Darwin Hospital
RHD rheumatic heart disease

RNA ribonucleic acid

Rpa reteplase RR relative risk

RPR rapid plasma reagin
RRR relative risk reduction
RSV respiratory syncytial virus

SA South Australia

**SAR** service activity reporting

SCATSIH Standing Committee on Aboriginal and Torres Strait Islander

Health

SDRF Service Development and Reporting Framework
SFCS Stronger Families and Communities Strategy

SMBG self-monitoring of blood glucose

SMR standardised mortality (or morbidity) ratio

SNAICC Secretariat of National Aboriginal and Islander Child Care

SRA Shared Responsibility Agreements

**STD** sexually transmitted disease

STEMI ST-segment elevation myocardial infarction

**STI** sexually transmitted infection

TAIHS Townsville Aboriginal and Islander Health Service

Tas Tasmania

TB tuberculosis

TCC total contact casting
TF follicular trachoma

TG triglyceride

TI inflammatory trachoma
TIA transient ischaemic attack
TM tympanic membrane

TNK tenecteplase

TPa tissue plasminogen activator
TST tuberculin skin testing

UA unstable angina

UDHR Universal Declaration of Human Rights

UK United Kingdom

UKPDSG United Kingdom Prospective Diabetes Study Group

UN United Nations

UNICEF United Nations Children's Fund URTI upper respiratory tract infection

USA United States of America

USPSTF United States Preventive Services Task Force

UTI urinary tract infection

VAHS Victorian Aboriginal Health Service
VDRL venereal disease research laboratory

Vic. Victoria

VMT-ST voluntary muscle and sensory test

VT vaccine type
WA Western Australia

WAACHS Western Australia Aboriginal Child Health Survey

WC waist circumference

WHO World Health Organization

WHR waist-hip ratio

WIC Women Infants and Children's Program

WPHC well person's health check

# Introduction

Please, before you go running off with all good intentions, talk to our mob around the country. Talk to our services, because I can honestly tell you from the position that NACCHO is in, we would not—I will not- endorse anything that comes to the table that hasn't been endorsed by my local community or through the State bodies. So if you are going to do Aboriginal health, do it with us, don't do it without us.

The late Dr Puggy Hunter

This book is a guide to help health professionals deliver primary health care and develop health policy that is appropriate, valid, sustainable, and acceptable to Aboriginal populations.

It is a reference document from which students, health providers, and organisations can access summarised 'evidence' relating to health problems faced by Aboriginal peoples and Torres Strait Islanders, but it also serves to guide clinical practice through explicit supported statements that help practitioners make decisions in the clinical situation. While the book may be seen as a guideline in this respect, its role is more as a resource for the local development of guidelines or a template against which to achieve local agreement so as to enhance the implementation of best practice. The local development or modification of guidelines by general practitioners/health staff who will be using them is a well-recognised and critical strategy to facilitate implementation is thought to be an important strategy in general practice. <sup>2,3,4</sup>

This book is also a tool for enabling more equitable health system responsiveness to the Aboriginal and Torres Strait Islander population. There is a strong health policy and population approach that informs on disparities in access to health care and where reforms are needed. It is hoped the book will help to overcome bureaucratic inertia by providing evidence for preventive interventions and health policies that can make a difference.

# Primary health care

The delivery of health care to Aboriginal and Torres Strait Islander populations invariably has a strong disease-control or public health focus because of the continuing burden of

diseases associated with poverty. An emphasis on both the individual and the population is a hallmark of primary health care.

The Aboriginal Community Controlled Health Services (ACCHSs) have been implementing primary health care since the early 1970s, when they were first developed. The international movement to implement health care that encompassed health promotion strategies, nutritional and environmental interventions for disease control, social supports, and essential drugs in addition to primary medical care was defined as 'primary health care' by the World Health Organization (WHO) Conference in Alma-Ata in 1978.<sup>5</sup>

Aboriginal Community Controlled Health Services still best exemplify the delivery of primary health care in Australia. 'Primary health care' according to the National Aboriginal Community Controlled Health Organisation (NACCHO) is defined as essential, integrated care based upon scientifically sound and socially acceptable procedures and technology made accessible to communities (as close as possible to where they live) through their full participation, in the spirit of self-reliance and self-determination. Subject to the availability of resources, care involves the treatment of diseases and management of chronic disease, provision of medication, preventive medicine, dental health, counselling, health education and promotion, rehabilitative services, antenatal and postnatal care, maternal and child care, and environmental health and community support services (such as transport, advocacy, home care, interpreting services, school health, prison health, funeral support, provision of food, financial assistance, etc) in a holistic context.<sup>6</sup>

Primary health practitioners are patient advocates and have a fundamental role to play in ensuring health equity. This means that the social and economic forces that influence health and disadvantage patients are considered in the provision of health care. The breadth of preventive interventions, together with their indisputable importance, is what makes primary health care so vital yet so misunderstood by policy makers as evidenced by insufficient resourcing of the sector that targets the Aboriginal and Torres Strait Islander population (chapters 1 and 2).

# Evidence-based practice

The health care paradigm of evidence-based practice has focused attention on the determinants of current practice and the need for 'best practice' in the management of important health problems.<sup>7</sup> Evidence not only drives clinical interventions, but should also drive policy,<sup>8</sup> although this is rarely the case (chapter 2). Health providers are now very aware of the value of evidence-based approaches that aim to improve health outcomes by focusing on health care processes that have been shown to: do more good than harm, decrease practice variation, and optimise resource utilisation.<sup>9</sup>

Practice variation often stems from uncertainty in the types of interventions that work best, especially for the health problems faced by the Aboriginal and Torres Strait Islander population. This is because of Aboriginal people's greater burden of disease: higher levels of co-existing morbidity; poorer access to health systems, education, and

health hardware; and preponderance of diseases reflecting poverty and disadvantage that are uncommon in other Australians such as skin infections, suppurative ear infections, trachoma, tuberculosis, and rheumatic fever. Some diseases considered to have been eradicated from Australia still occur in the Aboriginal and Torres Strait Islander population (for example, leprosy).

Many students also receive no training in handling these matters. In ACCHSs where nearly 90% of the episodes of care are to Aboriginal or Torres Strait Islander patients, <sup>10</sup> there is a frequent turnover of health staff, and a great deal of practice is based on 'word of mouth' passed on through an apprenticeship system or by trial and error repeated over the years. Valuable time and goodwill may be lost in the process and this is compounded by the difficulties in doctor recruitment for ACCHSs across Australia, so a need for guidance on the delivery of evidence-based preventive interventions is fundamental. The good news is that in 2004 the Committee of Deans of Australian Medical Schools (now known as Medical Deans Australia) endorsed a national curriculum framework for the inclusion of the health of Aboriginal peoples and Torres Strait Islanders in all medical curricula. <sup>11</sup>

How health policy in Australia is made (or not made) is also generally a mystery to those who deliver clinical care. This need not be the case and is largely the result of medical curricula lacking content on the Australian health policy process. Knowledge of health policy is of vital importance when delivering health care to Aboriginal peoples because the health sector perpetuates inequities when it excludes those who need health care the most. How this happens should be understood, lest health professionals unwittingly contribute to these inequities.

# Terminology

... they even tried to call us some sort of insect a while ago by calling us 'Atsics' and now they still try to chuck us together in a sense by saying 'indigenous'.

Dr Puggy Hunter, Opening Address, 6th National Rural Health Conference, March 2001

This book respects the preferred terminology when referring to the Aboriginal and Torres Strait Islander population. <sup>12</sup> The term 'Aboriginal peoples' reflects the diversity of the original people of Australia. The term 'Indigenous Australians' is less commonly used, and Indigenous is always capitalised.

Although this book makes reference to Aboriginal people's health, there is significant heterogeneity within this population, with diverse Aboriginal nations each with their own language and traditions. Aboriginal peoples in different regions of Australia face similar but at times different health problems, or the same health problems but to different degrees. Moreover, the health of Torres Strait Islanders, who come from the islands of the Torres Strait beyond Cape York in Queensland, is very similar to that of Aboriginal peoples but Torres Strait Islanders represent a distinct Indigenous Australian population. While authors of this book have taken care to distinguish between

populations, many studies combine Aboriginal and Torres Strait Islander population data, and therefore effort has been made to be inclusive so that the information in the book can be applicable to both Aboriginal peoples and Torres Strait Islanders.

### Generalisability

In Australia, interventional research involving the Aboriginal or Torres Strait Islander population is rare. Consequently, for this book there was a need to draw on international studies and expert consensus statements that could be generalised to the Aboriginal and Torres Strait Islander population.

The 'transferability' or 'generalisability' of research is the inference that research findings in one population can be applied to others. One way of defining populations is by their 'race'/ethnicity, but generalising research is usually more about characterising the influence of factors other than 'race'/ethnicity per se on expected outcomes. Some of the factors which may influence the generalisability of research are differences in age, sex, degrees of biomedical risk, diagnostic skill of practitioners, health resources, client adherence, and socioeconomic status. <sup>14</sup> In applying research findings to other populations, the question may be posed: 'Is my patient so different from those in the trial that its results cannot help me make my treatment decision?' <sup>15</sup>

Using ethnicity to justify against generalising research findings can be potentially unethical. For example, there is little evidence that ethnicity predicts differences in pharmacological responsiveness because it cannot be given a precise biological definition as race and ethnicity are widely agreed to be social constructs. <sup>16,17</sup> Using ethnicity as a criterion may inappropriately deny medicines to certain population groups when they have been shown to work generally. <sup>18</sup>

Policy makers are tending to place emphasis on commissioning research that examines whether treatments or health systems applied to Indigenous Australian populations and health care settings achieve the same outcomes as those already shown for the general population. The reasons for this may be political, or may be due to misunderstanding. One thing is certain: given the significant heterogeneity of the Aboriginal and Torres Strait Islander population within Australia, it is not possible to make any generalisation about an ethnographic basis for differences in therapeutic outcomes.

A famous example of the exploitation of the characteristics of trial subjects was the US Food and Drug Administration (FDA) approval of the isosorbide/hydralazine drug combination for heart failure<sup>20</sup> for only one ethnic/racial group (African Americans). The evidence from the trial did not show variations in drug response attributed to ethnic group, it merely showed it worked in African Americans. The regulatory restrictions on ethnicity were imposed only because they were requested by the drug company<sup>21</sup> for market gain. The FDA's defence was that making the medicine available was in the interests of African Americans.<sup>22</sup> While others believe this was well intentioned, it was a flawed interpretation of the trial and set back future drug approval mechanisms.<sup>23</sup> There is a difference between policy that allocates medicines

to population subgroups because of disparate disease burdens from that which suggests ethnic differences in efficacy.

The issue of generalising study findings is now being investigated at the genetic level. Pharmacogenomics is a new field exploring the genetic basis for differences in drug responses with the aim of predicting individual responsiveness to therapy,<sup>24</sup> but it raises ethical and legal concerns if applied inappropriately to population subgroups.<sup>25,26</sup>

Many individual and population-based interventions do not involve drug therapy and the generalisability of external studies in these situations may be dependent on Aboriginal people's values, culture, social expectations, expertise in program delivery, and resources. This explains the need for Indigenous-specific programs and policies, in addition to the equity argument. Such considerations should not be used to deny services or policies directed to the Aboriginal and Torres Strait Islander population.

The key message regarding generalisability is that too much emphasis is placed on whether research findings apply to a certain patient population. The complaint has been: 'but no study has shown that this works in the Aboriginal population'; when, in fact, 'energy currently devoted to agonising over the minutiae of the inclusion and exclusion criteria used to generate the research evidence, is better spent considering how it can be applied to the special situations and values of our patients'.<sup>27</sup>

#### Format of the book

All of the health problems reviewed in this book contribute significantly to the burden of disease affecting Aboriginal peoples, but are amenable to prevention and to improvements in the consistency of practice (by reducing unnecessary variations), with the potential to reduce morbidity and costs to the health sector if interventions are widely implemented. The 3rd Edition Reference Group (see Acknowledgments) guided the process of revision and the selection of new chapters. Selected authors represent those invited by the Reference Group on the basis of their expertise in the subject matter.

All chapters, with the exception of those addressing the policy process, social issues, organised prevention, well person's health check, and pregnancy care have a similar format. They begin with health policy positions endorsed by governments or other bodies, which may describe health goals and targets for the Aboriginal and Torres Strait Islander population. Identifying such agreements (or lack thereof) is of vital importance as health policies set the scene for primary health care resourcing, and can thus influence clinical care. The absence of an agreement or policy may assist in opening up opportunities for their development. To understand the importance of health policy, the editors strongly encourage reading chapters 1 and 2 of this book.

Chapter sections on the burden of disease, case definitions, and diagnostic procedures follow 'goals and targets', with subsequent discussion of the evidence for preventability. In order to define, organise, and separate prevention strategies from standard disease management approaches, 'prevention' has been divided into primary, secondary, and tertiary types:

- primary prevention—aims at complete avoidance of the disease or to delay its
- secondary prevention—aims at detecting and curing the disease before it causes symptoms
- tertiary prevention—aims at minimising the consequences for a patient who already
  has the disease.

These definitions reflect the public or population health approach to disease control. 28 This approach was selected in order to enable *systematic* disease management because this is what defines *primary health care* and differentiates it from primary medical care, hospital care, or palliative care. Primary health care practitioners need to view the management of disease at all levels—from interventions that influence health hardware, social or behavioural factors, or the provision of immunisation or chemoprophylaxis before the disease is evident, through to interventions that engage with tertiary level health care and rehabilitation services.

#### Methodology

Because of the breadth of the subjects addressed in this book, many types of evidence were used. The use of primary research has been combined with existing integrative summaries such as systematic reviews and meta-analyses and, when unavailable, the use of overviews or narrative summaries by experts. Clinical practice guidelines developed and used by other health services, nationally and internationally, have been used in order to address practical issues for which evidence was lacking, such as optimal follow-up periods after treatment.

The collation and synthesis of research in a systematic review considers the hierarchy of primary research. The best 'evidence' that defines optimal therapeutic approaches is that derived from randomised controlled trials. A combination of randomised controlled trials synthesised in a meta-analysis or systematic review constitutes evidence of the highest quality because it is least subject to bias.<sup>29</sup> The following system of levels of research evidence illustrates this hierarchy:

- level I—based on studies, such as meta-analysis or systematic reviews, of all relevant randomised controlled trials
- level II—based on well-designed randomised controlled trials
- level III—based on well-designed cohort or case-control analytic studies
- level IV—based on opinions of respected authorities, clinical experience, descriptive studies, and case reports or reports of expert committees.

In order to supplement areas of clinical uncertainty, authors have sourced evidence that comprised expert opinion through position statements, guidelines, and other consensus-based documents. The use of grey literature (unpublished) and published Aboriginal expert opinion (for example, Aboriginal Health Workers) was encouraged. It is important to acknowledge that clinical decisions still have to be made in the absence of research evidence, which highlights the importance of expert opinion as reported

from consensus statements or overviews. This book has used expert opinion where there is an absence of higher-level evidence.

Authors used a qualitative approach to synthesis of the research literature similar to that used by the US Preventive Services Task Force.31 Integration took the form of a narrative summary within chapters. Other forms of synthesis included tabular representation of studies and their major findings.

#### Implementation

Although individual health services should decide how they will 'put prevention into practice', clinical chapters have a section on implementation, data collection, and performance indicators to provide a practical framework. In order for guidelines to become part of the routine primary care process, this book has suggested care plans and recall schedules where relevant as well as general principles for organising prevention (chapter 4). These can assist services to measure progress and are a part of quality assurance activity that is increasingly being requested of services by funding bodies. Some performance indicators or process indicators have been suggested, the collection of which will depend on the sophistication of the information technology used by services. Ultimately, the collection, aggregation, and analysis of this practice level information is a matter for individual health services to determine.

The emphasis on population approaches is crucial in informing services on how to optimise field team and opportunistic preventive health care delivery, as well as assisting regional public health units with program design. The recommendations are not intended to be prescriptive. Standard treatment manuals are widely available and should be consulted.31,32

Guidelines for clinical practice are useless if they are not used. It is hoped that this book will strengthen the substantial contribution that Aboriginal and non-Aboriginal primary health care providers such as general practitioners, nurses, Aboriginal Health Workers, allied health workers, and students are making in their efforts to make the health system more equitable for Aboriginal peoples and Torres Strait Islanders across Australia. If we were to see an authentic political commitment towards 'health equality within a generation' for Aboriginal peoples in the next few years, 33 we could also hope that by 2027 a book such as this would not be needed.

#### Notes

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