

HEALTH INDICATORS IN PEOPLE WITH CHRONIC KIDNEY DISEASE FOLLOWING THE INTRODUCTION OF AN ERYTHROPOIETIN STIMULATING AGENT

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BACKGROUND

Chronic kidney disease (CKD) is a complex condition which impacts on an individual's quality of life (QoL) and ability to perform everyday activities. Fatigue is also a common symptom experienced by people with CKD. Little, however, is known about the influence of anaemia and whether fatigue contributes to QoL and activity levels. This study builds on previous research.¹⁻³

RESEARCH QUESTION

Does QoL, activity and fatigue levels of people with anaemia secondary to CKD change over a 12 month period following the introduction of erythropoietin stimulating agent (ESA)?

METHODS

Design: Longitudinal repeated measure

Sample: 29 people with CKD

Data collected at baseline, 3, 6 & 12 months:

- Demographic - age, gender & marital status
- Renal History - cause of renal failure, haematology and biochemistry results and anaemia therapy.
- Instruments -
 - i) Quality of Life (SF-36)
 - ii) Human Activity Profile (HAP)
 - iii) Fatigue Severity Scale (FSS)

	Mean	SD
Baseline	49.0	13.23
3 months	46.8	13.05
6 months	39.2	18.54
12 months	42.2	13.52

RESULTS

- ❑ Of the 29 renal patients, 5 died, 2 withdrew & 1 lost to follow-up.
- ❑ Ages 31 to 84 years (mean = 64).
- ❑ Table 1 reveals descriptive scores for each time point.
- ❑ QoL was low & did not change from baseline to 12 months after commencing an ESA (Table 2).
- ❑ Levels of fatigue significantly improved over time ($\lambda=.492$, $F(3,11)=3.78$, $p<.05$).
- ❑ Table 3 shows that the highest levels of fatigue occur when the ESA is started (baseline) and was lowest 6 months later.
- ❑ Activity level (HAP) did not improve over time ($\lambda = .669$, $F(3,13)=2.14$, ns).

Table 1 Quality of Life, Activity & Fatigue Scores Over Time

	Baseline Mean (SD)	3 months Mean (SD)	6 months Mean (SD)	12 months Mean (SD)
SF36 (mental health)	46.92 (7.23)	46.73 (4.99)	46.71 (3.1)	48.44 (3.65)
SF36 (physical health)	45.25 (6.6)	46.86 (5.73)	46.76 (4.96)	48.43 (4.6)
HAP (activity level)	43.40 (17.76)	47.95 (20.07)	47.61 (23.68)	48.22 (23.23)
FSS (fatigue level)	47.69 (13.18)	47.61 (12.87)	38.70 (17.18)	42.35 (13.19)

Table 2 Change in Quality of Life

Subscales	λ Wilks Lambda	F	p	N	η^2 Partial Eta Squared
Physical functioning	.786	1.17	ns*	16	.214
Role physical	.892	.725	ns	21	.108
Bodily pain	.951	.292	ns	20	.049
General health	.628	1.97	ns	13	.372
Vitality	.88	.499	ns	14	.12
Social functioning	.932	.338	ns	17	.068
Role emotional	.842	.812	ns	16	.158
Mental health	.762	1.14	ns	14	.238
Physical health	.679	1.42	ns	12	.321
Total mental health	.728	1.37	ns	14	.272

* $p>.05$

IMPLICATIONS FOR PRACTICE

- ❑ There is a need for increased assessment by nurses to identify and monitor changes in QoL, fatigue and activity levels in people with CKD.
- ❑ Early detection of a person's inability to engage in normal daily activities due to increasing levels of fatigue is necessary.
- ❑ Early detection would enable timely nursing interventions to optimise QoL and independent activity.

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