What aspects of acceptance influence health related quality of life in Haemodialysis patients?

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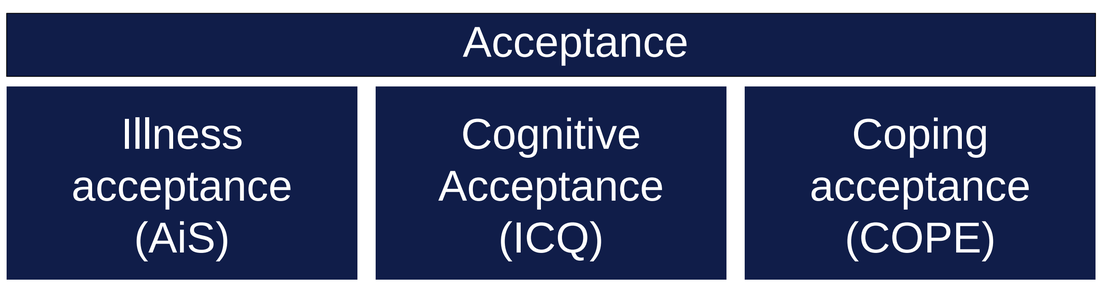
Introduction

How patients accept illness is important for helping people manage conditions that cannot be improved through medication or therapies.

Evidence from a range of chronic conditions suggests that more positive acceptance facilitates improvements in patients' quality of life (QoL) however there is variation in the measures used to measure acceptance.

To identify the components of acceptance which determine health related Quality of Life (QoL) in haemodialysis patients, we compared, the influence of three measures of acceptance on QoL – 'Illness acceptance' as measured by the Acceptance of illness scale (AiS), 'coping acceptance' by the COPE and 'cognitive acceptance' by the Illness cognition questionnaire (ICQ).



Methods

Questionnaire study

98 Haemodialysis patients from one dialysis unit

Questionnaires including three measures of acceptance

- Acceptance of Illness Scale
- Illness cognitions questionnaire
- The COPE inventory

QoL was measured using the KDQoL scale, with three component scores being used for analysis; Physical QoL, Mental QoL and Kidney Disease burden.

The standard approach to regression was taken with three analyses run with each focus one of the components of QoL as the dependent variable. The regression analysis took account of significant baseline differences; age, employment status and depression.

Demographic characteristics of sample population	Total N=98
Gender (male), n (%)	64 (65.3)
Age (years) mean (SD)	62.24 (13.97)
Ethnicity (white), n (%)	85 (86.7)
Marital status, n (%)	
Married or living with partner	47 (48)
Single, divorced or widowed	51 (52)
Employment status, n (%)	
Employed full/part time	22 (22.4)
Retired/not seeking employment	70 (71.4)
Other	5 (5.1)
Mean time on Dialysis (months), mean (SD)	37.5 (46.55)

Results

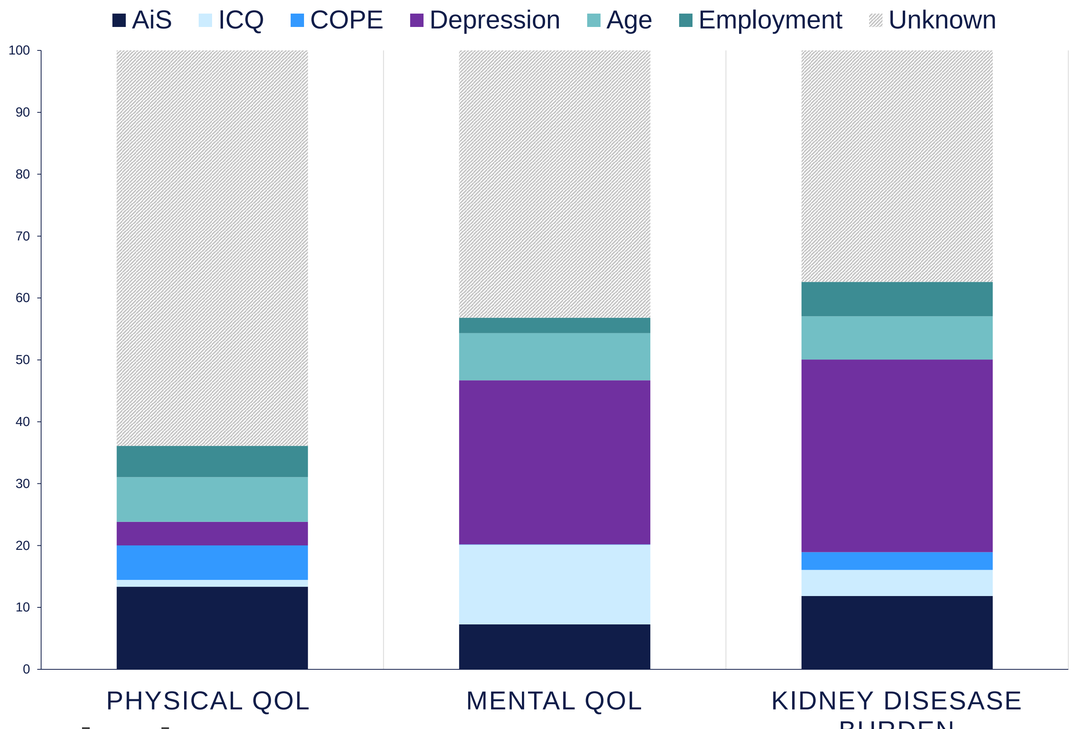
Illness acceptance was correlated with cognitive acceptance (r=.49, p<0.001) but not correlated with coping acceptance (r=.035, p=.730). Cognitive and coping acceptance were significantly correlated (r=.28, p= 0.004)

Overall acceptance, as measured by the three scales, was found to be a significant predictor of physical QoL (f(6,88)=7.984, p<0.001), mental QoL (f(6,88) 17.787, p<0.001) and burden of kidney disease (f(6,95)=23.068, p<0.001).

Figure 1 illustrates that across the three components; Illness acceptance was the strongest independent predictor of physical QoL (β=.47 p=0.001) and an independent predictor of kidney disease burden (β =.279, p=0.005) however for mental QoL cognitive acceptance was the strongest predictor (β=.230, p=0.011). Coping acceptance was only a significant independent predictor of physical QoL (β=-.209, p=0.026). Overall the Physical QoL regression model accounted for the smallest proportion of the variance.

In mental QoL acceptance was mediated by depression (Sobel=0.547, 95% CIs 0.3630 to 0.7762, p<0.0001).

FIGURE 1: PROPORTIONAL REPRESENTATION OF STANDARDISED BETA VALUES PREDICTOR VARIABLES



Conclusions

The results indicate that there are differences between the three measures of acceptance. However they are not entirely separate constructs; illness acceptance and cognitive acceptance are related to some extent. The results show that acceptance is a significant factor in QoL but the importance of each type of acceptance varies across the QoL components.

Across the QoL domains, elements of acceptance are identified as predictors however this must be taken in context. For physical QoL illness acceptance is a significant predictor however the overall model accounts for a less than 40% of the variance. The importance of acceptance in relation to depression also needs to be considered, as data shows that depression mediates the effect of acceptance in some domains.

For haemodialysis patients, who must manage demanding treatment and the associated physical symptoms, increasing their acceptance of illness may reduce the dialysis-related burden they experience, thereby improving their quality of life. Developing acceptance-based interventions should consider the different acceptance types and how these might be targeted to deliver improvements in QoL across the different QoL domains