Quality of Life Progression During Dialysis Initiation

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Introduction

• Dialysis initiation is associated with emotional distress and poorer quality of life (QOL)
• Reduced internal and external resources may perdix which patients are at a greater risk of QOL decline

Objectives

• To assess, QOL changes over time, specifically as patients transition from (CKD) after Chronic Kidney Disease pre-dialysis care to dialysis initiation
• To evaluate the possible impact of internal (resilience) and external (emotional support) resources on QOL change during dialysis initiation

Quality of Life Assessments

KDQOL - 36
Kidney Disease Quality of Life Survey

- • Resilience, frequently used measure of QOL
• Consists of 5 subscales, higher scores indicate better functioning

Connor-Davidson Resilience Scale (CD-RISC)

- Resilience is viewed as a measure of stress coping ability; the ability to “bounce back”
- A Brief, self-rated measure of resilience with sound psychometric properties
- Composed of 25 items, each rated on a 5-point scale (ranging from 0 to 4), with higher scores reflecting greater resilience
- Increases in CD-RISC score are associated with greater improvement during treatment
- Resilience is viewed as a measure of stress coping ability; the ability to “bounce back”
- A Brief, self-rated measure of resilience with sound psychometric properties
- Composed of 25 items, each rated on a 5-point scale (ranging from 0 to 4), with higher scores reflecting greater resilience
- Increase in CD-RISC score is associated with greater improvement during treatment
- Distinguish between those with greater and lesser resilience
- Demonstrate that resilience is modifiable and can improve with treatment, with greater improvement corresponding to higher levels of global improvement

Benefits of PROMIS:

• Comparable across many Chronic Conditions
• Self-guided, reflective of patient experience
• Diversity of administrative methods, e.g. iPad
• Efficient: Less respondent burden/turnaround

Attributes of PROMIS:

• Uses Computer Adaptive Testing (CAT) methodology
• Pool-based, empirical methods to optimize efficiency of assessment questions, driven by prior responses to any items in a pool
• Tailored to the maximum possible item score, using fewer response options, to improve respondent burden: 8-12 items are selected from each instrument’s item bank

Methods

• QOL assessments repeated in the same cohort of patients: 26.1 weeks prior to and 2.7 weeks, 14.9 weeks after dialysis initiation
• Repeated QOL measurements analyzed using longitudinal mixed effects models, with either resilience or emotional support at enrollment, used as independent predictors, adjusting for temporal and patient level factors
• Assessed resilience and emotional support impact on QOL changes over time, differentiation between PROMIS 65 and 84 scores:
  1. Resilience – differentiation cut-off point was 85 (median score)
  2. Emotional Support – differentiation cut-off point was 24 (median score)

Results

QOL assessed:

Time 1: 26.1 weeks prior to
dialysis initiation

Impact of Emotional Support

- Emotional Support Impact on Kidney Disease Burden
- Emotional Support Impact on Effects of Daily Life

Impact of Resilience

- Resilience Impact on Kidney Disease Burden
- Resilience Impact on Global Physical Health
- Resilience Impact on Global Mental Health

Conclusions

• Quality of life measures decline during dialysis initiation and return to baseline in most patients
• Lower levels of internal (resilience) and external (emotional support) resources are associated with lower QOL scores. 
• This suggests a possible modifiable relationship to help patients cope better during this vulnerable period