# Health-Related Quality of Life and Treatment Outcomes for Individuals With ESRD Treated By Hemodialysis

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## Purpose

• This research investigated risk factors and support style on health-related quality of life (HrQoL) and depressive symptoms (DSs) in adults with end-stage disease (ESRD). Previous studies focused on the psychosocial correlations studies or the presence of DSs but not on the specific causal antecedents that lead to DSs or HrQoL.

#### Results

- The average age of the participants was 62.9 years (± 11.5), the mean time since dialysis was about 57 months (± 40.2), and most were males. Over 70% individuals with ESRD have sleep disturbances. The results revealed younger, more education, lower pain, more appraisal support, and better sleep quality of individuals with ESRD are more likely have better physical quality of life and lower depressive symptoms. All four types of social support (emotional support, appraisal support, informational support, and tangible support) were negatively correlated with depressive symptoms. Moreover, sleep disturbances are negatively related to both physical and mental quality of life.
- For SEM, the best fitted structural equation modeling model included individual demographics and disease characteristics, and social support as significant predictors on depressive symptoms, with social support acting as a mediator in this relationship. Subjects' characteristics and social support both contributed substantial indirect effects on depressive symptoms and physical and mental related quality of life.

### Conclusions

• Identifying risk factors and the mediators of support are an integral part of disease management. This integrated model provides a whole understanding of how factors and mediating effects of support influence HrQoL and DSs in individuals with ESRD. If people with ESRD perceived themselves with more support, they were more likely to report less depressive symptoms and better physical quality of life.

#### Methods

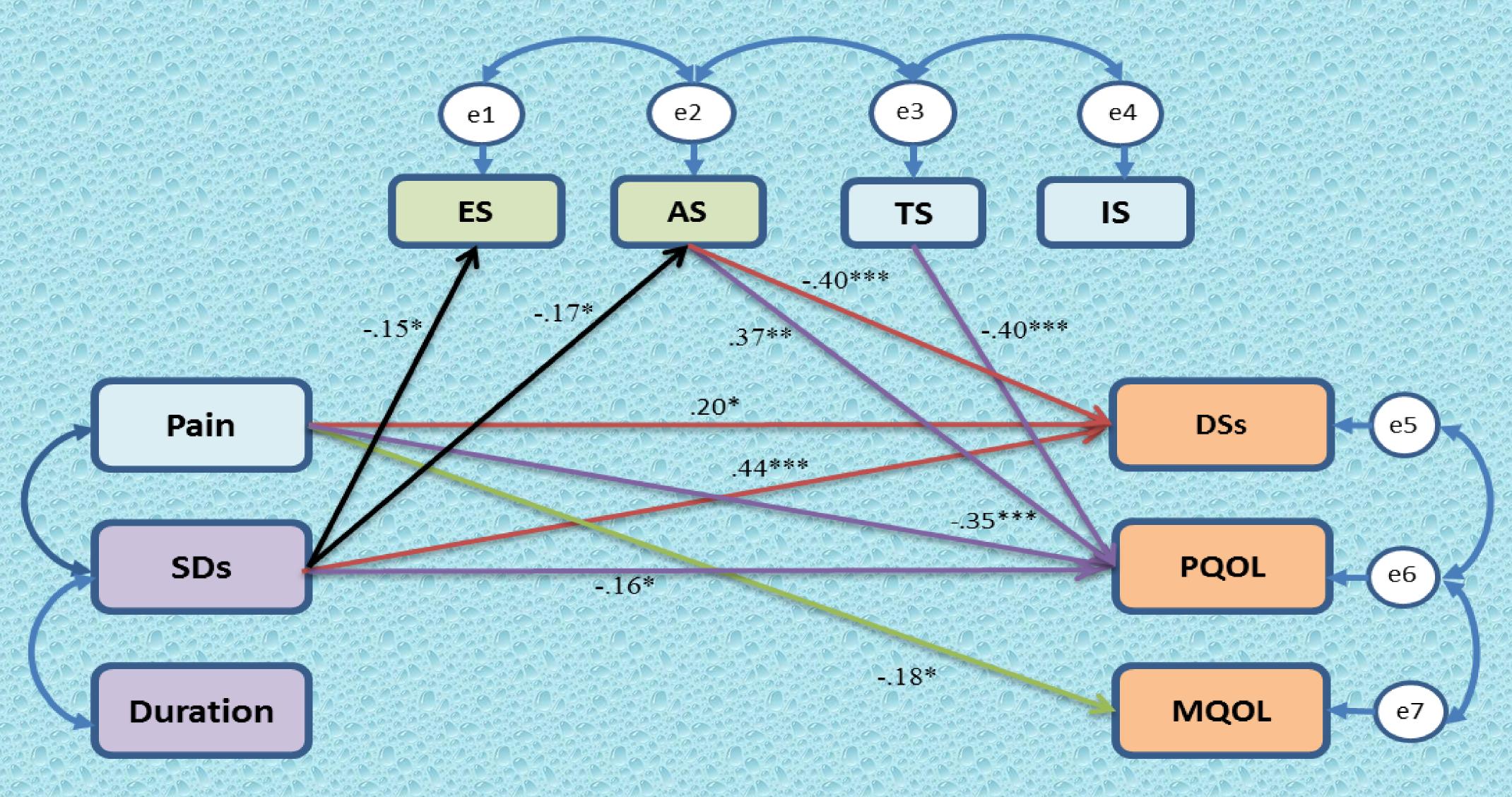
- A descriptive, correlational design was used to examine related factors and social support on health outcomes. This study was conducted at the dialysis center in a general hospital. A convenience sample of 178 adults with ESRD aged 20 or above was recruited. Data were collected by a self-reported questionnaire and physiological examination. Study questionnaires included a demographic sheet, , disease characteristics, the Pittsburgh Sleep Quality Index, the modified social support Inventory, and the the Center for Epidemiological Studies Depression (CES-D) scale.
- Using the structural equation modeling (SEM) technique analyzed all relationships among factors, mediators, and health outcomes. AMOS 19.0 was used to examine the structural equation modeling approach.

Figure 1. A path model with standardized weights

Social Support in ESRD Model

Specification: standardized estimates

X²/df = .79; GFI = .99 AGFI = .95; RMSEA= .00



Note: SDs; Sleep disturbances; DSs: Depressive symptoms; ES: Emotional support; AS: Appraisal support; IS: Informational support; TS: Tangible support