

Association of the Nutritional Status Health-Related Quality of Life SF-36 Score in Maintenance Hemodialysis Patients

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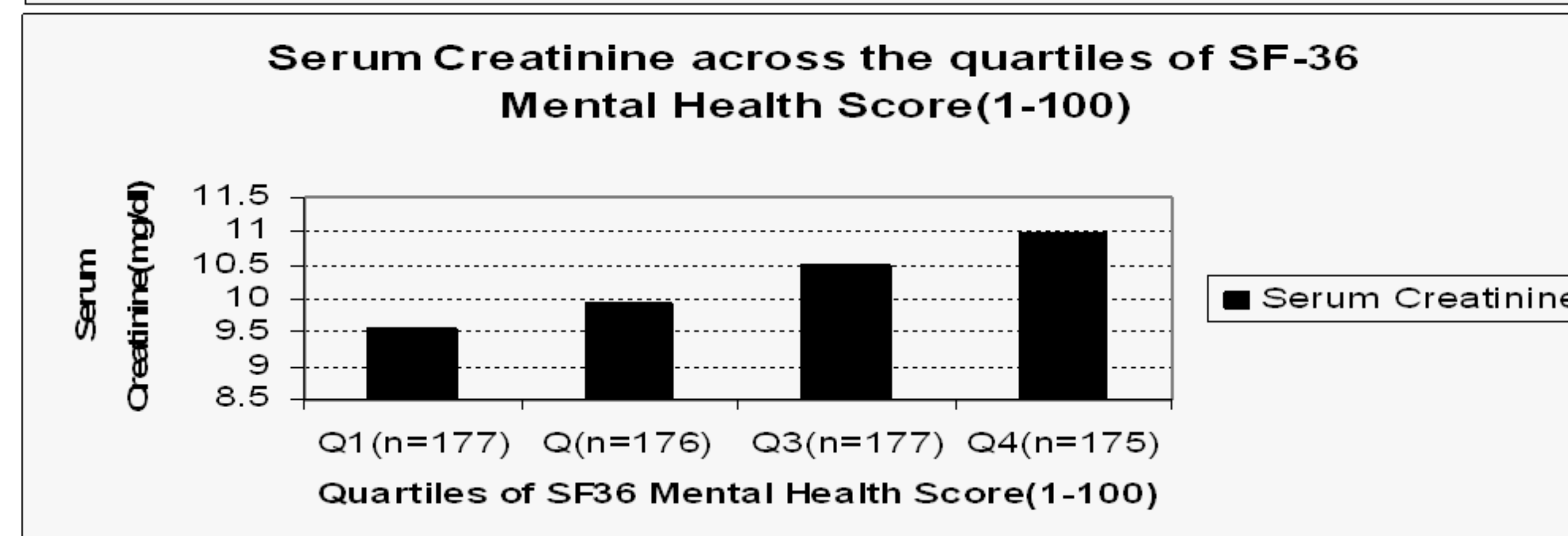
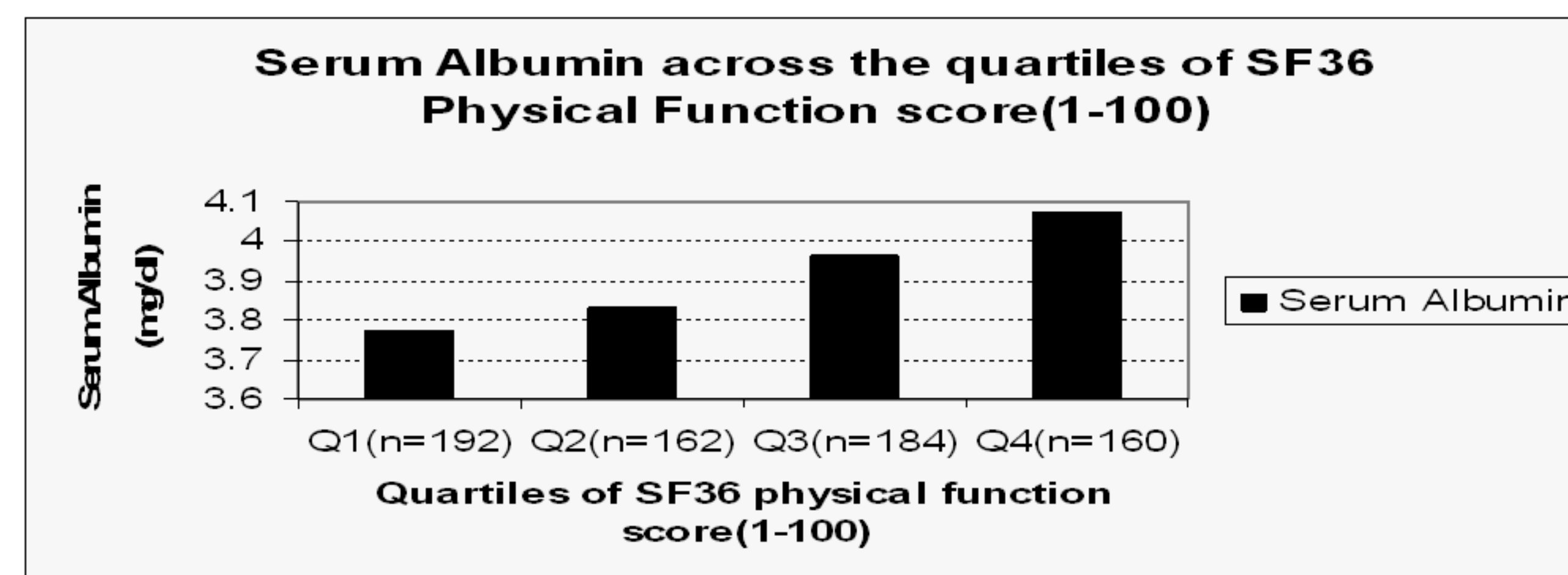
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INTRODUCTION

- Monitoring the self-reported mental and functional health of individuals with chronic disease states is important for ensuring optimal disease management and examining patient satisfaction.
- Quality of life (QoL) may also serve as a prognostic measure and predictor for survival; a worse self-reported QoL is associated with higher death risk, whereas a better scored QoL correlates with greater longevity.
- Maintenance hemodialysis (MHD) patients usually report an unfavorable health-related quality of life (HR-QOL).
- Many MHD patients also suffer from protein-energy wasting (PEW), as indicated by low serum albumin and/or creatinine levels.
- We hypothesized that better nutritional status is related to a better self-perceived HR-QOL.
- We examined the 6-year cohort of 893 MHD patients who participated in the prospective "Nutrition & Inflammation Evaluation of Dialysis Patients" (NIED) Study between 2001 and 2007 in 8 DaVita dialysis clinic in Los Angeles South bay area.

METHODS & RESULTS

- Out of 893 MHD patients who were followed from 2001 to 2007 in the NIED Study, SF-36 was obtained from 701 patients. Patients were ranked according to SF-36 score and then divided into 4 quartiles. They were also grouped into 4 according to the quartiles of the SF-36 (physical function) score (<25, 25-<50, 50-<75, and >=75).
- MHD patients across the above 4 SF36 quartiles were 55.2±13.2, 53.6±14.4, 52.51±15.1 and 52.7±16 years old (mean±SD) and included 56%, 49%, 45% and 38% women; 64%, 58%, 54% and 47% diabetics; and 37%, 26%, 33% and 31% African Americans, respectively. Both serum albumin and creatinine levels showed incrementally higher values for the better (higher) score groups across the SF-36 quartiles (Figure 1).



- Demographics:
 - 54±15 yrs old
 - 47% female
 - 32% Black

Figure 1. Serum Albumin and Creatinine levels across the quartiles of SF36 mental health score (1-100).

CONCLUSIONS

- Better nutritional status as reflected by higher serum albumin and creatinine concentrations are associated with better self-reported HR-QoL score in MHD patients.
- Interventional studies to improve nutritional statuses and to examine its impact on improving outcomes including HR-QOL are indicated.

KEY LEARNINGS

- ✓ Higher serum albumin and creatinine levels are incrementally associated with better mental health in maintenance hemodialysis (MHD) patients.
- ✓ Given that both nutritional status and HR-QOL are predictors of longevity in MHD patients, each should be considered when designing interventional studies to improve survival in MDH patients.

We thank the patients who participated in this study and DaVita Clinical Research® (DCR) for grant funding and support in preparing this poster. DCR is committed to advancing the knowledge and practice of kidney care.

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