

THE PATIENT-REPORTED OUTCOME MEASURES (PROMS) OF SENIOR CITIZENS ON HAEMODIALYSIS: NKF MALAYSIA INSIGHT

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ABSTRACT

The dialysis rate for Malaysians aged ≥ 65 increased from 158 per million age group population in 1996 to 1,232 in 2023 (MDTR 1999 & 2023), reflecting improved access to treatment. However, patient-reported outcomes (PROMs) in this population remain underexplored. We analysed the PROMs of senior citizens undergoing chronic haemodialysis in NKF Malaysia.

In 2024, senior patients aged ≥ 65 years receiving haemodialysis at NKF Malaysia completed the SF-12v2 questionnaire during routine annual reviews. Significant differences in health scores were observed based on caregiver support, diabetes-related end-stage renal disease (ESRD), comorbidities (cardiorespiratory, musculoskeletal, and neurological), and functional status.

PROMs offer valuable insights into the well-being of elderly haemodialysis patients and can guide targeted interventions by NKF Welfare to enhance care delivery and psychosocial support.

METHODS

Setting:

All 29 Dialysis Centres operated by the National Kidney Foundation of Malaysia (NKF) across Malaysia, including Sabah and Sarawak (excluding Malacca and Negeri Sembilan, where NKF does not operate any dialysis centres).

Design:

A cross-sectional annual screening conducted by the NKF Welfare Department among patients aged ≥ 65 years receiving dialysis at NKF Dialysis Centres

Subject:

A total of 456 out of 1,562 NKF patients aged ≥ 65 years in 2024 were included.

Screening Criteria:

Patients aged ≥ 65 years receiving dialysis at NKF centres were eligible for the routine screening. Patients who were cognitively impaired, hospitalized, unwell, or declined to participate were excluded.

Screening tool:

The SF-12v2 Health Survey questionnaire, which focuses on physical and mental health scores, was administered during the annual patient review conducted by the NKF Welfare Department

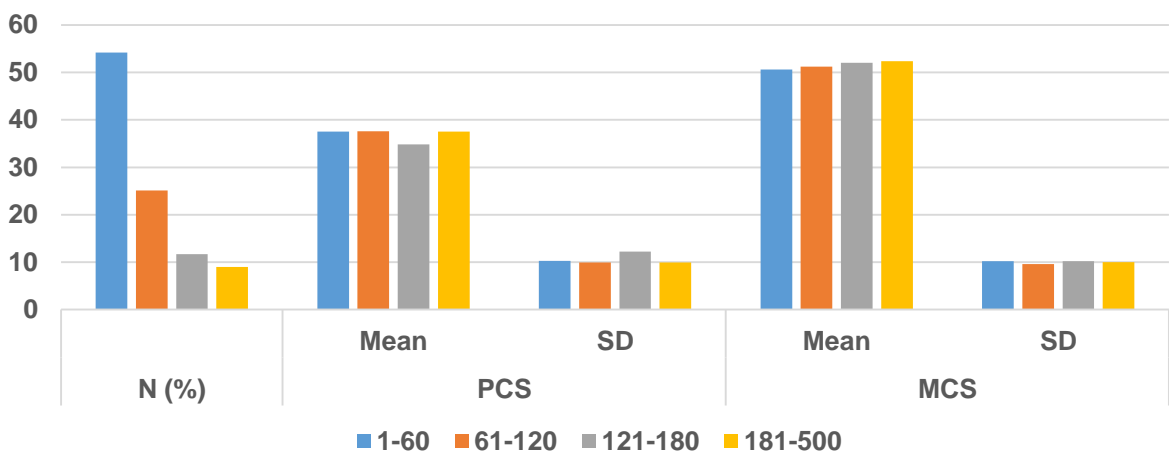
Statistical Analysis:

Data were analyzed using SPSS, applying both univariate and bivariate analyses.

RESULTS

The mean age was 71 years, with 52% male and 48% female participants. Regarding marital status, 7% were single, 63% married, 4% divorced, and 26% widowed. Only 8% were still employed, and 31% contributed co-payment for dialysis. The average dialysis duration was 76 months (6 years). The mean physical health score (PCS) was 37, while the mean mental health score (MCS) was 51 (range 0–100, with higher scores indicating better health). As shown in Table 1.

Table 1: Physical and Mental Component Summary Scores (PCS & MCS) by month of dialysis



HD Duration (months)	N (%)	PCS		MCS	
		Mean	SD	Mean	SD
1-60	54.2	37.5	10.3	50.6	10.2
61-120	25.1	37.6	9.9	51.2	9.6
121-180	11.7	34.8	12.2	52.0	10.2
181-500	9.0	37.5	9.9	52.4	10.0

Significant differences in both physical and mental health scores were associated with caregiver support, diabetes as the underlying cause of ESRD, and the presence of cardio-respiratory, musculoskeletal, and neurological comorbidities, as well as patients' functional status. However, dialysis duration showed no significant association with either health domain.

Discussion:

The results suggested that the mean PCS scores of patients aged ≥ 65 years in the NKF were below the risk threshold of 50, indicating a decline in physical functioning commonly associated with aging. However, their mean MCS scores were above the mental health cut-off of 42 on the SF-12, suggesting that their mental well-being remained stable despite physical limitations.

CONCLUSIONS

By utilizing Patient-Reported Outcome Measures (PROMs), the NKF Welfare team can gain deeper insights into the challenges, health status, and personal experiences of senior citizens undergoing haemodialysis. Through this patient-centered approach, welfare officers are better equipped to understand the unique needs of elderly patients, enabling them to provide more tailored and holistic support.

By actively engaging with these patients, they can work collaboratively to enhance treatment outcomes, offer appropriate social and emotional support, and ultimately improve the overall psychosocial well-being and quality of life of elderly individuals receiving care at NKF.

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