

A comparative study of health-related quality of life between patients on maintenance hemodialysis and kidney transplant recipients

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Abstract

Background: Although kidney transplantation has been shown to improve health related quality of life (HRQOL), it may also present with negative consequences as it relates to the side effects of immunosuppressives, the anxiety and uncertainty concerning events of graft rejections and graft loss.

Objective: To compare the HRQOL in kidney transplant recipients (KTRs) and patients on maintenance hemodialysis (MHD) patients.

Methods: This cross sectional multicenter included KTRs with functioning grafts and patients on MHD from three major transplant centers and five dialysis units in Nigeria. QOL was assessed with the Kidney Disease QOL-SF-36 (version 1.3) questionnaire.

Results: 491 (293 MHD, 98 KTRs, and 108 healthy controls) participants were enrolled. With the exception of bodily pain, KTRs had significantly higher HRQOL mean scores in the eight subscales of the SF-36 than patients on MHD: physical functioning (73.8 ±25.3 versus 52.7±27.5; p<.0001), log role-physical (4.4±0.4 versus 3.8±0.6; p<.0001), bodily pain (79.1±25.8 versus 72.7±25.5; p=0.10) , general health (73.8±23.2; p<.0001), vitality (65.1±15.0 versus 57.2 ; p=0.002), social functioning (62.5±24.6 versus 50.6±25.0; p<.0001), log role emotional (4.3±0.4 versus 4.1±0.5; p=0.01) and mental health (84.7±16.7 versus 72.3±17.9; p<.001). Except for mental health and social functioning, the subscale scores and the two Mental Component Summary (MCS) and Physical Component Summary (PCS) measures for KTRs and healthy controls did not differ. KTRs have higher PCS (46.8±9.1 versus 38.2±8.8; p<.0001) and MCS (50.1±8.1 versus 43.9±9.1; p<.0001) scores than patients on MHD.

In multivariable analysis, kidney transplant is significantly associated with higher PCS score (β coefficient: 8.33; 95% confidence interval: 5.08- 11.58; P<.0001) and higher MCS score (β coefficient: 6.29; 95% confidence interval: 3.11-9.47; P<.0001).

Conclusions: Kidney transplant recipients have a better health related quality of life than patients on MHD, and comparable HRQOL scores to healthy individuals.