

Depression Doubles Mortality Risk among Transplant Recipients

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Introduction

Renal transplantation is the best available treatment for patients with kidney failure, but recipients have been shown to develop emotional distress and affective disorders, such as anxiety and depression, associated with a compromised quality of life (QoL). Depression is associated with impaired QoL and increased morbidity and mortality in patients with end-stage renal disease (ESRD). Research has confirmed that depression may worsen kidney transplant outcome. Dobbles et al. reported in the American Journal of Kidney Diseases (2008), that depression is considered as a high risk factor for kidney failure, return to dialysis and death among the studied kidney transplant recipients. They found after examining the patients' records, from 1905-2003, that the incidence of depression was about 7% the first year after transplantation, 11% in the second year and 13% in the third year. According to this study, kidney failure occurred in 19% of the patients, 8% died with a functioning kidney and 11% had to return to dialysis therapy. This study concluded that depression may double the risk of adverse outcomes. It is suggested that recipients should be recommended for depression screening that is essential to evaluate and monitor the occurrence of depression and identify high risk recipients after transplant that can be referred for psychological intervention [1,2]. The prevalence and correlates of depression in renal transplant recipients (RTRs) need to be explored extensively since it can worsen the transplant outcome. Szeifert et al. (1999) compared depressive symptoms between RTRs and ESRD patients on dialysis, identifying the correlates of depressive symptoms in the transplant recipients and found that the prevalence of depression was lower in transplant recipients as compared to ESRD patients awaiting transplant. However, they further found that one-fifth of RTRs were still at high risk of clinically significant depression. Comorbid conditions, socioeconomic status, and treatment modality predicted depressive symptoms in ESRD patients. It is suggested that depressive symptoms are an independent predictor of mortality in RTRs [3]. They compared the depression levels and confounding parameters in renal patients. They compared three groups including, group 1 comprising of RTRs, group 2, with ESRD patients awaiting transplant and group 3 consisting of recipients who had chronic allograft rejection and returned to dialysis. They found that depression levels among RTRs were significantly lower than that of dialysis patients with chronic allograft rejection. Depression was not related to age or gender and married patients showed a lower percentage of depression. They concluded that depression was an outcome of returning to dialysis, particularly after a short duration of graft function [4]. Kusleikaite et al. examined the factors affecting quality of life (QoL) in RTRs to analyse the association between depression and QoL in this population and confirmed that depression was associated with a lower QoL. RTRs reporting depression were older and had a worse graft function [5-8]. The findings suggest that besides investigating clinical factors, there is need to explore the Sociodemographic and

psychosocial variables that may cause, precipitate or potentiate the occurrence and prevalence of depression. Screening recipients for depression can enhance quality of life and improve transplantation outcomes.

Research aims

The research in health psychology, particularly in solid organ transplantation needs to identify psychological risk factors that may negatively influence graft survival and longevity. It is important that the following aims are considered when dealing with transplant recipients and screen them for depression as well as other psychological issues.

- To investigate occurrence of depression after kidney transplantation.
- To analyse the contribution and role of Sociodemographic/ psychosocial factors in influencing depression levels among renal transplant recipients

Renal transplantation is considered to be the best available choice of treatment for patients with kidney failure. Efforts are made to improve the efficacy and longevity of transplantation. There is extensive research investigating the medical and clinical factors that affect health outcomes after kidney transplantation. The aim is to identify potential risk factors so that quantity and quality can be added to the recipients' life. Pakistan is a developing country with limited health care facilities and resources available, but it has the highest rates of kidney transplants in the world. The Sindh Institute of Urology and Transplantation (SIUT) is the largest centre in South Asia and it performs the highest number of kidney transplantations in the world (Kidney International 2003). Despite this, most research is only limited to medical aspects of transplantations carried out in Pakistan. Therefore, the aim of this study was to highlight the significance and contribution of psychosocial issues of recipients' post-transplant life.

QoL improves dramatically after successful renal transplantation as compared to patients maintained on dialysis [5]. Pakistan is a developing country with less resources and health care services available to general population. Health care costs are not covered by insurance or government support systems.

There is consensus on the significance of psychosocial factors in influencing life after transplant [9-13]. The positive and negative impact of a multitude of psychosocial conditions such as anxiety and uncertainty about future, coping with challenges of transplant is analysed to understand the subjective factors in transplant experience. Health outcomes vary from one individual to another after transplant and although most recipients' report an improved health status after kidney transplant but the results are not the same for everyone and there are complexities involved in objective and subjective quality of life (QoL). In order to understand the mechanisms underlying these

individual and intra individual differences, it is important to analyse the occurrence of potential risk factors such as depression to reduce mortality and morbidity among recipients. Research confirms that depression doubles the risk of graft loss. "Perception of a better QoL correlated with less perception of depression." [10]. Besides noncompliance and viral infections, depression is one of the major causes so far for organ rejection. Kusleikaite et al. reported that depression was associated with a lower QoL in four domains. Patients with depression were older and had a worse graft function [8]. Education level also affected depression levels and recipients with higher educational backgrounds appeared to be less depressed. It has been found that the severity of depressive symptoms is higher among recipients with lower educational status [9]. There are significant differences in depression between male and female recipients. Males tend to be less depressed as compared to females. Research evidence on gender differences in QoL are in conformity with the present findings. Jofre et al. (1998) found that males reported more improvement in mood and QoL as compared to female recipients for unclear reasons. They also found that older age and greater prior comorbidity reduced QoL [7].

Research in health outcomes highlights the significance of life orientation and its impact on developing depression and influence on over all QoL. It is found that recipients with a more optimistic life orientation tend to be more satisfied with their QoL and less depressed. The direction of causal relationships among these three variables can be multidirectional. We can assume that a satisfactory QoL that comprises of four major domains of life can be a cause of being less depressed and more optimistic. Recipients may experience depression if they have less satisfactory QoL and experience socioeconomic difficulties and poor health status. This suggests the need for qualitative research that can explain the causal direction of such significant factors and individual perspectives of recipients' experiences of life post-transplant.

Conclusion

Research in Health Psychology needs to focus and contribute towards understanding the contribution of psychosocial factors that modify health outcomes and influence QoL after renal transplantation. Depression is a major psychiatric outcome prevalent among transplant recipients that must be dealt by designing counselling programs for the target population. Future research should aim to undertake qualitative analysis of the mechanisms causing depression. The role of personality type, social and environmental stressors and psychological issues particularly in developing countries must be focused.

Identification of potential risk and facilitating factors involved in life after transplantation can help improve survival rates and add quality and quantity of life.

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