

ASSESSMENT OF QUALITY OF LIFE IN 50 PATIENTS WHILE UNDER HEMODIALYSIS AND FOLLOWING KIDNEY TRANSPLANT

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ABSTRACT

The quality of life of 50 end stage renal disease (ESRD) patients on hemodialysis was evaluated before and after kidney transplantation (KTx). Mean duration of the patients' hemodialysis was 3 years and mean postoperative period was 2.4 years when tested. Common problems of such patients such as depression, sleep disorders, energy pattern disruption, sex-life difficulties, and appetite disorders were assessed using a five point scale (very good, good, medium, difficult and disabled). Following renal transplant, more than 80% of patients showed an improvement in several aspects in this regard.

Keywords: Quality of life, Hemodialysis, Kidney transplant.

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INTRODUCTION

It is the goal of modern medicine to do more than save lives. The entire life of the patient from all aspects—social, physical, and psychological—is now considered the focus of the physician. Thus, according to such modern standards, a life-saving intervention such as kidney transplantation (KTx) is expected to do more than merely prolong life.^{4,5} In order to be considered worth the risks, effort, time, and expertise involved, KTx must also contribute to the overall health of the patient. This overall health is referred to by some as quality of life.³

PATIENTS AND METHODS

The current study used a self-rating questionnaire to evaluate the quality of life in 50 hemodialysis patients before and after KTx. Mean duration of hemodialysis was 3 years and mean postoperative time was 2.4 years when tested. No patient was tested less than 3 months following transplant. Participants were 68% male and 32% female, with an average age of 31. Approximately 55% of transplant recipients had serum creatinine levels between 1-1.4 mg/dL and only 3% had serum creatinine levels between 2.5-2.9 mg/dL.

Table I. Factors considered in order to assess the quality of life.

Dimension	Factor
Physical health	Physical energy, exercise, appetite, sleep
Psychological health	Overall mood, depression, hope for life, plans for the future
Family relations	Number of children, sex-life
Occupation	Type of occupation, hours worked daily

Quality of Life Following Kidney Transplant

Table II. Comparison of different factors influencing the quality of life in hemodialysis and kidney transplant recipients.

Problem Group	Depression	Sleep disorder	Energy problem	Sex-life disturbance	Appetite disorder
Hemodialysis patient, pre-KTx	70%	76%	80%	70%	82%
After KTx	6%	4%	3%	20%	0%

For the purposes of this investigation, a questionnaire was developed measuring certain factors of key dimensions related to quality of life (Table I).

Finally, a five point scale was used to evaluate the patients' status in regard to these factors. Life quality was graded as either very good, good, medium, difficult, or disabled.

RESULTS

In more than 80% of patients there was an improvement in several dimensions of quality of life following KTx. The comparison of patients' problems while under hemodialysis and following KTx is shown in Table II.

The data suggest that KTx is not only a life-saving intervention; it also increases the quality of life of the patient and thus can be considered cost-effective for the patient and the society.

DISCUSSION

Quality of life is a multi-dimensional concept used to refer to a series of health dimensions. Within these dimensions are factors which interact with each other³ to contribute to individual satisfaction and well-being.^{6,7} These dimensions include, but are not limited to,² the following physical and psychological indices: physical health, psychological health, family relations, occupational status, and overall difficulties and strengths.¹

This study was undertaken to establish the relation of KTx among hemodialysis patients and quality of life. Such

data is needed to help end stage renal failure patients on dialysis make appropriate decisions regarding KTx. It might also prove KTx to be more than a life saving device available to medicine and to the society, i.e., a method to improve the quality of life of patients and, by extension, the society.

Data of this study showed KTx to have a positive effect on several dimensions of quality of life in patients on hemodialysis. Quality of life has been associated with overall well-being, low levels of dysfunctional stress, and physical as well as psychological health. Renal transplant can thus be considered a cost-effective intervention both in saving lives and in improving the quality of lives.

REFERENCES

1. Evan RW, Munnin EL, Garrison LP, et al: The quality of life of patients with end stage renal disease. *New England Journal of Medicine* 312: 553, 1985.
2. Gorlen T, et al: Quality of life after kidney transplantation, a 10-22 year follow up. *Scandinavian Journal of Urology-Nephrology* 27: 89-92, 1993.
3. Gok ALR: Quality of life in patients undergoing renal replacement. *Kidney International* 43 (Suppl): 23-27, 1993.
4. Jacobs C, et al: Rehabilitation of patients on dialysis and after transplantation. *Proceedings of the European Transplant Association* 14: 3-69, 1977.
5. Morris PJ, Jones B: Transplantation versus dialysis: a study of quality of life. *Transplant Proceedings* 20: 23-26, 1988.
6. Morris PJ: Rehabilitation and quality of life. In: Morris PJ (ed.), *Kidney Transplantation: Principle and Practice*. London: W.B. Saunders, pp. 751-753, 1988.
7. Steger C, Kotler T: Contrasting resources in disturbed and nondisturbed family systems. *British Journal of Medical Psychology* 52: 243-251, 1979.