

Quality of Life and Social Support in Patients with Haemodialysis

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Abstract— Chronic kidney disease is the slow loss of kidney function over time. Haemodialysis is the most common treatment. The objectives of the present research were to study the quality of life and social support of the chronic renal failure patients. The result of 60 adult patients interviews depicts that, female patients do better than males on physical quality of life, further, it is observed that no significant differences were found among males and females on the domains of quality of life and social support. It is suggested that there should be more widespread appreciation of patient and carer psychosocial needs among health professionals in this particular setup.

Keywords—Renal Failure, QOL, social support, haemodialysis, chronic kidney disease

I. INTRODUCTION

Chronic kidney disease is the slow loss of kidney function over time and it slowly gets worse over time. The kidneys no longer function and the patient needs dialysis or a kidney transplant. Renal replacement therapy is a life-saving treatment for patients with end-stage renal disease. The two main treatment modalities are transplantation and dialysis [1]. Haemodialysis is the most common method used to treat advanced and permanent kidney failure. Chronic dialysis has a major impact on the daily life of end-stage renal disease (ESRD) patients. Fatigue, itching, and cramps are common in this group of patients, and many ESRD patients experience impaired physical, mental, and social functioning [2], [3].

In an international study coordinated by the Dialysis Outcomes and Practice Patterns Study, and carried out in 4123 prevalent haemodialysis (HD) patients of working age, it appeared the percentage of employed patients was 21% in the USA, 30% in Europe, and 55% in Japan [4]. Although unemployment is common in ESRD patients, continuation of work has important advantages: a job can be a source of social support, and having a job contributes to a higher quality of life and increased self-esteem [5], [6]. Moreover, the patient's financial situation remains stable. Furthermore, maintenance of work is also important for society because loss of production is prevented.

Since the 1980s, the quality of life (QOL) in patients with end-stage renal disease has received increasing interest, however, in the recent past it is not much spoken over, though a lot need to be done yet [7]. End-stage renal disease patients on renal replacement therapy live with varying degrees of physical and psychological symptoms, especially side effects of immune system suppression therapy, stress, and the fear of rejection [8]. Health status and health-related quality of life (HRQoL) are core components of health outcomes, HRQoL measures can be assessed with both generic and disease-specific instruments [9]. It has also been suggested that for patients receiving RRT, quality of life measures can be used to predict future morbidity and mortality [10]. However, in most developing countries, there have been no known prospective studies completed QoL in haemodialysis and peritoneal populations.

The present study would be useful to address these issues and outcome of the study can become a knowledge base for the hospital and government to frame welfare programmes and policies for treatment and rehabilitation of the chronic renal failure patients. The aim of the present study was to study the Socio economic issues of renal failure patients.

II. METHODOLOGY

The objectives of the present research were to study the quality of life of the chronic renal failure patients. The researcher adopted ex-post facto research design for the present study. All the patients with chronic renal failure condition within age group of 18 to 60 Years and seeking for treatment in St. John's Medical College and hospital were considered as universe of study. A cross sectional design within a stipulated time period was utilized to select the samples. During the period of study 60 adult patients undergoing treatment for renal failure were approached, those meeting the inclusion criteria and willing to participate in the present study were interviewed. A structured interview schedule which consisted of specific questions related to personal details of the patients and standardized instruments viz., Quality Of Life Scale – BREF and Multidimensional Scale of Perceived Social Support (MSPSS) were used for collecting the data [11], [12].

III. RESULTS

The results indicate that the age wise distribution shows that nearly a quarter (23.3%) of the respondents were between 21 to 30 years and 41-50 years of age, one fourth of respondents (25%) were between 61 to 70 years of age and one sixth (16.7%) were in the age group of 51-60 years, an insignificant number of respondents (3.3%) were below 20 years, very few respondents (8.3%) were in the age of 31-40 years. Gender wise distribution shows that a little more than two fifth (44%) were males and nearly one sixth (16%) were females. Education wise distribution shows that majority of the respondents studied high primary (30%), followed by primary (18.3%), graduation (13.3%), secondary school (8.3%), professional (6.7%), professional (6.7%), others (1.7%), and among the participants about 10% of them were not formally educated.

With regard to earlier occupation majority (33.3%) of the respondents working in private sector, followed by agriculture and house wife (11.7%), Coolie (10%), unemployed and students (8.3%), government employees (6.7%) and least (3.3%) were professionals. In the category of present occupation majority (41.7%) of them were working, about 30% of the respondents lost the job due to illness and about 6.7% of the respondents were on long leave for the treatment. As for as the change in occupation due to illness as indicated in the table, results shows that 31.7% of the respondents did have the changes in occupation due to illness and 48.3 % of the respondents reported to be no changes.

Regarding awareness about illness, nearly half (45%) of patients were aware and rest (55%) of them were not aware about their illness. With regard to beliefs and reasons for renal failure majority (80%) of them said to be illness was the reason. Majority (78.3) of the respondents had no prior knowledge about the illness. Coming to first reaction towards the illness majority (43.3%) of them had shock, followed by depression (25%), acceptance (16.7%), denial and anger (6.7%). Majority of them had more than Rs.15000 as monthly expenditure on treatment followed by Rs. 15000 (28.3%), Rs.10000 (13.3%), Rs.12000 (8.3%) and less than Rs.10000 (5%). With regard to sources of meeting the expenditure 25% of the respondents had from relatives, 23.3% of them self, 21.7% of them from donors, 16.7% of them borrowed, 8.3% of them sold their belongings and 5% of them from friends out of which 90% of them did not have health insurance.

Quality of Life and Social Support

The physical quality of life was found to be slightly better among females (M=37.5, SD=17.44) when compared to the males (M=36.28, SD=19.31), there was no significant difference found ($t=-0.221$, $p>0.05$). It is observed that values of all the domains of quality of life and social support were almost the same among males and females and no significant differences were found. In comparison with domicile no

significant difference found among all the domains of quality of life. However, slight variations have been found between the rural, urban and semi urban background on all domains of the quality of life. Unmarried respondents had high social support from friends than the married and widowed, significant differences were also found ($F=3.116$, $p<0.05$). But there is no significant difference between on other domains of the perceived social support and quality of life with respect to marital status of the respondents.

Quality of life and social support sub-domains did not show significant difference between religions among the respondents. The findings of the table indicate that religion has no impact on Quality of Life and Social Support among renal failure patients. The family type of the renal failure patients and their quality of life and social support, results revealed that in Physical (M=37.50, SD=18.95) and environment (M=46.80, SD=16.64) quality of life domain the nuclear families background patients show high quality of life and social support. But difference between groups was not significant.

The relationship between employment status with the quality of life and social support among renal failure patients depicts that, in the social quality of life, social support from friends and significant others there is significant difference ($p<0.05$) between four categories of employment status. Currently working patients shows better social quality of life, social support from friends and significant others. Patient's duration of illness and their quality of life and social support, the results indicate that there was no significant difference between the Below 2 years, 3 to 5 years and more than 5 years duration of the patient's illness in overall quality of life and social support. The impact of awareness about disease on quality of life and social support among the renal failure patients. The results show that patients with awareness about disease had significantly ($p<0.001$) high social quality of life (Mean=47.53 SD=.23.32) than the patients without having awareness about disease.

Patients with awareness about the disease had high psychological (Mean=39.81 SD=14.81) and physical quality of life (Mean=43.25 SD=16.67) indicating the significant difference ($p<0.01$ and $p<0.05$) than the patients without having awareness about the disease. But there is no significant difference between the groups on other domains of quality of life and social support. The results pertaining to the extent of knowledge of renal failure prior to diagnosis and quality of life and social support among the patients indicate that those who had knowledge about the illness prior to diagnosis found to have better social quality of life (M=57.05 SD =20.36) indicating the significant difference ($p<0.001$) than the patients having without knowledge about the illness prior to diagnosis.

The patients with knowledge about the illness prior to diagnosis were found to have significantly ($p<0.05$) high

physical quality of life ($M=46.15$ $SD=21.00$) than the patients not having knowledge about the illness prior to diagnosis. As far as other domains of quality of life and social support are concerned there was no significant difference found between the groups. The relationship between Quality of Life, Social Support and Patient's Age, Present income, previous income and duration of illness were assessed with the help of Pearson's product moment correlation (r). It shows that all the domains of quality of life were positively correlated with income status of respondents before illness. All the domains of quality of life except psychological quality of life were also positively correlated with present income. Perceived social support with family and friends were positively correlated with income before illness; perceived social support with friends and significant others were positively correlated with present income. There was no significant relationship between age of the patient, duration of illness and all domains of quality of life and perceived social support.

The relationship between domains of Quality of Life and domains of Social Support were assessed with the help of Pearson's product moment correlation (r). The physical quality of life was positively correlated with perceived social support from friends and significant others. Psychological quality of life was positively correlated with social support from significant others. Social Quality of life was positively correlated with perceived social support from friends and significant others. Environmental quality of life was positively correlated with perceived social support from family, friends and significant others.

IV. DISCUSSION

This study confirms earlier findings that indicated difficulties in ability to work for chronic dialysis patients [13]. Our study, however, also demonstrates that at the start of dialysis, large proportions of patients are already unemployed. Two studies from the USA also investigated the percentage of employed patients at the beginning of dialysis [14]. These percentages were 20% and 35%, the latter being similar to what we found in our study. The start of dialysis marks an important stage in disease, after which the patient becomes completely dependent on treatment and is confronted with many constraints imposed by dialysis. Yet, it is apparent that many patients become unemployed before starting dialysis. It is unlikely dialysis itself promotes vocational rehabilitation, as only a small minority of patients who were unemployed at the start of dialysis in our study became employed within 1 year of beginning dialysis (2%).

Studies on factors for improvement in quality of life of dialysis patients assessment has rapidly become an integral outcome in clinical research; over 1,000 new articles each year are indexed under "quality of life". Despite the proliferation of instruments on QOL, no unified approach has been derived for its measurement, and little agreement has been attained on

what it means. Lack of clarity regarding the definition of QOL has led to several related concepts, namely functional status, life-satisfaction, well-being, and health status, being used interchangeably with QOL. Questionnaire-based QOL measurement in ESRD has demonstrated that WHOQOL-Bref still holds well in measuring QOL unit-based haemodialysis patients. The main determinants of difference are the physical function domains. QOL in ESRD has traditionally been measured by a number of disease-specific, domain-specific and generic instruments, all exhibiting a fixed design. However, the fixed nature of the instruments is problematic in that what is measured is predetermined and hence may not represent the free choice of the individual whose QOL is assessed [15].

CONCLUSION

Chronic kidney disease is a major cause of morbidity and mortality, particularly at the later stages. The results of the study show that there were no differences on Quality of Life and Social Support among Males and Female patients. Slight variations have been found between the rural, urban and semi urban background on all domains of the quality of life. Religion has no impact on Quality of Life and Social Support among renal failure patients. Patients with awareness about disease had significantly high social quality of life than the patients without having awareness about disease. Patients with awareness about the disease had high psychological and physical quality of life. The results also show that those who had knowledge about the illness prior to diagnosis found to have better social quality of life than the patients having without knowledge about the illness prior to diagnosis. The domains of quality of life were positively correlated with income status of respondents before illness.

All the domains of quality of life except psychological quality of life were also positively correlated with present income. The physical quality of life was positively correlated with perceived social support from friends and significant others. Psychological quality of life was positively correlated with social support from significant others. Social Quality of life was positively correlated with perceived social support from friends and significant others. Environmental quality of life was positively correlated with perceived social support from family, friends and significant others.

Based on these findings the researcher would like to conclude that the social work intervention can enhance the quality of life of the chronic renal failure patients. There should be more widespread appreciation of patient and carer psychosocial needs among health professionals in this particular setup. This would assist in improving the quality of care. The health care team/practitioners should have a full understanding of the ways in which both patients and carers

can actively and positively shape their experience of living with the disease. They should assist patients and carers in gaining access to the resources that enable them to manage their psychosocial states in positive ways, so minimising the danger of developing acute psychological distress. Resources include: information, prompt medical attention, ready access to health professionals, emotional support, and practical assistance.

Patients should be allocated a 'key worker' – an appropriate professional to whom the patient and their carer can turn during their each visit or whenever need arises for information, psychosocial support and advice. Sufficient time should be given in medical consultations to enable patients to be involved in treatment decisions at every stage. Identifying psychosocial needs should be part of routine patient and carer assessment. The care providing team members should receive more training in communication skills and in understanding and assessing the psychosocial needs of patients. Professionals should be alert to the sub-group variations in psychosocial need and unmet need so that support and assistance can be appropriately targeted. Patients and carers, either together or separately, should be encouraged to disclose concerns about the emotional, social and practical implications of their situation.

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