



Quality of Life and Chronic Kidney Disease Patients

SHALLY,

Research Scholar, Department of Psychology, Patliputra University, Patna

Dr. KIRAN BALA,

Assistant Professor, Department of Psychology, Jagat Narain Lal College, Khagaul, Patliputra University, Patna

ABSTRACT

Chronic kidney disease is a global health problem with a high economic burden on the health care system. Quality of life and psychological state can be influenced by various individual and social factors, disease and clinical situations of the individuals. The objective of the study is to assess the quality of life of chronic kidney disease patients. For this study we took 30 chronic kidney disease patients from private nephrology department (dialysis unit) and 30 healthy people. This age ranged from 18 to 55 years. To measure quality of life world health organization quality of life - bref (WHOQOL-BREF) scale was used. This comprises four domains: physical health, psychological aspects, social relationships, and environment. Quality of life was administered on chronic kidney disease patients and healthy groups. After analyzing the data it was found that there was significant difference between the chronic kidney disease patients and healthy person group on WHOQOL-BREF. It is concluded that quality of life of chronic kidney disease patients are poor than healthy group.

Keyword: Quality of life, chronic kidney disease, World health organization quality of life- bref (WHOQOL-BREF)

INTRODUCTION

Chronic kidney disease (CKD) is a worldwide public health problem which leads to social, physical, economic and psychological issues (Premadasa et.al., 2019). Along with the present era of globalization, the life of individuals has also developed to a great extent as in life style, career etc. yet these advantages have led to a highly stressful life and many emotional disturbances, as well as many critical health problems. Among them, Chronic kidney disease is a worldwide public health problem and is now recognized as a common condition that is associated with an increased risk of many mental health problems (Baruah, 2016). Chronic kidney disease is a global public health problem, with adverse outcomes of renal failure, cardiovascular disease, and even premature death. The patients with end- stage renal failure undergoing dialysis undergo major changes and adjustments in terms of their personal, professional, and social life (Sharma et.al., 2022). Chronic disease may have multiple impacts like mortality, long term morbidity, and impairment in quality of life (QOL) (Jacob et.al, 2020). End stage renal disease is defined as an irreversible decline in the individuals own kidney function, which is severe enough to be fatal without dialysis or transplantation (Nasreldin et.al, 2021). According to world health organization (WHO), Quality of life is defined as individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards, and concerns (Alshelleh et.al., 2022). The World Health Organization Quality of Life (WHOQOL Group, 1996) defined quality of life as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (WHOQOL,

1996). Quality of life can be determined from the condition of the physical, psychological, social relationships, and environmental aspects (WHOQOL GROUP, 1996). Chronic kidney disease also has an impact on the general activities and the patient's mental and social role in the society. Such patients suffer from both physical and psychological problems, which affect their quality of life (Taptagaporn et.al., 2021). Quality of life is an overall assessment of a person's well being, which may include physical, emotional, and social dimension, as well as stress level, sexual function, and self-perceived health status (Parimala & Sofia, 2021). The domains of Quality of life for patients have been outlined as physical functioning, psychological aspects, and social and interpersonal relationship. Physical functioning includes the ability to ambulate and perform activities of daily life such as bathing, and the ability to remain free of, or to relief from, troublesome symptoms. Psychological aspects of Quality of life include depression affect and anxiety, and cognitive function, among others. Social aspects of Quality of life include the effects of perceived, received, and transmitted social support; marital and familial interactions; interactions with medical and dialysis personnel; and socioeconomic concerns such as financial burdens of illness, disability, and unemployment; and ecologic characteristics such as residence within a particular neighborhood or state (Kimmel & Patel,2007).

OBJECTIVES

The main purpose of this study is to find out the quality of life (QOL) among the chronic kidney disease (CKD) patients who have undergoing hemodialysis.

MATERIALS AND METHODS

This study was conducted at private nephrology department (dialysis unit) with 30 chronic kidney disease patients and 30 healthy persons who fulfilled the inclusion criteria (diagnosed cases with CKD, undergoing hemodialysis for at least 3 months and aged between 18 to 55 years) were involved in the study.

PROCEDURE

Before carrying out this study, permission was received from government and private hospitals, nephrology department. The patients with diagnosis of CKD who satisfy the inclusion, exclusion criteria will be taken up as patients group. After that, those patients who are interested in participating were informed individually offered the possibility of completing the questionnaire alone or with an interviewer and 92% of the participant preferred to complete it with the interviewer. The participants were divided into two groups, 30 experimental group and 30 control group. The WHOQOL-BREF questionnaire was administered on both group. World health organization quality of life - bref (WHOQOL-BREF) developed by world health organization. It is a 5 point Likert scale based on 26 items with four domains: physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental health (8 items). There are also two items that are examined separately 1 question asks about an individual's overall perception of quality of life and 2 questions asks about an individual's overall perception of their health. Domain scores are scaled in a positive direction which means higher scores denote higher quality of life. To evaluate perceived quality of life and satisfaction with health, cut-off point is 60. However, in this study, a mean score of 50 was used as a cut-off.

RESULTS

The individual's perceptions of health and quality of life were measured based on responses to the first and second questions on the WHOQOL-BREF

TABLE: 1

Individuals Perceptions on their Quality of Life and Health (N = 30)

VARIABLE	CHRONIC KIDNEY DISEASE PATIENTS		NORMAL CONTROL	
	Frequency	Percentage	Frequency	Percentage
QOL:				
Good	22	73.3	4	13.3
Poor	8	26.7	26	86.7
SATISFACTION TO HEALTHY :				
Satisfied	10	33.3	25	83.3
Dissatisfied	20	66.7	5	16.7

The table shows on the WHOQOL- BREF scale the CKD patients have poor quality of life with 73.3% and also in satisfaction of health domain CKD patients is dissatisfied with 66.7% compared to normal control of 16.7 %.

TABLE: 2

WHOQOL – BREF scale four domains responses on 24 items.

Quality of life of CKD patients and healthy person in four domains (N=30)

DOMAIN	CHRONIC KIDNEY DISEASE PATIENTS		NORMAL CONTROL	
	Frequency	Percentage	Frequency	Percentage
PHYSICAL :				
Good	10	33.3	25	83.3
Poor	20	66.7	5	16.7
PSYCHOLOGICAL :				
Stable	5	16.7	18	60
Unstable	25	83.3	12	40
Social Relationship :				
Active	12	40	20	66.7
Not Active	18	60	10	33.3
ENVIRONMENT:				
Adequate	10	33.3	22	73.3
Inadequate	20	66.7	8	26.7

The table shows that on WHOQOL- BREF scale the CKD patients have poor quality of life physical (66.7), psychological (83.3), social relationship (60%), environment (66.7) as compared to normal control.

DISCUSSION

Quality of life is the extent to which an individual can feel and enjoy all the important events in life in a prosperous way and this concept is often used to measure the well-being of individuals, communities, and nations (Komalasari et.al, 2019).

Qualities of life of chronic kidney disease patients in comparison to healthy person was significantly lower in all the four domains of (WHOQOL-BREF) and mostly lower quality of life in psychological, environment and Physical aspect dimension of WHOQOL-BREF scale.

In a study by Fiona Y. Wong et.al (2010), it was found that the four domains of QOL, the residents in this study had a relatively higher QOL in the physical health domain and a lower QOL in the environmental domain. An overall moderate satisfaction with the neighborhood environment was found significantly predicted QOL in the psychological domain, however, this effect was partially mediated by the non-smoking status of the residents.

Another study by sathvik et.al (2020) the quality of life of hemodialysis patients, in comparison to renal transplant patients, was significantly lower in all the four WHOQOL-BREF domains and female hemodialysis patients showed significantly lower quality of life than male patients in the psychological and environmental dimension of WHOQOL-BREF.

Similarly, a study done in Sri Lanka a cross- sectional study was conducted at a teaching hospital in Anuradhapura and the national hospital of Sri Lanka. 250 participants were selected they found that patients with CKD undergoing dialysis has overall low scores. 62.2% of participants were observed to be experiencing poor quality of life, and 30.8% participants good quality of life (Premadasa et.al, 2019).

Same finding was observed by Suja A. et.al., 2012 assessed hospital-oriented prospective, longitudinal, observational comparative study was conducted for six months in the nephrology department of a tertiary care hospital. Patients who were receiving hemodialysis regularly and aged between 20 and 80 years. 50 patients were selected, 25 randomly as the control group and the other 25 were considered as the test group. They showed overall quality of life of patients on hemodialysis was significantly impaired.

Assessment of QOL in CKD is important as it is a longstanding disease with limited treatment facilities in low resource is CKD patients. In this study majority of the participants were reportedly experiencing poor in all four domains physical (66.7), psychological (83.3), social relationship (60%), environment (66.7). QOL under psychological domain was higher than the other domain and QOL under physical, social relationship and environmental domain was lower than the psychological domain.

In general, research on patients with various chronic diseases indicates that coexisting chronic diseases, adverse health risk behaviours, depressive symptoms, insomnia and cognitive impairment, are associated with impaired health related quality of life (HRQoL). Therefore, intensified early treatment of diabetes, obesity, and left ventricular dysfunction, spirituality and interventions for reducing psychological morbidity are associated with improved HRQoL (Megari K. 2013).

Some limitations of the present study are the relatively small sample size to detect significant differences between the stage of CKD and the difficulties we encountered in recruiting subjects in the initial stages in the initial stages of the disease.

CONCLUSION

The results of the study showed that CKD patients suffer from depression, anxiety and poor quality of life. Quality of life of chronic kidney disease patients was poor in all four domains to healthy persons. Data was found that there was significant difference between the chronic kidney disease patients and healthy person on quality of life. After dialysis CKD patients have better quality of life compare to before dialysis treatment but, QOL was significantly higher in all domains among healthy person compared to those who has undergone dialysis treatment. The health professionals responsible for the care provided to this population should ideally be familiar with and trained in the application of the QOL assessment tools, which may be valuable in the global assistance of these, patients, even in of the disease the earlier stages of disease, and allow timely health care interventions in the course.

ABBREVIATIONS

CKD: Chronic Kidney Disease

QOL: Quality Of Life

WHO: World Health Organization

WHOQOL-BREF: World Health Organization Quality of Life-bref

HRQoL: Health related Quality of LIFE

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