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LEVEL OF LIFE SATISFACTION AMONG PATIENTS OF END STAGE RENAL DISEASE (ESRD) UNDERGOING HEMODIALYSIS: A CROSS-SECTIONAL STUDY

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Abstract

Objective: *The present study aims to investigate the Level of Life satisfaction among patients of End Stage Renal Disease (ESRD) undergoing hemodialysis.*

Methodology: *A total of 100 patients with End Stage Renal Disease (ESRD) were included in this cross-sectional study. Participants were categorized into two age groups: above 45 and below 45. Both genders were included, and all participants resided in Islamabad or Rawalpindi. The demographic data collected included gender, family system, and socioeconomic status. Descriptive frequency and Chi-square tests were used for the analysis of the results.*

Results: *Analysis showed that 28% of patients were under 45 years old, while the remaining 72% of patients were over 45 years old. Dissatisfaction was frequent, indeed: 22% were dissatisfied, and 29% were slightly dissatisfied, versus 11% slightly satisfied, 11% satisfied, and 10% very satisfied.*

Conclusion:*The results indicate that Level of Life Satisfaction was inadequate {dissatisfied (22%) and slightly dissatisfied (29%)}. Findings concluded that patients with End Stage Renal Disease (ESRD) were not experiencing an adequate level of life satisfaction due to chemical changes in the kidneys and the physiological distress associated with ESRD*

INTRODUCTION

Health involves not only physical aspects but also mental and social well-being.

The World Health Organization mentions that the absence of disease does not ensure that someone is healthy and health goes beyond this state (WHO, 2022). It is a condition in which all the domains including physical, mental, emotional, andsocialdomainsofone'slifeareinaharmoniousrelationshipwithoneanother[1] (World Health Organization, 2022). Health is a complex concept that includes different aspects of well-being such as mental, physical, and social dimensions in addition to the absence of illness .Health is not just about being free from disease and disability but also involves complete physical, mental and social well-being[1]. Patients with End-Stage Renal Disease (ESRD) frequently experience diminished life satisfaction because the disease affects multiple facets of their lives, such as physical health, mental well-being, social interactions, and financial conditions. Although dialysis may enhance survival rates, it does not guarantee a high quality of life for every patient.

End-Stage Renal Disease (ESRD) is a significant public health issue that causes high morbidity and

mortality rates. It negatively impacts the quality of life of those affected, places a considerable economic burden, and is often diagnosed too late due to low awareness. There has been a global increase of 41.5% in the all-age death rate due to chronic renal disease. (Arora, 2021). The prevalence of chronic renal disease is higher in females (9.5%) than in males (7.3%). In 2017, global cases of chronic kidney disease showed a 29.3% increase in all-age prevalence (Arora, 2021). End-stage renal disease and hemodialysis treatment lead to various changes, encompassing physical and psychosocial factors, including how patients perceive and evaluate their quality of life. The primary benefit of hemodialysis treatment is its ability to sustain life in individuals facing end-stage renal failure. Due to the ongoing nature of this treatment, it is essential to address both the biological dimensions of patients' experiences and their psychosocial challenges. Evaluating the quality of life for patients enables the medical team to adopt a comprehensive view of the patient's situation, going beyond merely focusing on medical symptoms, and helps to strengthen the relationship between physicians and patients. Individuals undergoing hemodialysismayencountervariousphysiologicalandpsychosocialchallenges,exposing them to potential risks, losses, and lifestyle adjustments (Helmy et al., 2022). Research suggests a strong association between overall happiness and several health-related factors, including chronic diseases, sleep disorders, discomfort, obesity, tobacco use, anxiety, and physical exertion (Strine et al., 2007). A decline in health-related quality of life and physical activity is associated with increased susceptibility to mortality and hospitalization (Johansen et al., 2000) Lower QOL scores are linked to higher rates of both mortality and morbidity (Shafiee et al., 2017). Althoughhemodialysis canprolong and maintain life, the illness itself as well as a number of psychological issues have a substantial influence on quality of life (Khan et al., 2019). Numerous studies have indicated a decline in the satisfaction with life and an elevated prevalence of depression among individuals undergoing hemodialysis.

Life Satisfaction

Subjective well-being consists of two key components: the emotional component and the judgmental component, also known as life satisfaction (Veenhoven, 1996) - (Diener et al., 1985). Life satisfaction refers to how a person evaluates their overall quality of life (Gutiérrez-Vargas et al., 2013). It is measured by factors such as mood, satisfaction in relationships, achieving goals, self-concept, and the ability to handle life's challenges. Instead of focusing on momentary emotions, life satisfaction reflects a positive attitude toward one's life overall. When assessing life satisfaction, various aspects such as economic status, education level, personal experiences, and living conditions are often taken into consideration (Diener et al., 1999). Life satisfaction is the overall assessment of one's feelings and attitudes about their life at a specific moment, encompassing various aspects of well-being, such as emotional, psychological, and social factors (Veenhoven, 2013). Life satisfaction is a crucial part of subjective well-being, influenced by various factors. Socio-demographic factors include gender, age, marital status, income, and education, while psychosocial factors involve health, illness, functional abilities, activity levels, and social connections. Individuals with higher life satisfaction generally experience better physical health outcomes, such as lower risk of pain and physical limitations, fewer chronic conditions, and better self-rated health (Martín-María et al., 2016). Recent research indicates that having a higher life satisfaction is associated with better health outcomes, including a reduced risk of chronic conditions such as heart disease and diabetes, as well as lower mortality rates. (Kim et al., 2016) There are at least three potential ways in which life satisfaction may affect health: (1) by enhancing psychological and social resources that can help shield against the negative impacts of excessive stress; (2) by indirectly influencing health behaviors; and (3) by directly affecting biological processes. (Kim et al., 2021)

METHODOLOGY

This cross-sectional study (2023-2024) aimed to investigate the Level of life satisfaction among patients with end-stage renal disease (ESRD). A clinical sample of 100 participants receiving dialysis treatment was selected from Islamabad and Rawalpindi. (BBH, CDA & SIH). Hospital administrative consent was obtained. The debriefing provides participants with a full explanation of the hypothesis being tested, procedures, if any, involving deception, and the reason(s) why it was necessary to deceive them.Furthermore, they were also informed about their right to refuse participation or withdraw at any

time.Participants were given instructions on how to complete the questionnaire. With the patients' consent, data were collected. To obtain data, various demographic variables were recorded, and a comprehensive demographic sheet was developed, including gender, family system, and socioeconomic status. Satisfaction with life was evaluated using the Satisfaction with Life Scale (SWLS)17.

As the participants were dialysis patients, their comfort was ensured and maintained.All other ethical guidelines provided by the American Psychological Association were followed.

Measures:

Satisfaction with Life Scale (SWLS). Diener, Emmons, Larsen, and Gryphon established the Satisfaction with Life Scale (SWLS)17. This 5-item test, which is not a gauge of positive or negative affect, is intended to assess a person's overall cognitive assessment of their level of life satisfaction. This is a 7-point Likert scale that ranges from 1 (strongly disagree) to 7 (strongly agree) in order to measure the level of agreement with each of the 5 statements. Higher scores indicate elevated levels of life satisfaction. The SWLS had a good level of internal consistency, as indicated by its Cronbach's alpha rating of 0.8.

Statistical Analysis:

Data were analyzed by SPSS version 22. Descriptive Chi-square tests were used for the analysis of the results.

RESULTS

This study involved 100 participants, with a majority identifying as female (60%). All participants were from a middle socioeconomic status background; none were from upper or lower classes. Additionally, the family structure of the participants was predominantly joint (60.7%), compared to nuclear families (39.3%). Analysis indicated that 28% of patients were under 45 years old, while the remaining 72% of patients were over 45. As shown in Table 2, the combined percentage of respondents reporting dissatisfaction—22% identified as dissatisfied and 29% as slightly dissatisfied—significantly exceeds the percentage of those expressing satisfaction. Specifically, only 11% of participantsreported being slightly satisfied, 11% satisfied, and 10% extremely satisfied, indicating a total of 32% reporting some level of satisfaction.

Table1
Demographiccharacteristicsofthesample (N=100).

Demographics	Frequency	Percentages
Gender		
Male	40	40 %
Female	60	60 %
Socioeconomic Status		
Upper	000	00%
Middle	100	100%
Lower	000	00%
Family System		
Nuclear	35	39.3%
Joint	54	60.7%

Table 2
Frequency of Life satisfaction among Patients of End Stage Renal Disease (ESRD) undergoing Hemodialysis (n=100).

Level of Life Satisfaction	Frequency	Percentages
Extremely dissatisfied	10	10%

Dissatisfied	22	22%
Slightly dissatisfied	29	29%
Neutral	7	7%
Slightly satisfied	11	11%
Satisfied	11	11%
Extremely satisfied	10	10%

TABLE 3
Life satisfaction among male and female patients of end stage renal disease undergoing hemodialysis (n=100).

N of valid cases	Gender	Mean	SD	Chi-Square	Likelihood ratio	df	Sig
100	M = 40	24.91	3.720	27.44	30.103	1	.000

DISCUSSION

The findings of this study reveal significant insights into the life satisfaction of patients with End Stage Renal Disease (ESRD) undergoing hemodialysis. Notably, the data indicate that a considerable proportion of participants reported dissatisfaction with their lives, with 22% identifying as dissatisfied and 29% as slightly dissatisfied. In contrast, only 11% of respondents were slightly satisfied, 11% satisfied, and 10% extremely satisfied. This discrepancy suggests that nearly 51% of patients are experiencing negative perceptions regarding their life satisfaction. These results are consistent with existing literature that points to the emotional and psychological challenges faced by patients undergoing chronic treatments such as hemodialysis. Previous research also shows that quality-of-life parameters in hemodialysis patients are significantly lower (Dembowska et al., 2022). Hemodialysis patients encounter various challenges in their daily lives. Besides mood disturbances, both illness-related and treatment-related stressors—along with physical symptoms—significantly affect how patients perceive stress (Gerasimoula et al., 2015). Previous Studies have also shown a statistically significant negative impact on the quality of life of dialysis patients due to the duration of dialysis treatments. The findings of the recent study suggest that hemodialysis and its duration have a significant impact on the quality of life of most patients. Extended hemodialysis a negativelyaffects their physical health, social relationships, psychological well-being, and environmental factors (Akram et al., 2013). The heightened risk of complications, morbidity, and mortality in patients undergoing hemodialysis is linked to a decline in quality of life. Limitations in daily activities adversely affect both their physical and psychological well-being. (Krau et al., 2016) As the duration of dialysis increases, there is a corresponding decline in quality of life for people with chronic kidney disease on hemodialysis. They face significant physical, psychological, environmental and social challenges, which make it difficult to maintain or return to work. This situation often creates a vicious cycle of stress, anxiety, despair, and feelings of being a burden to their families. However, strong social support from partners, family, friends, coworkers, or the community is closely linked to improved quality of life (Chuasuwan et al., 2020).The systematically increasing number of patients requiring chronic hemodialysis draws attention to the problems of comprehensive health care in this group of patients. The improvement of dialysis techniques favors the prolongation of life and duration of therapy. This situation sheds new light on the health problems of this population. The long treatment period imposes the necessity of the full control of factors that are likely to interfere with its course. The oral health of patients, also expressed by the condition of the periodontium and mucosa, has significant potential to modify patients' overall health. Therefore, numerous indications are required for the implementation of comprehensive psychological care of hemodialysis patients due to their poor psychosocial condition.

Limitations and Suggestion

Sample of the study was confined to only 2 hospitals of Islamabad and one of Rawalpindi. So, the results may lack generalizability. Therefore, collecting samples from other cities in Pakistan would enhance generalizability.

The sample size could be increased for better generalizability of data.

This research was conducted within a limited timeframe that limits on further aspects such as limited literature view.

In this study, there was sample of hemodialysis patients only, for future research, comparison between different chronic kidney patients is recommended for assessing impact of hemodialysis on overall health status and life satisfaction among patients of end-stage renal disease.

Conclusion

This study indicates that more than half of the respondents experienced negative feelings regarding their life satisfaction, suggesting that the challenges associated with ESRD and hemodialysis may have a profound impact on their overall well-being. The prevalence of dissatisfaction highlights the importance of addressing not only the medical but also the emotional and psychological needs of patients undergoing hemodialysis, as improving life satisfaction could improve health outcomes.The findings of the study have direct implications for clinical practice, highlighting the need for tailored interventions to optimize the care and quality of life of patients undergoing hemodialysis.

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