

Access this article online

Quick Response Code:



Website:

www.jehp.net

DOI:

10.4103/jehp.jehp_1449_22

Physical and psychosocial burden experienced by women on maintenance hemodialysis

Sheeba George, Nalini M¹, Sarosh Kumar², Fatima D'Silva¹, Pradeep Shenoy³

Abstract:

BACKGROUND: The global prevalence of chronic kidney disease is growing at an alarming rate, and the number of patients progressing to kidney failure is increasing. A substantial number of patients are undergoing hemodialysis (HD), which improves health and lengthens life. However, it imposes multiple physical and psychological demands on the patients. With the intensity of symptoms being greater among women, a greater focus is needed to obtain empirical evidence regarding the health problems of females receiving HD.

MATERIALS AND METHODS: A descriptive qualitative design was used to explore the health problems of women undergoing maintenance HD. The sampling technique used was maximum variation purposive sampling. The data were collected through in-depth face-to-face interviews with 12 female patients attending the dialysis unit of a tertiary care hospital in northern Kerala, South India, using a semi-structured interview guide. The interview was audiotaped, and the participant content was later converted verbatim into English. The content was imported to NVivo and coded. Thematic analysis was performed using Braun and Clarke's six-step approach.

RESULT: During data analysis, six major themes and 20 subthemes emerged. The themes include (1) physical suffering, (2) mental agony, (3) restricted life, (4) sexual inactivity, (5) breakdown of social life, and (6) financial hardship.

CONCLUSION: Females undergoing maintenance hemodialysis experience significant health-related issues in all major dimensions of health. They are physically vulnerable, psychologically defeated, and socially detached. The study highlights the need for detailed evaluation and consistently supportive and educational care.

Keywords:

Hemodialysis, India, physical and psychosocial burden, women

Govt Nursing College,
Kannur, Kerala, India,
¹Nitte Usha Institute
of Nursing Sciences,
Nitte University,
Mangalore, Karnataka,
India, ²Department of
Medicine, Government
Medical College, Kannur,
Pariyaram, Kerala,
India, ³Department of
Nephrology, K S Hegde
Medical Academy,
Mangalore, Karnataka,
India

Address for correspondence:

Dr. Nalini M,
Department of Psychiatric
Nursing, Nitte Usha
Institute of Nursing
Sciences, Nitte (Deemed
to be University),
Mangalore, Karnataka,
India.
E-mail: nalini@nitte.edu.in

Received: 04-10-2022

Accepted: 16-06-2023

Published: 22-01-2024

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

Introduction

Chronic Kidney Disease (CKD), which affects more than 10% of the world's population, is a significant contributor to the global disease burden and has emerged as the 10th leading cause of death globally.^[1,2] There is an increase in the prevalence of CKD in India. It ranges from <1% to 13% in different regions of the country.^[3] The population in Kerala is more vulnerable to CKD due to the high prevalence of lifestyle diseases.^[4] Hemodialysis (HD) is a complex

therapy for end-stage renal disease (ESRD) that negatively affects patients' health. Being on dialysis can be stressful, both for the patient and the family.^[5,6]

Incorporating sex and gender aspects in health research is gaining recognition globally.^[7] The existing qualitative and quantitative studies conducted among patients on maintenance dialysis focused on their lived experiences and quality of life, irrespective of gender. Most often, men are addressed in research studies, while women are underrepresented.^[8-10] Females are often denied the right to decide on treatment.

How to cite this article: George S, Nalini M, Kumar S, D'Silva F, Shenoy P. Physical and psychosocial burden experienced by women on maintenance hemodialysis. *J Edu Health Promot* 2023;12:456.

Many studies have reported that the health-related quality of life is low and the burden of symptoms is higher among females.^[11,12] The problems faced by female patients on HD have insufficient information. It limits the evidence base on which the recommendations are made to ensure the best outcomes. To address the existing knowledge gap, the present study aimed to qualitatively explain women's physical and psychosocial burden on maintenance HD from their perspective.

Materials and Methods

Study design and setting

The descriptive qualitative research design was used for the study, conducted between April 10th and May 5th, 2022, at the dialysis unit of a tertiary care center in Northern Kerala, South India.

Study participants and sampling

The study participants were twelve female patients with ESRD undergoing HD. We used the maximum variation purposive sampling technique to recruit the participants to facilitate a diverse group. Female patients aged above 18 years undergoing HD for more than a year, three times a week, and who were hemodynamically stable were included in the study. Patients with speech or hearing problems and cognitive impairments were excluded.

Data collection tool and technique

A face-to-face, in-depth interview was conducted using a semi-structured interview guide. The guide, developed in English, was translated into the regional language, Malayalam, and then translated back to English to check for consistency. Two pilot interviews were conducted to maximize validity.

Data collection

Approval from the institutional ethics committee was obtained. A face-to-face, in-depth interviews with 12 female patients were conducted using a semi-structured interview guide to acquire a dense description of the patients experiences. The principal investigator (PI) introduced herself, explained the study's purpose, and ensured confidentiality. After obtaining informed consent, the interviewer started the interview at the bedside during dialysis. A general lead question was asked to stimulate discussion. The interviewer listened carefully as the patient spoke. Probing questions were used to clarify the participant's description and acquire comprehensive data. The interviewer audiotaped the interviews and maintained a set of documents and field notes for reference during the analysis. Each interview lasted for 20 to 30 minutes. The data collection was continued until data saturation.

Most female patients were initially hesitant to talk about their health issues, but as the interview continued, they were ready to share their experiences. The PI spent long hours daily in the dialysis units during the data collection period to engage with the participants.

Ethics considerations

Ethical clearance was obtained from the institutional ethics committee. We obtained informed consent from the participants after explaining the purpose and ensuring confidentiality.

Data analysis

After repeatedly listening to the recorded interviews several times, each interview was transcribed verbatim on the same day of data collection. The gaps were identified, and clarifications were made with the patient during their next visit to the dialysis unit. The transcription verbatim was translated into English. The software NVivo was used to analyze and manage the data. The transcribed documents were imported into NVivo. The thematic analysis approach of Braun and Clarke's six-step framework was used to identify themes from the interview.^[13,14]

The following steps were followed for analysis.

Step 1: Familiarizing with the data

The fundamental step in the thematic analysis is becoming familiar with the data, as they lay the foundation for the rest of the analysis. Reading and re-reading the transcripts multiple times helped the researchers become familiar with the data and facilitate deep immersion in it.

Step 2: Generating initial codes

The relevant phrases and sentences that addressed the research question were coded by examining the data. Fifty-one codes emerged. For example, the extract says "Lying down continuously for hours together for dialysis is exhausting. I cannot move my hand. I feel like running away from here" was coded as "confined to bed for a long time."

Step 3: Searching for themes

This step aims at the interpretation of aggregated meaningfulness across the data set that helps answer the research question. The coded data were examined for similarities and differences. Similar codes with shared meanings were combined to form subthemes and then themes.

For example, there were several codes related to restrictions experienced by them. We assembled similar

codes with related meanings to form subthemes: dependency, restricted movements, loss of control over life, diet- a matter of concern, and fluid restriction. These subthemes were collated to form the theme of restricted life. Likewise, 21 subthemes and six themes emerged from 12 interviews.

Step 4: Reviewing themes

The investigators conducted an iterative review of the data and assessed its relevance to the research question and whether it supports and fits into the theme. Accordingly, modifications are made.

For example, the subthemes of hopelessness and uncertainty have similar meanings. Hence, they were merged, and the theme of "the uncertainty of the future" was developed.

Step 5: Defining and naming themes

The themes and subthemes are refined at this stage. A detailed assessment of the data set was done to identify the essence of the themes and subthemes. The researchers also decided on the data extracts to be presented in the results. The identified themes were cross-checked with the raw data.

Step 6: Producing the report

This phase involves writing up the report. The results of the study are presented as themes, subthemes, and the most suitable data extracts, which demonstrate the nature of the theme.

Quality assessment

To minimize the investigator's bias, bracketing of pre-existing ideas and beliefs was employed. For methodological quality, we adopted the evaluative criteria for qualitative studies developed by Lincoln and Guba. Credibility, transferability, dependability, and confirmability are the criteria employed to establish trustworthiness.^[15,16] The strategies used in the study are detailed in Figure 1.

We adopted consolidated criteria for reporting qualitative research: COREQ, 32-item reporting guidelines for qualitative studies.

Results

a. Description of demographic and clinical data

Twelve female HD patients aged between 32 and 66 years participated in the study. The mean age was 54.75 years. Among the participants, all had attained menopause except one, who was 32 years old. Nine participants were married and lived with

their spouses, whereas two were widows and one was single. Five subjects were working but stopped once they started on HD. Six participants had been using HD for more than six years. Four patients were hypertensive, one had heart disease, and one had a stroke. [Table 1]

b. Health problems of female patients undergoing HD

Fifty-nine codes were identified from 12 interviews and categorized. From these categories, the researcher identified subthemes, and six themes emerged. This includes physical suffering, mental agony, a restricted life, sexual inactivity, a breakdown of social life, and financial hardship. [Table 2]

Theme 1: Physical suffering

Female patients receiving HD suffer from physical health problems including nagging pain, incapacitating fatigue, unnerving cramps, sleep disturbances, itching, nausea, vomiting, and menstrual problems.

Nagging pain

Chronic pain is a major problem reported by the majority of the participants. The pain level increases based on the duration of dialysis. It ranges from discomfort at the fistula site to whole-body aches throughout the day, preventing them from engaging in daily activities.

"I experience constant pain in my arms, legs, and back, especially when I move my arm. Now the whole body has an ache." Participant 2

"..... in addition, there is severe pain while inserting the cannula which may last up to 4 hours." Participant 3

Incapacitating fatigue

All of the participants verbalized fatigue which was more on the day of dialysis.

"Fatigue is a major problem I experienced, especially on the day of dialysis which lasts until noon, the next day. Hence getting up from the bed itself is difficult." Participant 7

Unnerving cramps

The most common causes of cramps are said to be increased fluid removal and electrolyte and mineral disturbances. Cramps affect the legs, arm, abdomen, and back may also occur intra-dialysis or post-dialysis.

"For me, the major problem is cramps and it is unpredictable. It is more during dialysis and when more fluid is removed from my body." Participant 1.

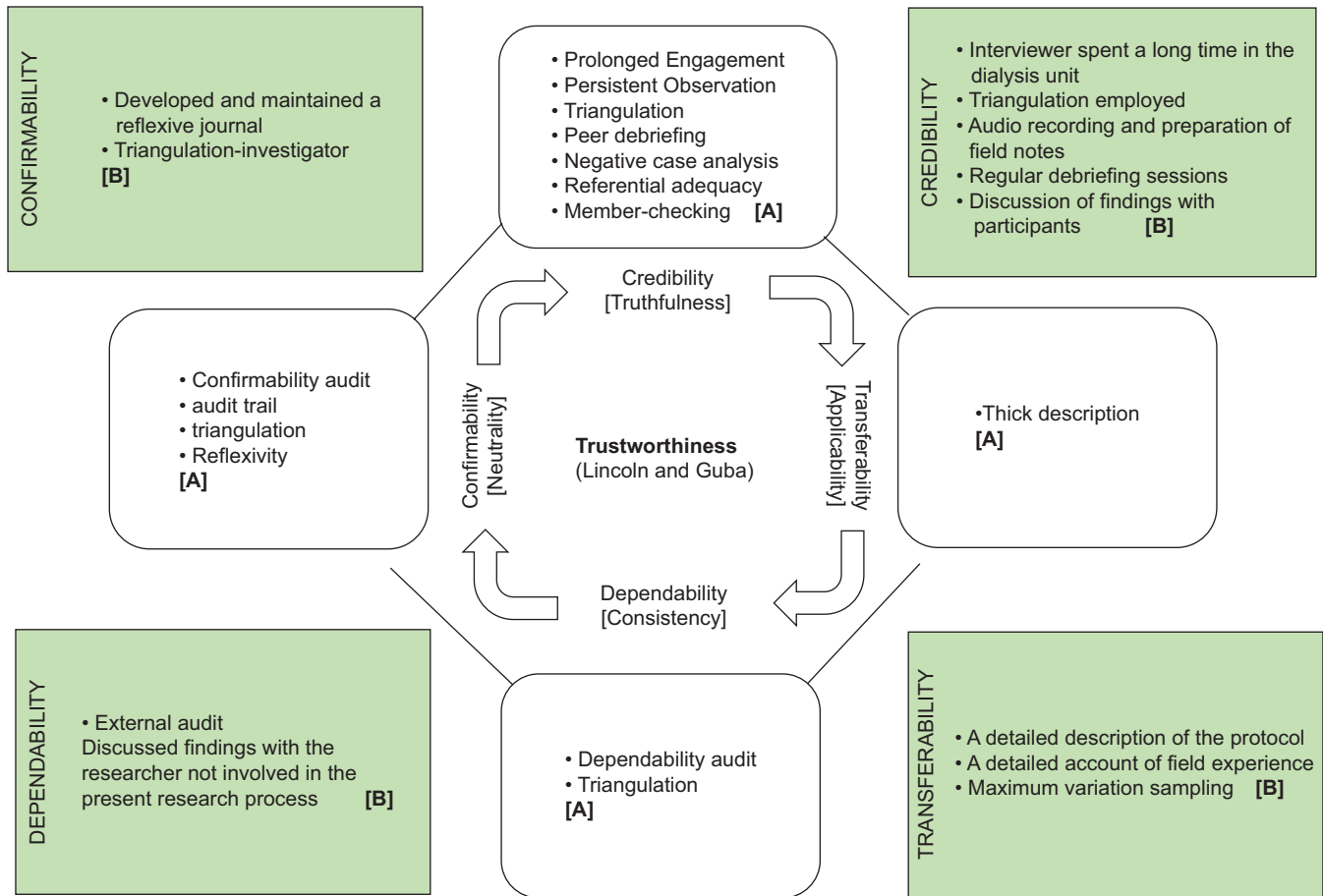


Figure 1: Evaluation criteria developed by Lincoln and Guba (1985): [A] depicts the techniques to achieve trustworthiness. [B] depicts the strategies applied in the study to establish trustworthiness

“Cramps may occur during dialysis or after, but rarely on nondiabetic days. It may be on the leg, hands, stomach, or even back.” Participant 2

Sleep disturbance

HD patients are often deprived of restful sleep. Sleep disturbances comprised poor sleep or increased daytime sleep. Most of the participants have reported decreased sleep, whereas a few reported increased sleep on the day of the dialysis cycle.

“I don’t sleep during the day. Still, I get short sleep spells at night.” Participant 6

Itching

The respondents experienced itching at some point in the course of their disease, even though the levels of severity differed for each. Two subjects reported this distressing symptom as unpleasant and difficult to cope with.

“My skin feels itchy and flaky. It is really difficult to cope with this” Participant 7.

Nausea and vomiting

Dialysis patients often feel nauseous and experience vomiting. Most of them reported occasional vomiting, whereas a few verbalized vomiting episodes. This again contributes to fatigue and lethargy.

“I constantly feel nauseous and bloated in my stomach.” Participant 2

Menstrual problems

Women with CKD experience menstrual irregularities. Once the dialysis is started, periods may even be stopped.

“During those days, I had to endure tremendous suffering. The bleeding was there for a month or more, and then I had to be infused with blood. Those days were really difficult for me. Now menstruation has ceased for four years.” Participant 3

Theme 2 Mental agony

Almost all the participants are experiencing some form of mental disturbance. They face emotional ups and downs.

Table 1: Distribution of the sample according to the socio-demographic characteristics of the participants

Participants	Age range In years	Marital status	Occupation	Duration CKD In years	Duration HD in years
1	40–49	Married	Unemployed	3	1
2	50–59	Married	Unemployed	12	11
3	40–49	Married	Unemployed	17	17
4	50–59	Married	Unemployed	9	10
5	30–39	Single	Unemployed	17	15
6	60–69	Married	Unemployed	9	7
7	60–69	Widow	Unemployed	9	7
8	30–39	Married	Unemployed	3	2
9	50–59	Married	Unemployed	1 year 5 months	1
10	60–69	Married	Unemployed	7	4
11	60–69	Widow	Unemployed	8	2
12	50–59	Married	Unemployed	3 year 6 months	3

High levels of stress and anxiety related to disease and health status are common. They feel mentally defeated and debilitated. Uncertainty about life, worthlessness, and hopelessness emerged as subthemes.

Uncertainty of the future

High feelings of hopelessness exist among HD patients. Repeated hospitalizations and fear of death make their lives unpredictable and devoid of future goals. Poor prognosis and deteriorating health contribute to it. It hinders them from following health-promotive practices, as they feel that they are not worth following.

“My son and I are very close to each other. He has been working abroad for two years. I am ardently waiting for his return, and I pray that I live to see him return. Our lives are unpredictable, as mine has changed in a fraction of a second.” Participant 3

Worthlessness

Feeling negative emotions like worthlessness and the feeling of becoming a burden for the family overwhelms them.

“..... everything in my life has changed now and cannot be compared to what it was before. I was an active person doing all types of work, and I was active in sports too. Looking at my certificates and medals fills me with grief. Such activities are not possible now post-dialysis, and each passing day seems to be a hurdle.” Participant 3

Helplessness

They need to depend on others for everything, and others do the decision-making. They feel that others control their lives.

“I have no other option other than adjusting to the changes posed by the disease. If such a problem happens

in life, what else can be done? I wasn't aware of the magnitude of the disease.” Participant 4

Theme 3: Restricted life

Once the patient is diagnosed with ESRD and is started on HD, they are forced to give up their desires. HD accentuates the restrictions, which often deprive the patient's basic needs, resulting in a negative impact on QoL. In the present study, many subjects described HD as being unpleasant. The subthemes of restricted life are dependency, restricted movements, diet as a matter of concern, fluid restrictions, and loss of control over life.

Dependency

The debilitating nature of the disease and long-term HD result in a loss of freedom and dependency on caregivers. When it comes to women, they are not involved in the decision-making process pertaining to their health. They are often forced to depend on others. None of the subjects have a regular income. This worsens the situation even further.

“Since the diagnosis, life has changed. Now I need to depend on others for things that I did before.” Participant 10

Restricted movements

During HD, the patients need to lie down for at least four hours, and most of the patients are subjected to this thrice a week. The patients end up losing their most productive hours with a feeling of being tied down.

Family members often restrict them from moving around. The chronic nature of the disease and long-term treatment impose high stress on caregivers. They are overly concerned about the patient's health and restrict their movements and activities.

Table 2: Themes, subthemes, and supporting data extracts of physical and psychosocial problems experienced by the female patients on hemodialysis

Themes	Subthemes	Supporting data extracts
Theme 1: Physical suffering	Nagging pain	"I experience constant pain in my arms, legs, and back, especially when I move my arm. Now the whole body has an ache." Participant 2 "..... in addition, there is severe pain while inserting the cannula which may last up to 4 hours." Participant 3
	Incapacitating fatigue	"Fatigue is a major problem I experienced, especially on the day of dialysis, which lasts until noon the next day. Hence, getting up from the bed itself is difficult." Participant 7
	Unnerving cramps	"For me, the major problem is cramps, and they are unpredictable. It is more during dialysis and when more fluid is removed from my body." Participant 1 "Cramps may occur during dialysis or after, but rarely on nondiabetic days. It may be on the leg, hands, stomach, or even back." Participant 2
	Sleep disturbance	"I don't sleep during the day. Still, I get short sleep spells at night." Participant 6
	Itching	"My skin feels itchy and flaky. It is really difficult to cope with this" Participant 7 "I experience severe itching, especially on the day of dialysis." Participant 9
	Nausea and vomiting	I constantly feel nauseated and bloated in my stomach." Participant 2 I always feel nauseated. The mere sight of anything undesirable incites vomiting. So I am unable to eat anything. I remain confined to bed." Participant 6
	Menstrual problems	"During those days, I had to endure tremendous suffering. The bleeding was there for a month or more, and then I had to be infused with blood. Those days were really difficult for me. Now menstruation has ceased for four years." Participant 3
	Theme 2 Mental agony	Uncertainty
Helplessness		"I have no other option other than adjusting to the changes posed by the disease. If such a problem happens in life, what else can be done? I wasn't aware of the magnitude of the disease." Participant 4
Worthlessness		"..... everything in my life has changed now and cannot be compared to what it was before. I was an active person doing all types of work, and I was active in sports too. Looking at my certificates and medals fills me with grief. Such activities are not possible now post-dialysis, and each passing day seems to be a hurdle." Participant 3
Theme 3: Restricted life	Dependency	"Since the diagnosis, life has changed. Now I need to depend on others for things that I did before." Participant 10
	Loss of control over life	"I am not permitted to do anything at home. They are afraid that it may cause some harm. I am not allowed to visit neighbors or attend functions like marriages. I am asked to lie down and take a rest. How long can a person lie down? It's boring" Participant 12
	Restricted movements	"Lying down continuously for hours together for dialysis is exhausting. I cannot move my hand. I feel like running away from here." Participant 3
	Diet: a matter of concern	"Food is an issue for me. I am afraid to eat anything. The stomach feels hunger pangs, but it's difficult to swallow the food that seems tasteless." Participant 12 "Do you want to know what I had yesterday? I ate a small portion of rice with a piece of fish.... that's all. :(I have to cook for myself, and I don't feel like it all the time..... Legumes boiled and drained taste like garbage then what's the point of having them?" Participant 2
	Fluid restriction	"I drink only a glass of water in divided portions twice a day. During the summer season, thirst cannot be quenched. I keep drinking sips of boiled water. Participant 2 "I drink only one glass of water a day. At times when I feel that my throat is parched, I suck on a pinch of sugar followed by boiled water to control thirst" Participant 4
Theme 4: Sexual inactivity	Lack of interest	"Since my dialysis cycle was initiated, I started sleeping separately as I have no such feelings: Participant2 "There has been total turmoil in my family since dialysis was started. Even then, my husband didn't abandon me and is taking care of me. There is no more intimacy between us physically due to a lack of interest. Even a touch seems to be irritating." Participant 3
Theme 5: Breakdown of social life	Social isolation	"Earlier, I used to go everywhere. Initially, I used to visit temples and other places. As time passed, my friends started avoiding me as I was a burden, making it difficult for them." Participant 3
	Sympathy	"Nowadays I don't go anywhere as everyone eyes me with empathy, and it's difficult. I hardly visit my family and have no friends as such." Participant 5
Theme 6: Financial hardships	Paying for dialysis	"Meeting the expenditure for dialysis is often strenuous. Hence, despite the doctor's advice, I delayed it. It started when I was drained and no could longer manage my symptoms. Here, it is free for two years. I am worried about what I will do after that." Participant 11
	Traveling a hurdle	"Traveling is difficult. I can't use public transportation. My husband is not going to the job on the day of dialysis, as he accompanies me. I was a coolie worker. If anyone supports....." Participant 4

"Lying down continuously for hours together for dialysis is exhausting. I cannot move my hand. I feel like running away from here." Participant 3

Diet: a matter of concern.

Dietary restrictions are unavoidable. They need to adhere to the instructions of the health care providers. They are often forced to compromise their tastes. Physical symptoms like fatigue, nausea, vomiting, tastelessness, etc., limit their food intake. A majority of them find self-cooking and following a special diet for themselves very difficult. So they do not adhere to the prescribed diet. Few of them are unaware of the need for a prescribed diet. Family support was deemed to be an important factor in determining strict adherence to the diet.

"Do you want to know what I had yesterday? I ate a small portion of rice with a piece of fish... that's all. I have to cook for myself, and I don't feel like it all the time..... Legumes boiled and drained taste like garbage: then what's the point of having it." Participant 2

Fluid restrictions

Fluid restriction is of great importance. Intra-dialytic weight gain must be controlled. If fluid intake is increased, it can precipitate breathing difficulties. When more fluid is removed during dialysis, it can result in cramps. So, most of the patients strictly adhere to fluid restrictions.

"I drink only a glass of water in divided portions twice a day. During the summer season, thirst cannot be quenched. I keep drinking sips of boiled water." Participant 2

Loss of control over life

"I am not permitted to do anything at home. They are afraid that it may cause some harm. I am not allowed to visit neighbors or attend functions like marriages. I am asked to lie down and take a rest. How long can a person lie down? It's boring" Participant 12

Theme 4: Sexual Inactivity

Lack of interest

Patients on HD show a lower level of sexual activity. Sexual desire is often reduced. Fatigue and other physical suffering also contribute to it. They are more concerned about their partners than they are about themselves, and this is even more true for younger women. Few of them expressed a feeling of guilt, and one of the participants broke down into tears inconsolably during the interview.

"There has been total turmoil in my family since dialysis was started. Even then, my husband didn't abandon me and is taking care of me. There is no physical intimacy between us due to a lack of interest. Even a touch seems to be irritating." Participant 3

Theme 5: Break down of social life

Social isolation

HD has a negative impact on social life. Detachment from society and a feeling of alienation and isolation are very common among patients undergoing HD. They withdraw themselves from society. They remain away from social gatherings. Changes in their physical appearance and the presence of fistulas were cited as reasons for their limited social interaction.

"Earlier, I used to go everywhere. Initially, I used to visit temples and other places. As time passed, my friends started avoiding me as I was a burden, making it difficult for them." Participant 3

Sympathy

"I hate to be an object of sympathy." This was the answer given for not attending social events like marriage by Participant 4. Instead of sympathy, provide social support. Even those who have been very active in social affairs often withdraw after the illness.

Theme 6: Financial hardships

Financial problems are a major challenge experienced by dialysis patients. Despite treatment costs, other expenses and loss of productivity contribute to it. It increases dependency.

Paying for dialysis

The cost of HD is high. So the majority of them depend on charitable centers or health insurance. At other times, the patients try to postpone the sessions, especially those coming from rural areas.

"Meeting the expenditure for dialysis is often strenuous. Hence, despite the doctor's advice, I delayed it. It started when I was drained and could no longer manage my symptoms. Here, it is free for two years. I am worried about what I will do after that." Participant 11

Travelling-a hurdle

On several occasions, it was difficult for patients to use public conveyance. So, most of them depend on the private modes of conveyance. Being women, someone

needs to accompany them, which increases the financial burden even further.

“Traveling is difficult. I can’t use public transport. My husband is not going to the job on the day of dialysis, as he accompanies me. I was a coolie worker. If anyone supports....” Participant 4

Discussion

HD often negatively affects the patient’s health and social life, as they face many physical, mental, and social problems. The problems of women are often different from those of men. The present study explores the health problems of female patients on maintenance HD. The majority of the study participants consider HD an unpleasant treatment as numerous problems can occur during its course, adversely affecting their quality of life. Most often, they are forced to compromise their family and social lives.

The themes derived from the study are physical suffering, mental agony, restricted life, sexual inactivity, and breakdown of social life. The most frequent physical problems are nagging pain, incapacitating fatigue, unnerving cramps, and sleep disturbances. Other reported problems are itching, anorexia, nausea, vomiting, and menstrual problems. The most annoying symptom experienced by patients on HD for less than 6 years is fatigue and cramps. Nevertheless, physical pain increases over time.

The results of the present study are matched with the results of the study conducted by Hrenczuk M, Koziel W, and Malkowski P. It states that general weakness, blood pressure variations, muscle cramps, headaches, itching, mental fatigue, and insomnia are the most annoying symptoms experienced by patients on HD. Other symptoms experienced by patients undergoing HD are pain at the fistula site, anorexia, intradialytic weight gain, dyspnea, and constipation. It also states that the therapy has a negative impact on their mental and social health domains.^[17]

According to Cox KJ *et al.*^[18], the significant symptoms experienced by patients include cramping, fatigue, itching, and depression, and the most bothersome symptom was cramping.

The chronic nature of the disease and long-term treatment adversely affect the patient’s mental status. Uncertainty, worthlessness, and helplessness were the subthemes extracted for the theme, of mental agony. Patients on HD often encounter many life restrictions, including diet and fluid restrictions, dependency, restricted movements, and loss of control over life.

A qualitative study by Avda EU, *et al.*^[19] reveals that most of the patients expressed their feelings regarding a lack of support from their spouses, children, and friends. The patients, especially females, experienced mental exhaustion and anxiety. They were concerned about their family roles and their inability to make plans.

The breakdown of social life is another theme emphasized by the participants in the present study. They dislike sympathy, which prevents them from attending social functions. They want others to understand them as one among them.

The result of the study is in concordance with the phenomenological study that aimed to investigate the lived experience of patients on HD by Shahgholian N and Yousefi H. It concludes that the participants expressed their dislike of pity for others. They stated that they need help and support from others whenever necessary.^[20]

Limitations and recommendations

There are certain limitations to consider. The data collected are subjective in nature. The data collection process was time-consuming. The data generated in the study serve as evidence for the early identification and treatment of health problems in the female population receiving HD. The investigators emphasize the need for future research to develop and test women-centered intervention programs. Furthermore, the impact of health problems on quality of life can also be analyzed. We found that physical pain increases over time. Further research is needed to explore the symptoms of pain and their determinants.

Conclusions

Chronic diseases burden the healthcare system. The number of patients undergoing HD is increasing by the day. Though life is prolonged, the array of symptoms experienced by clients on MHD decreases their functional capacity. An improved understanding of the suffering experienced by patients will help healthcare providers develop new management strategies to enhance their well-being. There is scarce information regarding the problems experienced by female patients undergoing MHD. According to the findings of the study, female patients on HD exhibit a heavy burden of symptoms that decrease their quality of life. The results can help us bridge the existing knowledge gap. The present study emphasizes the need for tremendous support from the family, health care team, and society. It highlights the importance of further research to explore the problems of females with MHD and their impact on daily life among a large sample from various settings.

Acknowledgments

The authors wish to thank Prof. Sreeja G Pillai and Ms. Leena Sooraj, Government Nursing College, Kannur, Kerala, for their pre-submission feedback and suggestions. We also acknowledge the participants in the study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

- Kovesdy CP. Epidemiology of chronic kidney disease: An update 2022. *Kidney Int Suppl* (2011) 2022;12:7–11.
- The global health observatory. Who.int. 10 September 2022 Available from: <https://www.who.int/data/gho>.
- Ene-Iordache B, Perico N, Bikbov B, Carminati S, Remuzzi A, Perna A, *et al.* Chronic kidney disease and cardiovascular risk in six regions of the world (ISN-KDDC): A cross-sectional study. *Lancet Glob Health* 2016;4:e307-19.
- Jacob SR, Raveendran R, Kannan S. Causes, comorbidities and current status of chronic kidney disease: A community perspective from North Kerala. *J Family Med Prim Care* 2019;8:2859–63.
- Bello AK, Okpechi IG, Osman MA, Cho Y, Htay H, Jha V, *et al.* Epidemiology of haemodialysis outcomes. *Nat Rev Nephrol* 2022;18:378–95.
- Kumar V, Yadav AK, Sethi J, Ghosh A, Sahay M, Prasad N, *et al.* The Indian Chronic Kidney Disease (ICKD) study: Baseline characteristics. *Clin Kidney J* 2022;15:60–9.
- Krishnan A, Teixeira-Pinto A, Lim WH, Howard K, Chapman JR, Castells A, *et al.* Health-related quality of life in people across the spectrum of CKD. *Kidney Int Rep* 2020;5:2264–74.
- Piccoli GB, Alrukhaimi M, Liu Z-H, Zakharova E, Levin A; World Kidney Day Steering Committee. What we do and do not know about women and kidney diseases; Questions unanswered and answers unquestioned: Reflection on world Kidney Day and International Women's Day. *Nephron* 2018;138:249–60.
- Tong A, Evangelidis N, Kurnikowski A, Lewandowski M, Bretschneider P, Oberbauer R, *et al.* Nephrologists' perspectives on gender disparities in CKD and dialysis. *Kidney Int Rep* 2022;7:424–35.
- Carrero JJ, Hecking M, Chesnaye NC, Jager KJ. Sex and gender disparities in the epidemiology and outcomes of chronic kidney disease. *Nat Rev Nephrol* 2018;14:151–64.
- Kefale B, Alebachew M, Tadesse Y, Engidawork E. Quality of life and its predictors among patients with chronic kidney disease: A hospital-based cross sectional study. *PLoS One* 2019;14:e0212184.
- Mahato SKS, Apidechkul T, Sriwongpan P, Hada R, Sharma GN, Nayak SK, *et al.* Factors associated with quality of life among chronic kidney disease patients in Nepal: A cross-sectional study. *Health Qual Life Outcomes* 2020;18:207.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2008;3:77-101.
- Maguire M, Delahunt B. Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *AISHE-J* 2017;9. Available from: <https://ojs.aishe.org/index.php/aishe-j/article/view/335>.
- RWJF-qualitative research guidelines project. *Qualres.org*. Available from: <http://www.qualres.org/HomeLinc-3684.html>. [Last accessed on 2022 Oct 02].
- Nowell LS, Norris JM, White DE, Moules NJ. Thematic analysis: Striving to meet the trustworthiness criteria. *Int J Qual Methods* 2017;16:160940691773384. doi: 10.1177/1609406917733847.
- Hreńczuk M, Koziel W, Malkowski P. Health problems and restrictions of chronic haemodialysis patients. *Gen Intern Med Clin Innov* 2019;4. doi: 10.15761/GIMCI.1000172.
- Cox KJ, Parshall MB, Hernandez SHA, Parvez SZ, Unruh ML. Symptoms among patients receiving in-center hemodialysis: A qualitative study. *Hemodial Int* 2017;21:524–33.
- Unsal Avdal E, Ayvaz İ, Özgursoy Uran BN, Yildirim JG, Sofulu F, Pamuk G. Opinions of hemodialysis and peritoneum patients regarding depression and psychological problems which they experience: A qualitative study. *J Infect Public Health* 2020;13:1988–92.
- Shahgholian N, Yousefi H. The lived experiences of patients undergoing hemodialysis with the concept of care: A phenomenological study. *BMC Nephrol* 2018;19:338.