JERN Journal of Education and Research in Nursing

Original Article

DOI: 10.14744/jern.2025.59837
J Educ Res Nurs. 2025;22(4):1-6

Difficulties Experienced by Peritoneal Dialysis Patients in the Home Environment: A Phenomenological Study

Abstract

Background: Treatment process experiences of peritoneal dialysis patients in the home environment may affect their daily living activities, social lives, and quality of life.

Aim: This study aimed to reveal the difficulties experienced by peritoneal dialysis patients in their home environment based on their own experiences.

Methods: The universe of this qualitative study consisted of peritoneal dialysis patients receiving services from a research hospital in a province in the Marmara Region. The sample included all patients over the age of 18 who were receiving peritoneal dialysis services between August 27 and October 27, 2023, who agreed to participate in the study. The study was completed with 15 participants. Data were collected using a "Descriptive Characteristics Form" and an "Assessment Form for Difficult Experiences of Peritoneal Dialysis Patients in the Home Environment." Thematic analysis was used to analyze the data.

Results: The majority of participants were women, married, and housewives (66.7%). In the study, the following themes and sub-themes were identified: "daily living activities (freedom of movement, sleep patterns and nighttime routines, time management and daily planning)"; "exhaustion/dependency (physical fatigue, device and program dependency)"; "social life and social activities (vacation and travel barriers, feelings of social isolation, family relationships)"; "peritoneal dialysis complications (physical complications, adaptation issues and transition to the machine, hygiene concerns and risk of infection)"; and "access to treatment and the treatment process (material procurement and economic difficulties, spatial inadequacies, expectations for institutional support and assistance)."

Conclusion: The study demonstrates that the experiences of peritoneal dialysis patients indicate that healthcare should not be limited to the clinical dimension alone; supportive practices targeting the family, social environment, and work life are an integral part of patient care. It may be advisable to reassess and improve existing practices developed to prevent difficulties experienced by peritoneal dialysis patients in their home environment and to enhance protective measures.

Keywords: Difficulties, peritoneal dialysis, qualitative research

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Introduction

Chronic kidney disease (CKD) is recognized as a significant and growing health problem worldwide,[1] and peritoneal dialysis is one of the renal replacement therapies used to treat the disease. In Türkiye, peritoneal dialysis accounts for 10% of the distribution of renal replacement therapy (RRT) types administered to patients (including pediatric patients) who started RRT in 2023.[2] Peritoneal dialysis (PD) treatment is performed at the patient's home by the patient and/or a caregiver who has received adequate training in the treatment protocol, through continuous manual or automated fluid exchange.[3]

The advantages of peritoneal dialysis include its ability to be performed at home, thereby increasing individuals' comfort and well-being and improving their quality of life. It is also noted that fewer complications are seen compared to hemodialysis treatment.[4,5] Despite these positive aspects, individuals undergoing peritoneal dialysis may also experience certain problems. Physiological problems include peritonitis, sleep problems, fatigue, constipation, pain, and cardiovascular and lipid disorders,[6–10] while psychological issues include anxiety and depression.[11] However, the literature indicates that all these problems, along with the environmental requirements of peritoneal dialysis, can also cause social and economic difficulties for individuals.[12,13] A review of the literature reveals that studies conducted in Türkiye mostly focus on the medical aspects of PD and the problems experienced by dialysis patients, while qualitative studies that examine patients' experiences and difficulties in depth are limited.[14] However, understanding individuals' subjective experiences of the treatment process is important for developing patient-centered care. In particular, the difficulties encountered by patients undergoing treatment at home, their expectations from the healthcare system, and their coping strategies may be decisive in restructuring nursing care. In this context, it is important to reveal the experiences and difficulties of individuals undergoing peritoneal dialysis. This study is expected to contribute to individual-centered care processes and the planning of home health services by examining the difficulties experienced by patients undergoing peritoneal dialysis in their home environment using a phenomenological approach. Furthermore, by identifying the difficulties experienced by peritoneal dialysis patients in their home environment

This study was presented as a poster at the 41st National Nephrology Congress and the 34th National Nephrology Nursing Congress, held in Antalya from December 4 to 8, 2024.

Cite this article as: Kuzu F, Alsancak S, Kahvecioğlu S. Difficulties Experienced by Peritoneal Dialysis Patients in the Home Environment: A Phenomenological Study. J Educ Res Nurs. 2025;22(4):1-6.

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Received: September 12, 2025
Accepted: October 12, 2025
Publication Date: December 01, 2025

from their own perspectives, the study is expected to contribute to the re-evaluation and improvement of existing practices developed to prevent these difficulties, as well as to the enhancement of protective measures. It is also assumed that the applications developed based on the results obtained will contribute to improving the quality of life of both peritoneal dialysis patients and their relatives. The study aimed to explore the difficulties experienced by peritoneal dialysis patients in their home environment through their own experiences.

Study Questionnaire

In this regard, the study sought answers to the following research questions:

1. What difficulties do peritoneal dialysis patients encounter in their home environment during the treatment process?
2. How do the difficulties experienced by patients affect their daily life activities and routines?
3. How does performing peritoneal dialysis at home affect patients' social lives and relationships?
4. How do patients perceive and manage their experiences during the peritoneal dialysis process at home?

Materials and Methods

Type of Research

This research was conducted using a qualitative design. The study was written in accordance with the *Standards for Reporting Qualitative Research* (SRQR) checklist for qualitative research reporting.

Research Population and Sample

The study population consists of patients receiving peritoneal dialysis services in a research hospital located in a province in the Marmara Region. Using the purposive sampling method, the study participants consisted of individuals aged 18 and over who were receiving peritoneal dialysis services in a research hospital located in a province in the Marmara Region, were able to communicate, agreed to participate in the study, and gave informed consent. In qualitative research, the sample size is not numerically determined in advance; participant recruitment is terminated when data saturation is reached. Therefore, interviews in this study were continued until data recurrence was observed, and the study was completed with a total of 15 participants. The study was conducted between August 27 and October 27, 2023.

Research Team and Reflexivity

The research team consists of three health professionals. The first researcher (F.K.) holds a doctorate in public health nursing and is experienced and trained in qualitative research methods. The other researchers are a nurse (S.A.) and a professor (S.K.) working in the dialysis unit. Interviews with participants were conducted by the researcher with extensive qualitative research experience. There was no direct clinical care relationship between the researcher conducting the interviews and the participants, which allowed participants to share their experiences more openly and in greater detail. The principle of reflexivity was taken into account during the research process; in particular, the possible effects of the clinical experience of researchers working in the dialysis unit on data collection and analysis were considered. Regular discussions were held among the research team during the creation of themes. This process contributed to reducing possible subjectivity and approaching the data from a multifaceted perspective.

Trustworthiness

To ensure the reliability of the study, the criteria of credibility, dependability, confirmability, and transferability were taken into account. Individual interviews were conducted with each participant, data were documented via audio recording, and critical statements were read back to participants for verification (member checking). During the coding and theme development stages, the research team worked collaboratively, taking care to reduce subjectivity through regular discussions. Participants' sociodemographic information was clearly presented, and findings were supported by direct quotations; this approach strengthened the reliability and transferability of the data.[15–17]

Data Collection Tools

The data collection tools used in the study were the *Demographic Characteristics Form* and the *Peritoneal Dialysis Patients' Home Environment Difficulties Assessment Form*, which consisted of open-ended questions to assess the difficulties experienced by peritoneal dialysis patients in their home environment.

Descriptive Characteristics Form

This form, created by the researchers based on relevant literature, contained eight questions. It included questions about the patients' age, gender, marital status, education, occupation, and identification. The questions took approximately five minutes to answer.

Peritoneal Dialysis Patients' Home Environment Difficulties Assessment Form

Developed by the researchers based on relevant literature, this form contained four semi-structured open-ended questions aimed at determining the experiences of peritoneal dialysis patients regarding difficulties in the home environment.

The open-ended questions were as follows:

- Do you experience any difficulties while performing peritoneal dialysis treatment at home? If so, what are they? Please explain.
- What do you think are the reasons for these difficulties?
- What do you do to prevent these difficulties?
- What do you think can be done to prevent these difficulties?

Follow-up questions included:

- At which stage of treatment do you experience these difficulties the most?
- Are the difficulties you experience primarily physical, emotional, or social?
- Who do you turn to for support when dealing with these difficulties? (e.g., family, healthcare team, friends)?
- How do these difficulties affect your daily life?
- Which of these challenges do you find most difficult?
- Have you experienced any problems with the treatment process or the materials used?
- How do you implement the precautions you need to take in your daily life?
- Do you encounter situations that make it difficult to implement these precautions?
- Do you have any expectations of healthcare professionals or institutions? If so, what are they?
- What changes could be made to facilitate the treatment process?

It took an average of 40 minutes to answer the open-ended questions.

Implementation of the Study

During the data collection process, individual interviews were conducted with each participant. The interviews took place in a suitable room (in terms of sound, temperature, lighting, and privacy) selected either at the participant's home (n=6) or in the dialysis unit (n=9). As part of the research, participants were first informed about the study, and informed consent was obtained. Participants were told that their participation in the research was entirely voluntary, that their names would not appear on the questionnaire form, and that the data would be used only for research purposes. Quantitative data were collected using the *Descriptive Characteristics Form*, while qualitative data were collected through face-to-face interviews using the semi-structured *Assessment Form for Difficulties Experienced by Peritoneal Dialysis Patients in the Home Environment*. All interviews were conducted by the same researcher, who holds a doctoral degree in public health nursing and is experienced in qualitative research methods.

Ethical Considerations

Prior to the commencement of the research, permission was obtained from the Clinical Research Ethics Committee of the hospital where the study was conducted (Date: 23/08/2023, Decision No: 2011-KAEK-25 2023/08-18). At the end of the interviews, participants were asked if they wished to add anything after listening to the audio recordings, and then the interviews were concluded. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Table 1. Descriptive characteristics (n=15)

	n
Age (year)	
Average age: 42.60±12.64 (Minimum: 21, Maximum: 70)	
Gender	
Female	10
Male	5
Marital status	
Single	5
Married	10
Educational status	
Not literate	2
Elementary school	6
Middle school	2
High school	2
University	3
Profession	
Housewife	10
Public sector	1
Private sector	4
Duration of peritoneal dialysis treatment	
≤3 years	9
4–6 years	4
>6 years	2
Accompanying medical condition*	
Yes	9
No	6
Information sources consulted regarding the disease	
Nurse	5
Doctor	3
Doctor, nurse	6
Doctor, nurse, social media	1

*: Diseases reported by participants marked as "present" include Familial Mediterranean Fever (FMF), amyloidosis, asthma, bronchitis, gastritis, hypertension, hyperthyroidism, hydrocephalus, and neurogenic bladder.

Data Evaluation

The quantitative data obtained from the research were evaluated using IBM SPSS Statistics 26.0 (IBM Corp., Armonk, NY, USA). Arithmetic mean, standard deviation, frequency, and percentage distribution were used in the evaluation of the quantitative data. The transcription of the qualitative data obtained from the research was performed by two researchers by listening to the audio recordings. Subsequently, the six-stage thematic analysis defined by Braun and Clarke[18] in 2006 was used for data analysis. The first five stages of thematic analysis consist of data analysis, while the sixth stage involves report writing. The analysis stages are as follows:

Stage 1. The transcribed interviews were read repeatedly by the researchers to become familiar with their content.

Stage 2. Interesting features in the data were systematically coded. These codes were then organized by relating them to the original data and the purpose of the study.

Stage 3. The created codes were grouped into potential themes, and subthemes related to each potential theme were identified.

Step 4. A thematic map was created using the themes and subthemes of the codes. The data were reread, and additions or deletions were made to the themes and subthemes as necessary.

Step 5. The thematic map was analyzed, and clear definitions and names were determined for each theme.

Step 6. The article was written based on the created themes and subthemes.

Results

The average age of participants was 42.60±12.64 years; 66.7% (n=10) were female, 66.7% (n=10) were married, 40% (n=6) were elementary school graduates, and 66.7% (n=10) were housewives. Regarding the duration of peritoneal dialysis among participants, 60% (n=9) had ≤3 years of treatment, 60% (n=9) had a comorbid condition, and 40% (n=6) stated that their main source of information about the disease was a "physician or nurse" (Table 1).

The difficulties experienced by peritoneal dialysis patients in their home environment were identified under the themes "daily life activities," "burnout/dependence," "social life and social activities," "peritoneal dialysis complications," and "access to treatment and the treatment process." A total of five themes and 14 subthemes were identified in the study (Table 2).

Theme 1. Daily Life Activities

Participants stated that peritoneal dialysis had various effects on their daily life activities. According to the data obtained from participants in the study, three subthemes were identified: freedom of movement, sleep patterns and nighttime routines, time management, and daily planning.

Subtheme 1.1. Freedom of Movement

Participants (n=15) indicated that individuals who switched to machine-assisted peritoneal dialysis felt freer to go out and live their daily lives more independently compared to the previous period.

Table 2. Themes and subthemes related to the difficulties experienced by peritoneal dialysis patients in the home environment

Theme	Subtheme
Daily life activities[15]	Freedom of movement
	Sleep patterns and nighttime routines
	Time management and daily planning
Exhaustion/dependency[15]	Physical fatigue
	Device and program dependency
Social life and social activities[15]	Vacation and travel barriers
	Feeling of social isolation
	Family relationships
Peritoneal dialysis complications[15]	Physical complications
	Adaptation problems and transition to the machine
	Hygiene concerns and risk of infection
Access to treatment and the treatment process[15]	Material procurement and economic difficulties
	Spatial inadequacies
	Expectations for institutional support and assistance

P7. *"I can move around more comfortably during the day because my stomach is empty... Since switching to the machine, I can now go out."*

P9. *"It was very difficult to leave the house during manual exchanges... I now have the freedom to go wherever I want during the day."*

Subtheme 1.2. Sleep Patterns and Nighttime Routines

Participants (n=15) stated that being connected to dialysis at night negatively affected their sleep continuity, leading to fatigue in the morning and lethargy during the day. Some participants emphasized that they felt the need to wake up during the night for treatment and that this had a negative effect on them.

P2. *"Connecting at night disrupts my sleep, so I wake up tired in the morning... I set the machine up for nighttime, but sometimes I wake up and check it."*

P11. *"Having to wake up at night is difficult for me... My sleep is disrupted, and I feel tired during the day."*

Subtheme 1.3. Time Management and Daily Planning

Participants (n=15) stated that they had to organize their daily routines according to their dialysis times.

P4. *"I plan my day around my machine connection time... I do all my work before connecting to the machine."*

P9. *"I schedule everything around my dialysis time... I'm free during the day, but I have to be home by nine in the evening."*

Theme 2. Exhaustion/Dependency

Participants (n=15) stated that the long-term physical burden of the peritoneal dialysis process and its structure, which limits their rhythm of life, creates feelings of exhaustion and dependency over time. According to the data obtained in this theme, two subthemes were identified: physical fatigue and dependence on the device and program.

Subtheme 2.1. Physical Fatigue

Participants (n=15) stated that symptoms such as shortness of breath, abdominal pain, and fatigue were experienced intensely, especially during the manual exchange period and the early stages of dialysis. This situation limited participants' involvement in daily life activities and negatively affected their motivation to continue treatment. Some participants emphasized that they struggled to adapt physically to the treatment and sometimes found themselves lacking the energy to continue dialysis.

P1. *"At first, I struggled a lot with shortness of breath and abdominal pain... I feel weak, especially on dialysis days."*

P3. *"...I was very tired when changing the machine four times manually."*

P7. *"Sometimes I find it difficult to connect to the machine due to fatigue. There are days when I don't have the strength to do it."*

Subtheme 2.2. Device and Program Dependency

Participants (n=15) stated that their lives were largely shaped around the hours they spent using the machine and that this situation undermined their sense of individual autonomy. It was understood that while a lifestyle based on long-term machine use was difficult to accept at first, over time it led to emotional fatigue, reluctance, and psychological strain. Such persistent limitations in treatment can negatively affect individuals' quality of life, not only physically but also psychosocially.

P4. *"When you're hooked up to a machine for nine hours, you don't feel free... My life is completely tied to the machine's schedule."*

P10. *"After a year and a half to two years of going through the process of hooking up to the machine every day, I'm getting tired of it... It took time to accept living hooked up to a machine."*

Theme 3. Social Life and Social Activities

The participants' (n=15) statements show that peritoneal dialysis treatment significantly limits not only individuals' physiological functioning but also their interaction with social life. According to the data obtained in this theme, three subthemes were identified: vacation and travel barriers, feelings of social isolation, and family relationships.

Subtheme 3.1. Vacation and Travel Barriers

Participants (n=15) indicated that individuals had to abandon their travel plans due to reasons such as inadequate hygienic conditions, the need to transport medical supplies, and stress experienced during transportation. This situation also narrowed opportunities for social participation. The continuous nature of dialysis created significant pressure on mobility by restricting individuals' freedom to move when and where they wanted.

P5. *"It's hard to maintain hygiene in a hotel, so I don't go on vacation... I had to book two rooms for vacation."*

P8. *"Traveling is difficult when I have to carry supplies with me... Even if I go on vacation, I can't relax; if I don't have a place to stay, I have to come back for dialysis."*

Subtheme 3.2. Feeling of Social Isolation

Participants (n=15) noted that the treatment regimen limits individuals' participation in social activities. In particular, treatment-specific requirements such as physical activity restrictions and diet create feelings of exclusion or alienation from society among participants.

P1. *"I can't go in the sea, and that alienates me socially."*

P9. *"I feel distant from society. Dialysis is exhausting, so it's hard to focus on anything else. What you eat affects your UF levels."*

Subtheme 3.3. Family Relationships

Participants (n=15) reported that peritoneal dialysis creates both physical and emotional burdens on household dynamics. They stated that the noise generated by the devices used during treatment causes sleep disruption and discomfort, negatively affecting the daily rhythm of family members. Furthermore, it was stated that parenting roles and family interactions were affected by the care process. All these findings reveal that peritoneal dialysis creates multilayered effects not only at the individual level but also at the relational level.

P4. *"When I get up at night, I disturb my wife... I arranged the children's room for this procedure so as not to disturb my wife."*

P6. *"When I was using the machine, I couldn't spend time with my children. I switched to hand dialysis; I think hand dialysis is good..."*

P8. *"The alarm goes off, you can't sleep, your sleep is disrupted, you can't sleep again, you're irritable all day..."*

Theme 4. Peritoneal Dialysis Complications

Participants (n=15) stated that the various complications they encountered during the peritoneal dialysis process significantly affected both their physical health and their level of compliance with treatment. According to the data obtained in this theme, three subthemes were identified: physical complications, adaptation problems and transition to the machine, hygiene concerns, and risk of infection.

Subtheme 4.1. Physical Complications

Participants (n=15) commonly experienced symptoms such as abdominal pain, bloating, shortness of breath, fatigue, and limited mobility. Some participants reported that these symptoms severely limited their daily activities and reduced their physical endurance during treatment. In addition, some individuals reported experiencing technical problems with the catheter (e.g., punctures or the need for frequent replacement).

P1. *"I had pain in my stomach and couldn't move. I had trouble breathing, so I switched to the machine."*

P8. *"At first, I felt weak... My stomach was bloated... After the change, I felt nauseous."*

P15. *"I was experiencing abdominal pain, shortness of breath, weakness in my movements... There was a high possibility of catheter perforation; the catheter was changed five times because it perforated..."*

Subtheme 4.2. Adaptation Issues and Transition to the Machine

Participants (n=15) stated that the difficulties experienced with manual dialysis led some individuals to switch to automated peritoneal dialysis. Transitioning to the machine required an adaptation period at first, but over time, this method was found to be more comfortable and sustainable.

> **P3.** *"I struggled with manual changes, but felt relieved after switching to the machine."*
>
> **P7.** *"Adapting to the machine was difficult at first, but I got used to it."*

Subtheme 4.3. Hygiene Concerns and Infection Risk

Participants (n=15) noted that the feasibility of peritoneal dialysis is significantly dependent on environmental hygiene conditions. They emphasized that the risk of infection increases if the area where dialysis procedures are performed is not sufficiently sterile; therefore, they stated that they had to make extra efforts to ensure hygiene in the home environment. It was also noted that this situation requires more attention and isolation, especially in homes with children, and that individuals limit their social and physical spaces due to fear of infection.

> **P3.** *"You need to have a clean, suitable room to do dialysis. You need to have a suitable place to put the dialysis solutions."*
>
> **P7.** *"I clean everything out of fear of infection. No matter how meticulous you are, washing your hands one by one before dialysis is exhausting."*
>
> **P8.** *"I do it alone to ensure hygiene... I can't use the room the children enter... Everything must be very hygienic; otherwise, the risk is high."*

Theme 5. Access to Treatment and the Treatment Process

Participants' (n=15) statements indicate that the peritoneal dialysis process involves various difficulties not only in its medical aspects but also in logistical, economic, and structural contexts. According to the data obtained in this theme, three subthemes were identified: material procurement and economic difficulties, spatial inadequacies, and expectations of institutional support and assistance.

Subtheme 5.1. Material Procurement and Economic Difficulties

Participants' (n=15) statements highlighted the high cost of dressing materials, disinfectants, and consumables required for treatment. They stated that most of these materials create a regular economic burden because they require daily or frequent use. In addition, some individuals expressed that they struggled to ensure continuity of treatment and to bear the additional financial burden caused by machine malfunctions and portability issues.

> **P8.** *"Gauze, disinfectant, everything is very expensive... Waterproof tape costs 500 lira, and it's needed for every shower... Dressing materials are very costly, and dressings are needed almost every day, or at worst every other day."*
>
> **P7.** *"It's a hassle to bring the machine back and forth. Three of my machines broke down when I was going somewhere... It's a serious expense every month."*

Subtheme 5.2. Spatial Inadequacies

Among the participants (n=15), it was observed that creating a suitable space for dialysis in the home environment posed a serious problem for many individuals. The solution and equipment required for treatment take up a lot of space, causing accommodation problems, especially in small or crowded households. Some participants stated that they had to reorganize their living spaces or allocate their children's rooms for dialysis procedures. Insufficient physical space stands out as one of the main environmental factors limiting the feasibility of home treatment.

> **P1.** *"I can't find a place to put the materials... The solutions take up two square meters in the house. We have space issues because the house is small."*
>
> **P2.** *"If I didn't have a 3+1 house, I couldn't have made a separate room. I cleared out the children's room and made it suitable for the procedure."*

Subtheme 5.3. Expectations for Institutional Support and Assistance

Participants (n=15) stated that supply chain problems and quota restrictions, especially in obtaining solutions, sometimes caused individuals to go back and forth between health institutions, creating both a physical and psychological burden. They emphasized that covering medication costs alone is insufficient and that other treatment-related expenses should also be covered by social security. In addition, the need for public support mechanisms such as regular financial assistance or care coordination was frequently mentioned.

> **P4.** *"We spend two days going from pharmacy to pharmacy trying to access and obtain peritoneal dialysis solutions, but we are told that there is no quota available."*
>
> **P8.** *"We would be much better off if we received monthly support... Social security only covers medication, which is not enough."*

Recommendations

Participants (n=15) stated various suggestions for solutions to the difficulties they experienced during the peritoneal dialysis process. In particular, participants stated that the procurement of medication and medical supplies should be facilitated, access to hospital services should be made easier, and supportive regulations should be implemented for the storage of supplies at home. It was noted that the dialysis process is more difficult for individuals in hot weather; therefore, it would be beneficial to make adjustments in terms of duration and frequency. It was also emphasized that following nurses' guidance facilitates the process and that patient compliance is important.

> **P4.** *"Materials can be affected by heat and cold; homes may not be suitable for material storage, and they could be obtained more frequently in smaller quantities."*
>
> **P7.** *"...If we could find the medications where we go, we could get them from there."*
>
> **P10.** *"It's a bit of a hassle because it prevents me from going out; I can't go far. If it were easier to get it done at the hospital there..."*
>
> **P8.** *"Patients should listen to their nurses, they are working hard for us. If they listen, the process will be easier."*
>
> **P15.** *"...It would be good if the time were shortened a little (nine hours). It's hard in the heat, or if it were every other day."*

Discussion

This study examined the difficulties experienced by peritoneal dialysis patients in their home environment based on their own experiences, and these experiences were discussed in light of the themes and subthemes mentioned above. The qualitative data focusing on the experiences of individuals undergoing peritoneal dialysis revealed that the treatment process is not limited to its biomedical aspects; rather, it creates multilayered effects on individuals' physical, psychosocial, economic, and spatial areas of life. Planning daily life activities around dialysis, the impact on sleep patterns, and the restriction of freedom of movement show that factors affecting physical adaptation to treatment also influence all other aspects of daily living. In fact, one study found that difficulties identified as important by patients included drainage pain, difficulty eating and sleeping, and fear of peritonitis.[19]

A study examining the perspectives of adults living with peritoneal dialysis through a thematic synthesis of qualitative studies found that peritoneal dialysis can provide patients with a sense of control, independence, self-efficacy, and freedom; however, it also emphasized that holistic and multidisciplinary care is needed to reduce the risks of low self-confidence, physical impairment, decreased social functioning, and low self-esteem.[20] Another study showed that, despite the difficulties posed by the treatment, participants expressed gratitude for being able to care for themselves at home.[21] In this context, it can be argued that in chronic disease management, not only medical parameters but also social determinants that shape an individual's life should be taken into account. Indeed, all themes reveal that this treatment modality requires a dynamic adaptation process at the individual level.

The study demonstrates that the economic burden, spatial limitations, and expectations of institutional support experienced during the treatment access process mean that individuals are largely forced to bear the responsibility for treatment with their own resources. Patient, caregiver, and clinician perceptions, as well as priorities identified in the remote management study for peritoneal dialysis, include the impact of peritoneal dialysis on daily life and support for treatment management,[22] which is similar to the findings of this study. Time and space limitations are among the subthemes identified in a qualitative study on patient realities and expectations.[23] In this study, under the theme of exhaustion/dependence, it was observed that both the physical fatigue associated with the treatment burden and the dependence on the machine create emotional weariness in individuals. At the same time, the impact on social life and family relationships affects the individual's adaptation process to treatment. In a qualitative study examining social support in the peritoneal dialysis experience, the identified themes included meeting emotional needs and managing emotions (emotional support), as well as peritoneal dialysis tasks and life tasks (instrumental support).[24] Another study also showed that the themes identified as difficulties in home dialysis included the burden of home dialysis tasks, the lack of a suitable home environment, and loss of freedom. The same study also indicated that the themes identified as facilitating home dialysis included convenience and freedom.[25] In a qualitative study conducted on the choice of dialysis, the peritoneal dialysis treatment method was stated to have two main reasons that encourage patients to choose it: it can be carried out at home, and there is no need to be in the hospital three times a week.[26] In this regard, it can be said that the thematic findings indicate that peritoneal dialysis is a multidimensional intervention in an individual's life. Therefore, it can be suggested that healthcare services should be developed to be holistic, patient-centered, and supported by structural mechanisms. In this context, it is thought that considering the findings obtained together with similar or different results in the literature will contribute to a more holistic perspective in evaluating the treatment process.

Limitations

This study was conducted only with peritoneal dialysis patients receiving services from a research hospital in a province in the Marmara Region. Therefore, the findings may not be generalized to patients living in different regions or with different socioeconomic conditions. Additionally, the data are based solely on patient opinions; the perspectives of family members or caregivers were not included in the study.

Conclusion

The study found that peritoneal dialysis patients experience various difficulties in their daily lives, social lives, and psychosocial situations during the treatment process in the home environment. The findings show that patients' needs for not only medical but also psychosocial and social support are important. Therefore, it is recommended that healthcare professionals develop individualized care plans and place importance on practices that strengthen psychosocial support and family involvement. Future research is recommended to be conducted in different regions and supported by quantitative methods.

Ethics Committee Approval: The study was approved by the University of Health Sciences Bursa Yüksek İhtisas Training and Research Hospital Clinical Research Ethics Committee (Approval Number: 2011-KAEK-25 2023/08-18, Date: 23.08.2023).

Informed Consent: Informed consent was obtained from the participants.

Conflict of Interest: The authors have no conflicts of interest to declare.

Funding: The authors declared that this study received no financial support.

Author Contributions: Concept – F.K.; Design – F.K., S.A.; Supervision – F.K., S.K.; Resource – F.K.; Materials – F.K.; Data Collection and/or Processing - F.K., S.A.; Analysis and/or Interpretation - F.K., S.A., S.K.; Literature Review – F.K.; Writing – F.K.; Critical Review – F.K., S.K.

Peer-review: Externally peer-reviewed.

References

1. Cockwell P, Fisher LA. The global burden of chronic kidney disease. Lancet. 2020;395(10225):662–664. [CrossRef]
2. Turkish Society of Nephrology. Registry of the Nephrology, Dialysis and Transplantation in Turkey. Accessed October 13, 2025. https://nefroloji.org.tr/uploads/pdf/REGISTRY2023_web.pdf
3. Gökalp C. Farklı diyaliz modalitelerinin hasta yakını yaşam kalitesi üzerindeki etkileri. Ege J Med. 2021;60(1):32–38. [CrossRef]
4. Kandakoglu A, Sauré A, Michalowski W, Aquino M, Graham J, McCormick B. A decision support system for home dialysis visits scheduling and nurse routing. Decis Support Syst. 2020;130:113224. [CrossRef]
5. Milan Manani S, Baretta M, Giuliani A, et al. Remote monitoring in peritoneal dialysis: benefits on clinical outcomes and on quality of life. J Nephrol. 2020;33(6):1301–1308. [CrossRef]
6. Kosmadakis G, Albaret J, Da Costa Correia E, Somda F, Aguilera D. Constipation in peritoneal dialysis patients. Perit Dial Int. 2019;39(5):399–404. [CrossRef]
7. Liu GL, Zhan QN, Zhao YL, et al. Risk factors for sleep disorders in patients undergoing peritoneal dialysis. Sleep Biol Rhythms. 2021;19(3):255–264. [CrossRef]
8. Salzer WL. Peritoneal dialysis-related peritonitis: challenges and solutions. Int J Nephrol Renovasc Dis. 2018;11:173–186. [CrossRef]
9. Tian C, Zhang B, Liang W, et al. Fatigue in Peritoneal Dialysis Patients and an Exploration of Contributing Factors: A Cross-Sectional Study. J Pain Symptom Manage. 2020;59(5):1074–1081.e2. [CrossRef]
10. Worsey L. Peritoneal Dialysis. In: Thomes N, ed. Renal Nursing: Care and Management of People with Kidney Disease. 5th ed. New Jersey: John Wiley & Sons; 2019:235–276. [CrossRef]
11. Nadort E, Schouten RW, Luijkx X, et al. Symptom dimensions of anxiety and depression in patients receiving peritoneal dialysis compared to haemodialysis. Perit Dial Int. 2022;42(3):259–269. [CrossRef]
12. 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(12):1988–1992. [CrossRef]
13. Sitjar-Suñer M, Suñer-Soler R, Masià-Plana A, et al. Quality of life and social support of people on peritoneal dialysis: mixed methods research. Int J Environ Res Public Health. 2020;17(12):4240. [CrossRef]
14. Göktuna G, Arslan G, Nasuhbeyoğlu G. Experiences of patients living with peritoneal dialysis: a descriptive qualitative study. EHD. 2024;17(2):161–175. [CrossRef]
15. Creswell JW, Poth CN. Qualitative Inquiry and Research Design: Choosing Among Five Approaches. Sage Publications; 2016.
16. Guba EG, Lincoln YS. Naturalistic Inquiry. Newbury Park, CA; Sage Publication: 1985. [CrossRef]
17. Nowell LS, Norris JM, White DE, Moules NJ. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. Int J Qual Methods. 2017;16(1):1–13. [CrossRef]
18. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77–101. [CrossRef]
19. Fissell RB, Wysocki M, Bonnet K, et al. Patient perspectives on peritoneal dialysis (PD) and the PD catheter: Strategies and Solutions. Perit Dial Int. 2023;43(3):231–240. [CrossRef]
20. Tong A, Lesmana B, Johnson DW, Wong G, Campbell D, Craig JC. The perspectives of adults living with peritoneal dialysis: thematic synthesis of qualitative studies. Am J Kidney Dis. 2013;61(6):873–888. [CrossRef]
21. Baillie J, Lankshear A. Patient and family perspectives on peritoneal dialysis at home: findings from an ethnographic study. J Clin Nurs. 2015;24(1–2):222–234. [CrossRef]
22. Subramanian L, Kirk R, Cuttitta T, et al. Remote Management for Peritoneal Dialysis: A Qualitative Study of Patient, Care Partner, and Clinician Perceptions and Priorities in the United States and the United Kingdom. Kidney Med. 2019;1(6):354–365. [CrossRef]
23. Ho YF, Hsu PT, Yang KL. Peritoneal dialysis after shared decision-making: the disparity between reality and patient expectations. BMC Nurs. 2022;21(1):268. [CrossRef]
24. Fox DE, Quinn RR, James MT, Venturato L, King-Shier KM. Social Support in the Peritoneal Dialysis Experience: A Qualitative Descriptive Study. Can J Kidney Health Dis. 2020;7:2054358120946572. [CrossRef]
25. Jones LA, Gordon EJ, Hogan TP, et al. Challenges, Facilitators, and Recommendations for Implementation of Home Dialysis in the Veterans Health Administration: Patient, Caregiver, and Clinician Perceptions. Kidney360. 2021;2(12):1928–1944. [CrossRef]
26. Ahmadi SM, Jalali A, Jalali R. Factors Associated with the Choice of Peritoneal Dialysis in Iran: Qualitative Study. Open Access Maced J Med Sci. 2018;6(7):1253–1259. [CrossRef]