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Lived Experiences of Patients with Chronic Kidney Disease Receiving In-Center Hemodialysis at a Tertiary Hospital in Laguna, Philippines

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Abstract

Chronic kidney disease (CKD) is a challenging and prevalent problem that affects around 120 Filipinos per million people annually, with 5,000 on dialysis and 1.1 million on kidney replacement therapy. However, only a few researchers have explored the perspectives of these individuals' experiences; hence, this study was intended to fill that knowledge gap. This study aims to provide a guideline for nurses in providing a holistic approach to chronic kidney disease patients by analyzing their lived experiences. Researchers utilized a qualitative research design and hermeneutic-phenomenological method. The data were gathered using an interview questionnaire adapted from the study of Wasihun et al. (2021), with twelve participants interviewed in a Tertiary Hospital in Laguna, Philippines. The transcripts were thematically analyzed and yielded five (5) key themes, including the severity of the disease, physico-psycho emotional effects of having CKD, coping with HD treatment, socio-economic impacts of HD treatment, and healthcare provision. CKD patients face diverse physical, psychological, emotional, and financial challenges. Despite these impediments, they were able to comply with treatment and manage their problems. Healthcare providers should holistically address patients' needs for healthier lives.

Keywords: Chronic kidney disease, CKD, Hemodialysis, HD, Lived-Experiences, Severity of the Disease, Physico-psycho Emotional Effects of Having CKD, Coping with HD Treatment. Socio-Economic Impacts of the HD Treatment, and Health Care Provision

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1. Introduction

Chronic kidney disease, also known as CKD, is characterized as having an abnormal kidney composition or function. It is a continuous, permanent damage in renal function that results in imbalances of fluid, energy metabolism, and electrolytes in the body (Tadesse et al., 2021). CKD is evidenced by GFR or glomerular filtration rate of less than 60 ml/min per 1.73 square meters (Vaidya & Aeddula, 2022). In addition, CKD is divided into five stages. Since stage 5 kidney failure is irreversible, treatments such as hemodialysis and kidney transplantation will be necessary to prolong life. All stages of CKD are correlated with a greater risk of poor quality of life, and early mortality (Tadesse et al., 2021).

Hemodialysis is the process of cleaning a person's blood by filtering waste, salts, and water through a dialysis machine and a filter known as a dialyzer or an artificial kidney. (National Kidney Foundation [NKF], 2016). Hemodialysis is a continuous procedure for patients that requires numerous hospital or dialysis center visits, typically three to five times per week, indicating significant changes in the patient's usual way of life (University of Maryland Medical Center [UMCC], (2022). Hemodialysis treatment typically causes a decrease in autonomy, reliance on healthcare providers, interruption of marriage, family, and social life, and a decrease in financial resources. Patients undergoing hemodialysis face challenges that are related to their therapy as well as

adjustments in their self-concept and self-confidence, reversals in family dynamics, and loss of dignity (Kustimah et al., 2020).

According to the recent available data from Philippine Renal Disease Registry (PRDR, 2022), there were 21,535 people with chronic kidney disease in 2016 and 20,776 of them are on hemodialysis. Every hour, one Filipino develops chronic renal failure, bringing the total to approximately 120 Filipinos per million people yearly. Consequently, about 5,000 are on dialysis, while around 1.1 million individuals worldwide are on kidney replacement therapy. As of October 2022, there were 533 cases of chronic kidney disease in San Pablo City, according to seven dialysis centers in San Pablo City, and all these patients are on hemodialysis. In addition, there are two (2) CKD patients who are on hemodialysis for every 1000 population in San Pablo City, Laguna in 2022.

The objective of this study will serve as a contribution to the body of foundational research for nursing intervention in providing care for hemodialysis patients by exploring and analyzing the comprehensive lived experiences of CKD patients on hemodialysis. Due to limited local studies on this topic, this study is beneficial in filling the knowledge gap by investigating the lived experiences of CKD patients on hemodialysis in a Tertiary Hospital in Laguna. Some studies revealed that this kind of treatment negatively impacts the lived experiences of patients and adds to their suffering. There were high prevalence rates for depression and suicide in hemodialysis patients, according to a study by Khan et al. 2019. Moreover, according to the data gathered by the researchers, the youngest hemodialysis patient in San Pablo City, Laguna, is 9 years old. These motivated the researchers to conduct a study on the subject. Therefore, the researchers intended to explore these experiences of hemodialysis patients in a Tertiary Hospital in Laguna, Philippines. They wished to know how healthcare providers, especially nurses, would be able to lessen their sufferings by addressing these concerns. The result of the study aspires to help hemodialysis patients through a holistic approach.

1.1. Statement of the Problem

The purpose of this study is to discover the lived experiences of patients with chronic kidney disease receiving in-center hemodialysis in a Tertiary Hospital in Laguna, Philippines. The study aimed to answer the following questions:

1. What is the essence of the lived experiences of patients with Chronic Kidney Disease receiving in-center hemodialysis treatment?

1.2. Corollary Questions:

1. How would the participants describe their lived experiences while in hemodialysis treatment?
2. What themes emerged from the lived experiences of patients with chronic kidney disease receiving in-center hemodialysis treatment?
3. What implications may be derived from the qualitative data gathered?

1.3. Theoretical Framework

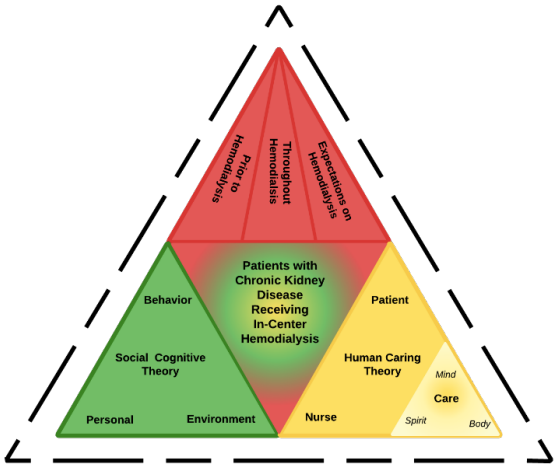

Figure 1: Theoretical Framework on the Lived Experiences of CKD Patients on Hemodialysis

This study focuses on patients with chronic kidney disease receiving hemodialysis treatment. It is a phenomenological study; thus, it comprises three parts: the experiences prior to hemodialysis, the experiences throughout hemodialysis, and the expectations and plans regarding their treatment and condition. The researchers conducted an in-depth one-on-one interview to be able to gather the data. With this, they were able to recognize the different experiences, challenges, and difficulties that the patients had experienced. These lived experiences can serve as a guide for their healthcare provider and support system in providing holistic care.

In relation to these, two (2) theories were used, Albert Bandura's Social Cognitive Theory and Jean Watson's Theory of Human Caring.

Albert Bandura's Social Cognitive Theory concentrated on the external factors that contributed to the participants' experiences. On the other hand, the Theory of Human Caring by Jean Watson focuses on the relationship between the nurse and the patients, as well as the holistic care that the nurse will provide for the patients receiving hemodialysis. Hence, these theories served as the backbone of the study.

With everything into consideration – from the lived experiences, external factors, and nurse-patient care, these served as the guide and pathway for the study.

2. Literature Review

2.1. Chronic Kidney Disease

According to the World Health Organization's report (2018), chronic kidney disease claimed 1.2 million lives in 2015, and 2.3 to 7.1 million people are with kidney disease.

Chronic Kidney Disease, a condition in which the kidneys are damaged and lose function that persists for a period of more than three months (CDC 2022; Tadesse et al., 2021; Webster et al., 2016; Delles & Vanholder, 2017; Hill et al. 2016). Due to its loss of function and inability to filter fluids and body wastes it leads to metabolic fluid and electrolyte abnormalities (Hill et al., 2016; CDC, 2022). Hence, the accumulation of wastes and fluids in the body leads to several health problems such as heart disease, hypertension, diabetes (CDC, 2022; Tadesse et al., 2021; Romagnani et al., 2017; Kalantar-Zadeh et al., 2021; Kovesdy 2022). The normal GFR ranges from 90 to 120 ml/min/1.73m^2. GFR or glomerular filtration rate is tested to determine how well the kidneys are functioning (UCSFHealth.Org., 2020; Webster et al., 2016). CKD is classified depending on the degree of the patient's GFR (American Kidney Fund, 2022). Immunocompromised patients specifically, with diabetes mellitus, high blood pressure, heart disease, family history of CKD, obesity is at risk for developing the disease (CDC, 2022; Romagnani et al., 2017; Kovesdy 2022; Webster et al., 2016; Kalantar-Zadeh et al., 2021; American Kidney Fund). The lives of patients with CKD are altered due to the restrictive aspects it causes (Alves Moreira et al., 2021). This led them to have negative perspectives and beliefs on their condition which contributed to their overall health, adherence to medication and treatment, and their coping strategies (Clarke et al., 2016)

2.2. Hemodialysis

According to the World Health Organization's report (2018), patients with illnesses who did not have access to continuous dialysis died in 2010 showing a 32% increase from 2005. Additionally, according to the same report, 2.1 million people underwent dialysis therapy in 2010, and by 2030, that number will increase to double that amount.

Hemodialysis is a continuous treatment that filters the wastes in an individual's blood. It is usually performed in a dialysis at least three times a week for 3 to 5 hours (UMCC, 2022; NKF, 2022). In hemodialysis, an artificial kidney called dialyzer filters the wastes in the blood and returns the blood to the body. There are three types of access in hemodialysis: a fistula, graft, and catheter. In fistula and graft, vein and artery will be surgically connected, however, a tube is used to connect the blood vessels in graft. While a catheter, the portal of entry is on the patient's neck or chest (NKF, 2022). Level of kidney function is the determinant whether a patient needs hemodialysis. The recommended GFR for hemodialysis of CKD patients must be below 15ml/min. (NKF, 2015; Dialysis Clinic, Inc., 2022). In addition, serum creatinine level of greater than 1.2 mg/dL for women and greater than 1.4 mg/dL for men who are CKD patients is also a determinant whether kidney is functioning. Before and after hemodialysis, the patient's weight and vital signs should be taken.

Patients might experience symptoms and side-effects before, during and after the hemodialysis such as muscle spasm, high and low blood pressure, itchiness, vertigo, nausea and more (Marks et al., 2015 & Chantira,

2016). Hemodialysis is considerably an effective form of therapy with evidence of successful patient betterment when done while committing proper adherence to the new health-based restrictions which made them feel isolated from others (Ibrahim et al., 2015; Cooper, 2017; Chantira, 2016; Filipi, 2021; Fleishman et al., 2020; Sharif et al., 2022; Gebrie, 2019)

In the study of Ibrahim et al. (2015), the treatment process for hemodialysis is complex and people must adjust to the hemodialysis method's procedure of treatment. This includes involvement, fluid intake, medication management, and diet in the completion of sessions and dialysis sessions due to individuals who have difficulty adapting. Moreover, hemodialysis difficulties can be observed as a result of the treatment in which people struggle with physical, mental, and emotional issues, and their well-being is negatively affected by economic status. On the one hand, participants had favorable attitudes toward hemodialysis, accepting and appreciating the innovative technique that extended their lives. The dialysis machine is a crucial therapeutic option for people with renal failure in which participants adored the device and claimed that it equates to life, as patients may have already perished without it and may have already passed away. They added that their bodies had cooperated with the equipment (Gebrie, 2019).

2.3. Lived Experience

Longer dialysis sessions are linked to greater rates of all-cause mortality (Sumida et al., (2015). Therefore, it causes psychological effects on the lives of hemodialysis patients. Some patients had psychological issues with their body image and mental health (Wasihun et al., 2021; Tadesse et al., 2021; Loiselle et al., 2016; Bracamonte, 2022). Aside from the physical and psychological aspects, hemodialysis treatment also causes financial burden to the patients and their families (Rachael et al., 2018; Tadesse et al., 2021). In addition, on the result of the study by Tadesse et al. (2021), the inaccessibility of hemodialysis has been one of the most common concerns of the participants of this study. Most of them travel long distances just to get treatment.

A majority of the affected age group are the elderly, ranging from 65 years of age and older as they are more susceptible and have complications due to age (Maenosono et al., 2021). The study by Tong, et al., (2022) found that more women than men have CKD. Moreover, women on dialysis have a higher mortality risk than men (Weigert et al., 2020)

In contrast, the study of (Muckaden et. al., 2018; Montalescot et al., 2021; & Moreria et al., 2022), reveals that CKD patients and their families experience difficulty accepting the condition and treatment and therefore view it as an additional burden especially in providing care. However, once a patient has undergone psychological and mental changes that have allowed them to manage their dietary and lifestyle choices and accept any necessary adjustments to their ongoing hemodialysis treatment, they may have a positive outlook in the treatment process (Shah & Chithra, 2017). Coping strategies are one of the most important things for patients who undergo hemodialysis. Each patient has their own way of coping. Supported by the studies of Lalita et al., 2017, Turkish Nephrology; Dialysis and Transplantation Journal, 2018; Emeline et al., 2019; Reid et al., 2017, some of the coping strategies of patients include family and social support, cognitive restructuring, problem-focused and emotion-focused engagement, spiritual coping, avoidance, hope, and acceptance.

3. Research Methods

The research utilized a qualitative research design. The study used a hermeneutic (interpretative) phenomenological research method to explore and analyze the comprehensive lived experiences of patients with chronic kidney disease (CKD) who are on hemodialysis treatment. It focuses on interpreting and making meaning out of the lived experiences of the individuals.

In addition, the sampling technique used in selecting the participants for this study was non-probability purposive sampling.

3.1. Participants of the Study

This study was composed of twelve (12) participants who were diagnosed with chronic kidney disease for more than three months and has a glomerular filtration rate (GFR) of below 15 ml/min or with a serum creatinine level greater than 1.2 mg/dL for women and greater than 1.4 mg/dL for men and are on hemodialysis treatment, both male and female. These participants are all patients in a Tertiary Hospital in Laguna, Philippines.

3.2. Research Locale

The study was conducted in a Tertiary Hospital in Laguna, Philippines. The participants were interviewed in the hospital at the dialysis center of the Tertiary Hospital in Laguna. The researchers selected this institution due to its vicinity, making it more accessible for the researchers to conduct their study despite the limitations of the pandemic imposed. In addition, researchers selected this hospital because it has the highest number of patients with chronic kidney disease who are on hemodialysis in San Pablo City, Laguna, with a total number of two hundred thirty-four (234) patients.

3.3. Research Instruments

The instrument was obtained and adapted from the published research study of Wasihun et al. (2021) titled "Lived Experiences of Patients with Chronic Kidney Disease on Hemodialysis in Felege-Hiwot Comprehensive Specialized Hospital, North-West Ethiopia."

3.4. Data Gathering Procedures

The researchers conducted a semi-structured interview for data collection in 12 patients with chronic kidney disease receiving in-center hemodialysis in a Tertiary Hospital in Laguna, Philippines. These participants were able to share their lived experiences regarding their condition and treatment.

3.5. Data Analysis

In this study, the researchers used thematic analysis, a method that was used to analyze qualitative data systematically and recognize significant trends from the data to generate themes. It allows researchers to derive new information and concepts from the data (Braun & Clarke, 2006). The researchers transcribed the interviews using an audio recording program, contributing to the data's documentation. In Vivo coding was performed on the transcribed interviews. A brief phrase or word from the actual language discovered in the data was utilized to generate a code.

3.6. Ethical Considerations

The researchers conformed strictly to the ethical guidelines in the preliminary process of conducting this study. The researchers complied with the Data Privacy Law of the Philippines and in National Ethical Guidelines Involving Human Participants (2022).

The researchers consulted three psychometricians to validate the research instrument to avoid eliciting emotional and psychological responses from the participants. The researchers also complied to the Ethical Clearance of Canossa College. They obtained approval from their research adviser and the Dean of the College of Nursing of Canossa College San Pablo to research outside the institution. They went and provided a letter to the various dialysis centers in San Pablo City to get the total number of cases of CKD and those undergoing hemodialysis. They were also granted permission to go to the city population office of San Pablo City, Laguna, as of 2022, to gather the total population in the said area. The researchers were also authorized by the Head Nurse of hemodialysis of the Tertiary Hospital in Laguna, Philippines to conduct their study in the said locale.

In administering the questionnaire, the researchers sought approval from the participants who took part in the said study. Moreover, the purpose of the research, the voluntary nature of participation, the confidentiality of the procedure and data from the participants, and their right to withdraw their response at any time, which are all part of the informed consent form, has been thoroughly explained. Furthermore, after a week of data gathering, the researchers inquired the head nurse of the hemodialysis department as well as the participants themselves about their condition after the interview.

4. Results and Discussion

4.1. Themes

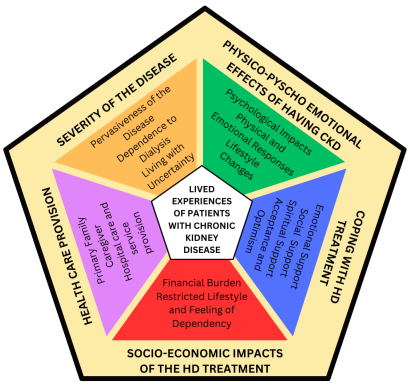

Figure 2. Visual Representation of Themes

This study focused on the lived experiences of patients with chronic kidney diseases, and the following major themes have been identified: Severity of the disease, Physico-psycho emotional effects of having chronic kidney disease, Coping with hemodialysis treatment, Socio-economic impacts of the hemodialysis treatment and lastly the Health care provision.

Sub-themes were developed for each major theme. The sub-themes established for the severity of the disease are the pervasiveness of the disease, dependence to dialysis, and living with uncertainty. These were derived from responses from participants who mentioned their symptoms before being diagnosed with CKD and beginning hemodialysis. They also stated that they relied on hemodialysis treatment because it is necessary for the rest of their lives.

The sub-themes mentioned in this subject include Physico-psycho emotional effects of having CKD, psychological impacts, physical and emotional responses, and lifestyle changes. Subthemes were identified for coping with hemodialysis treatment, emotional support, social support, spiritual support, acceptance, and optimism. These subthemes originated from responses provided by participants, wherein they discussed how they cope with their conditions.

Sub-themes developed for the socio-economic impacts of hemodialysis treatment are as follows: financial burden, restricted lifestyle, and feeling of dependency. Therefore, researchers came up with these sub-themes based on the participants' responses, which stated that money is all needed for hemodialysis treatment. Regarding the restricted lifestyle and feeling of dependency, they limit their rambling for safety, which reduces their independence.

Lastly, sub-themes established for healthcare provision are primary family caregiver, hospital, and service provision. Sub-themes mentioned above derived from the participants' responses to how others care for them when they have a disease.

4.1.1. Theme 1 Severity of the Disease: Having chronic disease and being on a lifetime treatment can cause alteration to the lives of an individual. Chronic kidney disease individuals have higher creatinine levels than those who do not have the condition; also, difficulty urinating is one of the most prevalent manifestations of a CKD patient experiencing pain, which indicates that their kidney function has diminished.

However, not all cases of CKD are precipitated by their lifestyle or other factors; others possess congenital kidney problems. These caused discomfort in the lives of CKD patients. As a result, hemodialysis treatment is essential for these individuals to eliminate wastes and fluids due to the kidney's diminished function. However, they became reliant on the treatment because of the relief that hemodialysis treatment provided in the patients' lives.

Furthermore, CKD and hemodialysis treatment are not only affecting the patients physically but their decision-making is also affected due to their condition, which makes them uncertain about various areas.

According to the responses, the disease's severity creates discomfort in the participants' lives. These results are supported by the three sub-themes from this major theme: the pervasiveness of the disease, dependence on dialysis, and living with uncertainty.

4.1.2. Theme 2 Physico-psycho Emotional Effects of having CKD: Psychological impacts, physical and emotional responses, and lifestyle changes. The Physico-psycho emotional effects of having CKD account for the participants' feelings of different kinds. Two sub-themes were identified: psychological impacts and physical and emotional responses. In the study, sadness, worry, and fear are prevalent emotions. In addition, some exhibited difficulty accepting the situation and pointed out changes in their life goals. Furthermore, prior to hemodialysis, the participants experienced edema in the face and extremities, vomiting, eye problems, and difficulty breathing. Whereas during hemodialysis, the participants experienced weight loss, vomiting, itchiness, hypotension, and high potassium. Nonetheless, the participants exhibited lethargy and felt relieved after hemodialysis. The participants' views are not always negative, as they consider hemodialysis as a means of extending their lives.

Participants undergoing hemodialysis have a variety of physical, psychological, and emotional problems. These issues are likely to have an impact on their quality of life. As a result of hemodialysis, participants confront major challenges and problems.

On the other hand, in continuation of the physico-psycho emotional effects of having CKD, another sub-theme has emerged, and this pertains to lifestyle change. The participants were unaware that their previous lifestyle choices would result in chronic kidney disease. However, upon hemodialysis, the participants specifically mentioned changes in their lifestyle, particularly their diet and nutrition. Furthermore, some expressed changes in their social lifestyle.

4.1.3. Theme 3 Coping with HD Treatment: A patient may choose to cope in a variety of ways. Acceptance and support systems serve as coping mechanisms that vary from self-acceptance. The spiritual aspect plays a role in enabling a patient to cope with hemodialysis treatment, be it spiritual, acceptance, or external factors. When coping is effective, the patient begins to develop a more positive attitude toward their current situation. Ultimately, the participants create coping and support systems based on what personally suits them or influences them by external factors, enabling them to accept their condition.

4.1.4. Theme 4 Socio-economic Impacts of Hemodialysis Treatment: In accordance with the responses, participants experienced socioeconomic impacts with their hemodialysis treatment which involves income, employment, and dependency on the treatment. Under this theme, two sub-themes were formed: financial burden and restricted lifestyle and feeling of dependency. Participants have to comply with the sessions of dialysis two times every week, and they also have to buy their maintenance medications which add up to their expenses. Regarding the restricted lifestyle and feeling of dependency, it is not solely the loss of money in hemodialysis treatment but also a decrease in the ability to accomplish activities they are used to. They limit their rambling for safety, which reduces their independence. This burden inhibits patients' capability to do things, leading to the negative impression that hemodialysis reduces their ability to do everything.

4.1.5. Theme 5 Healthcare Provision: Healthcare provision is one of the themes that emerged in this study based on the participants' responses. This includes how and who their primary caregivers are and how efficiently their professional healthcare provider explained their situation and provided them with the required treatment. Two sub-themes were identified under this theme: primary family caregiver and hospital care and service provision. The diagnosis of CKD and the need for hemodialysis increases the bond between patients and their families. Thus, they support them not just physically and emotionally but also financially.

Furthermore, whenever they refuse to attend a hemodialysis session, their family urges and pushes them to do so. Recognizing and developing these favorable traits can improve patient outcomes. In addition, patients who are on hemodialysis often spend a significant amount of time in the HD centers; therefore, the services and care that are provided in the center are not only limited to the doctors but also the nurses, staff, and managers, all play a significant role and have a big impact on the quality of life of the patients.

4.2. Implications of the Study

4.2.1. Patient Education: The study highlights the varied levels of knowledge and awareness among patients with Chronic Kidney Disease (CKD). Healthcare providers should prioritize patient education and ensure that patients clearly understand their condition, its implications, and the necessity of hemodialysis treatment. This can help alleviate feelings of confusion and helplessness that some participants expressed.

4.2.2. Emotional Support: The emotional impact of CKD and hemodialysis treatment should not be underestimated. Participants in the study exhibited a range of emotions, including sadness, hopelessness, anxiety,

and fear. Healthcare professionals should be attentive to patients' emotional well-being and provide adequate support, which can include counseling services, support groups, and open communication channels.

4.2.3. Individual Coping Mechanisms: Participants described various coping mechanisms they employed to deal with CKD and hemodialysis treatment challenges. These included relying on faith, seeking entertainment, acceptance, and finding support from family or external social groups. Healthcare providers should acknowledge and respect the diversity of coping strategies used by patients and incorporate them into holistic care plans.

4.2.4. Socio-Economic Impacts: The study revealed that the financial burden of hemodialysis treatment was a significant concern for some participants. Healthcare systems should address the socio-economic impacts of CKD and hemodialysis by providing financial assistance programs or insurance coverage options. Additionally, exploring ways to reduce the cost of treatment and improving access to resources can alleviate the burden on patients and their families.

4.2.5. Comprehensive Healthcare Provision: The study identified the importance of a robust healthcare provision system in managing CKD and hemodialysis treatment. This includes primary family caregivers' role, hospital care quality, and service provision. Healthcare institutions should ensure that comprehensive support is available to patients, including reliable caregiver support, well-equipped hospitals, and efficient service delivery.

4.2.6. Patient-Family Relationships: The findings indicated that the diagnosis of CKD and the need for hemodialysis treatment often strengthened relationships between patients and their families. Recognizing and fostering this positive aspect can contribute to improved patient outcomes. Healthcare professionals should actively involve families in the treatment process and provide family support and education resources.

In conclusion, this study emphasizes the importance of understanding the lived experiences of patients with CKD undergoing hemodialysis treatment. The implications derived from the findings can guide healthcare providers in improving patient education, emotional support, and individual coping mechanisms, addressing the socio-economic impacts, and enhancing the overall healthcare provision for this patient population.

5. Conclusion and Recommendations

5.1. Conclusion

Based on the indicated findings, the lived experiences of patients with chronic kidney disease receiving in-center hemodialysis in a Tertiary Hospital in Laguna, Philippines were influenced by these factors: severity of the disease, the physico-psycho emotional effects of having CKD, coping with hemodialysis treatment, socio-economic impacts of the hemodialysis treatment, and healthcare provision.

The participants of the study were able to establish different perspectives about their condition and hemodialysis treatment. Some participants were well-informed regarding their disease. In contrast, some were unfamiliar with chronic kidney disease, but this changed when their healthcare provider explained their condition thoroughly. In relation to knowing their condition are the participant's reactions, and based on the responses, participants had two distinct reactions, acceptance and denial of the condition. When it comes to the awareness of hemodialysis treatment, participants exhibit a variety of responses upon discovering that they need hemodialysis; participants also expressed their dependence on hemodialysis. Nevertheless, most participants considered and accepted the prospect of undergoing hemodialysis with optimism, while certain expressed living in uncertainty. Despite this, they acknowledged their condition and began treatment.

Additionally, the study's findings demonstrated that people of any gender or age are at risk of developing CKD. In the study, it was found that people may develop chronic kidney disease at a young age. Furthermore, as pointed out by the participants, one of the reasons they were on hemodialysis was because of high levels of creatinine. Thus, in order to eliminate their wastes, patients with chronic kidney disease need hemodialysis treatment since their kidneys do not function properly.

In terms of the physico-psycho emotional effects of hemodialysis, one crucial finding from the current research is that while most participants reported feelings of sadness, fear, and anxiety, others considered the life changes they would face due to hemodialysis, and some participants could accept their condition. Changes in their physical, emotional, psychological, and social characteristics have been described. Similarly, this corresponds to the study's assumption that hemodialysis patients experience physical sufferings that may also be affecting their mental health.

Throughout the progress of this research, the participants show various ways of enabling them to cope with their current health condition as patients undergo their life-changing treatment and restrictions. The results prove that the response of one participant is different from the other, such as their coping mechanisms and support groups. Additionally, spiritual influences possess an impact on an individual's capacity to deal with hemodialysis treatment. Hence, this conforms to one of the assumptions of the study; hemodialysis patients usually strengthen their trust in God in the hopes of a fast recovery. The process patients undergo to accept their new life is possible due to each patient's formed coping mechanism. At the same time, hemodialysis can be interpreted by some patients as a gift or a sense of hope in order to improve their quality of life.

On the other hand, the result also accounts for the socio-economic impacts of hemodialysis in which participants experience challenges in relation to financial burden and constraints, which also corresponds to the assumption of the study, patients on hemodialysis experience financial burden. Concerning this, the researchers discovered that some individuals can still work while others are unable to work and have to depend on family, relatives, and the government. Thus, it is also related to one of the assumptions, in which the relationship of patients with their family and relatives has been significantly affected because of their condition. However, the participants also shared that their family is their best support system. Furthermore, it was revealed that one of the motivators for them to undergo hemodialysis is their family.

Along with this, participants require the necessary care – in which family and healthcare providers are included as sources of comfort and care. These external factors enable the patient to interact and behave differently to new circumstances and experiences.

5.2. Recommendations

In accordance with the findings and conclusions of this study, the researchers advise that the patients maintain their hemodialysis treatment and adhere to the physician's diet restrictions and the medications essential to their health. Moreover, conducting prenatal tests and diagnostics would help in the early detection of congenital renal hypoplasia. In addition, psychological counselling and engagement in group discussions are also recommended to address their emotional and psychological health. Families and relatives should provide the most compassionate and constant support, positive outlook, and open communication to patients receiving hemodialysis and serve an essential role in increasing the quality of life in patients with chronic kidney disease undergoing hemodialysis. Additionally, healthcare institutions must address the socioeconomic effects of chronic kidney disease and hemodialysis by offering financial assistance programs or insurance coverage options, they investigate ways to reduce the cost of HD treatment. It is also essential to provide patients with holistic care rather than focusing solely on the physical aspect of care.

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