

Research Article

The Effectiveness of Spiritual Education to Reduce Anxiety in Hemodialysis Patients

(A Systematic Literature Review)

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Abstract: Chronic kidney disease (CKD) is a global health problem that affects millions of people, with hemodialysis as the primary therapy in the late stages of the disease. Hemodialysis patients often face anxiety due to physical, mental, and social changes. Spiritual support plays an important role in reducing anxiety and improving the quality of life. Objective: To evaluate the effectiveness of spiritual education in reducing anxiety in hemodialysis patients. Methods: Education using systematic observation of the literature review based on the guidance of the Joanna Briggs Institute (JBI). Literature review searches were conducted in various databases, PubMed, Google Scholar, BMC, ScienceDirect, Wiley Online Library, Bredlands and ResearchGate. Using relevant keywords, resulting in 10 articles that are explained in depth. Results: Spiritual education was effective in reducing the anxiety of hemodialysis patients by improving understanding, providing meaning in life, and strengthening coping mechanisms. Supporting factors include nurse involvement, access to information, and family support. The obstacles found include limited resources and lack of awareness. Conclusion: Spiritual education contributes to improving the psychological well-being of hemodialysis patients. The role of nurses in providing a holistic approach is essential to help patients cope with physical, mental, and social challenges.

Keywords: Anxiety; Chronic Kidney Disease; Hemodialysis Patients; Joanna Briggs Institute; Spiritual Education.

1. Introduction

Chronic kidney disease is a serious health problem, affecting millions of people worldwide, and the final stages of the disease require hemodialysis treatment. This process can have a major impact on the mental health and quality of life of patients. The kidney damage that occurs is progressive and irreversible, characterized by a decrease in kidney function for more than three months. According to the World Health Organization (WHO), in 2015, about 10% of the global population had chronic kidney disease, with about 1.5 million patients undergoing hemodialysis. This figure is estimated to increase by 8% annually (Badria & Fatmawati, 2023).

In Indonesia, data from the National Kidney Registry shows that the number of chronic kidney failure patients registered for hemodialysis continues to increase by 10% every year. Hemodialysis is an advanced technology that functions to replace kidney function to remove metabolic waste from the body through a semi-permeable membrane. Patients undergoing hemodialysis often experience depression, anxiety, and fear. This anxiety is a response to an unpleasant situation and can be triggered by various factors, both biological and physiological. There are four levels of anxiety identified, namely mild, moderate, severe, and panicky (Badria & Fatmawati, 2023).

Chronic kidney failure causes the inability to remove or process the body's metabolites, so it requires kidney replacement therapy. The types of therapy available include hemodialysis (78%), transplantation (16%), continuous ambulatory peritoneal dialysis (CAPD) as much as 3%, and Continuous Renal Replacement Therapy (CRRT) as

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much as 3%. Currently, hemodialysis is the main treatment for chronic kidney failure. In the United States, the prevalence shows about 200,000 people undergoing hemodialysis. Meanwhile, in Indonesia, the number of hemodialysis patients continues to increase from 6,862 patients in 2017 to 11,935 patients in 2018, 16,796 patients in 2019, to reach 78,281 patients in 2020. This data shows a significant increase in the number of patients every year (Elsera et al., 2022).

Hemodialysis therapy is the main treatment for patients with chronic kidney failure. Hemodialysis is a procedure for acute patients who require short-term dialysis therapy or patients with end-stage kidney disease (ESRD). Over the past two decades, the number of patients undergoing dialysis treatment for ESRD has steadily increased globally. Hemodialysis patients face challenges in adapting, both to the therapy itself, the complications that arise, changes in roles in the family, and the new lifestyle that must be lived. This condition eventually has an impact on the patient's physical, mental health, and social life. One of the significant impacts is the emergence of anxiety related to his physical condition and health, which can interfere with daily life. In addition, patients often experience psychological, biological, emotional and social problems (Elsera et al., 2022).

Anxiety can affect an individual's ability to adapt and deal with their health conditions. If individuals have effective coping mechanisms, anxiety levels can be reduced, allowing them to focus on recovery. If coping is not effective, anxiety can increase, causing an imbalance in the body's and mind's responses. Without hemodialysis, the body's function in maintaining metabolic and fluid balance will fail, potentially leading to uremia. Anxiety can manifest itself in the form of worry, anxiety, and physical complaints, which are affected by social interactions. In contrast to fear, which is an assessment of danger, anxiety is more subjective. Good knowledge of health conditions can help patients adapt faster to the changes that occur, thereby improving their quality of life (Badria & Fatmawati, 2023).

Prolonged hemodialysis treatment can have a variety of psychological effects. Among the effects are depression, difficulty in maintaining a job, impotence, and the appearance of anxiety. Anxiety is often experienced by kidney failure patients undergoing hemodialysis. Emotional support plays an important role in providing a zest for hemodialysis patients. Spirituality is defined as the search for a deeper meaning of life, related to the sacred, which may or may not be related to religion. The emotional strength that patients have can be a key factor in helping them cope with the disease. Success in disease management can change identity and quality (Elsera et al., 2022).

Psychological obstacles in the form of anxiety often hit patients with chronic kidney disease (CKD) who are undergoing hemodialysis procedures due to exposure to various depressive stimuli. These triggering factors intervene in aspects of the patient's life through cannular pain, economic instability, layoffs, depressive attacks, and existential fear of death. Nevertheless, the duration and frequency of hospitalization distinguish the intensity of emotional tension namely; Subjects with a history of repeated hospitalization exhibit more mature adaptation mechanisms so that their manifestations of anxiety tend to be lower than newly diagnosed patients. Changes in psychological aspects can affect clinical indicators as well as changes in patient behavior, which are detected through the appearance of cognitive disorientation, loss of security, high interpersonal dependence, and withdrawal (Yuwono & Ellina, 2025).

A study in Iran showed that depression and anxiety are the most common mental disorders among people with chronic illnesses. On the other hand, the need for calm, certainty, and avoidance from depression and anxiety is very important for patients. Spiritual health is considered the core of human health, serves to coordinate physical, mental, and social aspects, and is important in dealing with illness. In this context, spiritual adjustment strategies can play an important role in helping patients with chronic illnesses, increasing self-esteem, providing meaning in life, and increasing psychological comfort and expectations (Najafi et al., 2022).

Although improved spiritual health does not guarantee healing, it can help patients feel better, prevent health problems, and adapt to illness or death. Spiritual interventions, contribute to the balance between body, soul, and spirituality, which is an important step in achieving comprehensive health. When spiritual well-being is disrupted, individuals may experience mental disorders such as loneliness, anxiety, and loss of meaning in life (Najafi et al., 2022).

2. Method

This study is a systematic literature review that follows the guidelines of the Joanna Briggs Institute (JBI) to assess the quality of the studies to be summarized. This research protocol is designed to disseminate literature related to nurses' knowledge, motivation, and practice regarding discharge planning.

This study adopts an approach using systematic literature review (SLR) which implements or guidelines from preferred reporting items for Systematic Reviews and Meta-Analyses (PRISMA) to ensure accountability and transparency of data synthesis. By including relevant databases both internationally and nationally.

Literature searches were conducted through the databases PubMed, Google Scholar, BMC, ScienceDirect, Wiley Online Library Brieflands and Research Gate. To find articles or journals, keywords and boolean operators are used with specific search strategies, namely:

- a. In the database PubMed: Keyword combination: Effectiveness (OR) Spiritual (AND) Education (OR) Reduce (AND) Anxiety (OR) Hemodialysis (ANS) Patients.
- b. In the database Google Scholar: Keyword combination: Effectiveness (OR) Spiritual (AND) Education (OR) Reduce (AND) Anxiety (OR) Hemodialysis (ANS) Patients.
- c. In the database BMC: Keyword combination: Effectiveness (OR) Spiritual (AND) Education (OR) Reduce (AND) Anxiety (OR) Hemodialysis (ANS) Patients.
- d. In the database Sciencedirect: Keyword combination: Effectiveness (OR) Spiritual (AND) Education (OR) Reduce (AND) Anxiety (OR) Hemodialysis (ANS) Patients.
- e. In the database Wiley online library: Keyword combination: Effectiveness (OR) Spiritual (AND) Education (OR) Reduce (AND) Anxiety (OR) Hemodialysis (ANS) Patients.
- f. In the database Brieflands: Keyword combination: Effectiveness (OR) Spiritual (AND) Education (OR) Reduce (AND) Anxiety (OR) Hemodialysis (ANS) Patients.
- g. In the database ResearchGate: Keyword combination: Effectiveness (OR) Spiritual (AND) Education (OR) Reduce (AND) Anxiety (OR) Hemodialysis (ANS) Patients.

Inclusion and Exclusion Criteria

Inclusion and exclusion criteria in studies regarding the effectiveness of spiritual education to reduce anxiety in haemodialysis patients in the review literature review were established to ensure that only relevant and quality studies were included. The article under consideration must be written in English or Indonesian and published within the last five years (2020-2026) to ensure the information is relevant to current conditions. The studies that must be accepted are primary research with a quantitative or qualitative design, such as descriptive analytical, cross-sectional, iterative weighted least squares, cross sectional studies, experimental, semi-experimental and pre-experimental studies and involve nurses as the main participants in the work environment such as hospitals or health facilities.

Articles that are systematic observations, editorials, case reports, or opinions, as well as studies that are irrelevant or do not provide adequate data, will be excluded from observation. Articles that do not meet these criteria will be excluded from observation. Publications that are systematic observational, editorial, case reports, or opinions will not be included because they do not provide relevant primary data. In addition, research that is not related to the context of health care or initiation planning, or that does not provide adequate information such as research methods, sample sizes, or key outcomes, will also be excluded. Articles written in languages other than English or Indonesian will not be included due to accessibility and comprehension limitations.

Study Selection and Data Extraction

The search for literature review will be conducted in 2026. The data used are secondary data obtained from previous research. The process of searching for articles is carried out through five main databases, which allow access to articles from each source. This search uses keywords that correspond to MeSH Heading, and the search strategy in the database uses Boolean logic. The study filtered by title and abstracts generated from the search, yielding a total of 838 articles, with details, 2 from PubMed, 331 from Google Scholar, 61 from BMC, 75 from ScienceDirect, 363 from the Wiley online Library, 1 from Brieflands and 5 from ResearchGate. The purpose of this search is to answer the question of the effectiveness of spiritual education in reducing anxiety in hemodialysis patients, including its benefits, barriers, and supporting factors (Suharyono et al., 2021).

Irrelevant articles are removed, while full-text articles are then independently screened based on inclusion and exclusion criteria. The article selection process was

carried out in stages with the application of PICOS criteria and JBI critical assessment, which resulted in 10 studies that were eligible for literature review. All discrepancies in the study were resolved by the research team. The data were extracted independently from the selected articles, in a standard data collection format (Suharyono et al., 2021).

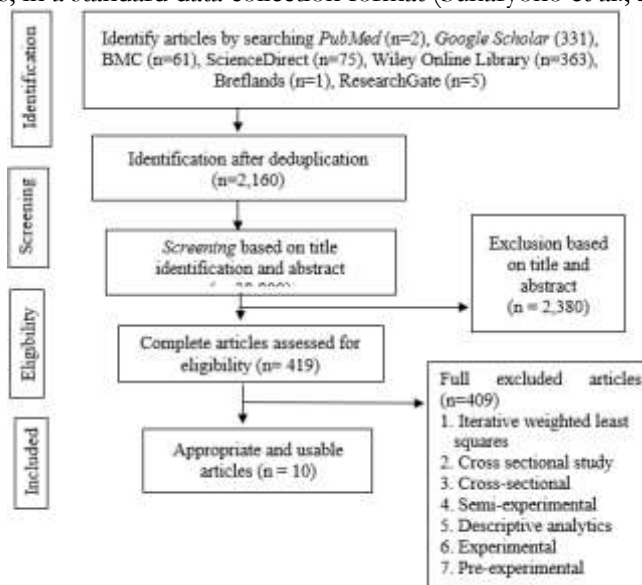


Figure 1. The PRISMA flowchart shows the articles that were identified, filtered, and included in the final review.

3. Results

Literature Search

The literature search process for the topic "The Effectiveness of Spiritual Education in Reducing Anxiety in Hemodialysis Patients" yielded a total of 38,800 articles. After identification, there are 2,160 articles left after removing duplicates. Of these, 419 full-text articles were screened, and 409 articles were removed (see Figure 1). The feasibility assessment of the 419 articles was carried out based on the analysis of titles and abstracts, which included checking the suitability of background, content, and methods with the established research criteria.

Study Characteristics

Characteristics that include information on spiritual education to lower anxiety in hemodialysis patients. 10 relevant articles from 2020-2026 with the purpose of the research were successfully identified. These articles were then analyzed using tables, followed by assessments using JBI Tools (Suharyono et al., 2021).

Data Extraction

Data are extracted using standard formats, instruments, including information about study objectives, methods and key findings.

Table 1. Summary of Identified Study Characteristics.

Title and Source	Stuttgart/ Sample	Method	Actions Next	Results
<i>The Role of Spirituality in Anxiety and Psychological Resilience of Hemodialysis Patients in Turkey</i> (Şanlı et al., 2023)	Participants in this study consisted of 91 hemodialysis patients, 49 women and 42 men. The age range of participants was from 20 to 82 years, with an	The study used the <i>iterative weighted least squares method</i> to analyze the relationship between spirituality and anxiety, as well as between	The study emphasizes the importance of comprehensive care that focuses not only on the physical aspects of chronic kidney disease (CKD) management, but also on the psychological aspects to improve patient outcomes and quality of life.	Research shows that there is a weak positive association between spirituality and psychological resilience ($t = 1.35$, $P = 0.183$), as well as a moderate negative association between spirituality and anxiety ($t = -2.84$, $P = 0.006$), where spirituality

	average age of 48 years.	spirituality and psychological resilience. Data was collected using several instruments, including <i>the Beck Anxiety Inventory, the Spirituality Scale, and the Brief Psychological Resilience Scale</i> .		explains only 1% variance in psychological resilience and 5% variance in anxiety; Factors such as education level, gender, and who lived with patients had a stronger correlation with psychological resilience and anxiety.
<i>Knowledge of the Anxiety Level of Clients with Chronic Kidney Failure</i> (Badria & Fatmawati, 2023)	The population in this study is chronic kidney failure patients who are treated at the Labuang Baji Regional General Hospital in Makassar. The sample used was 33 respondents taken from a total population of 38 people, using <i>the accidental sampling technique</i> .	The research method used is an analytical survey with a <i>Cross Sectional Study</i> approach. This study used a questionnaire to collect data, where the knowledge variable was measured with 11 question items using the Gutman scale, and the anxiety variable was measured using <i>the Hamilton Rating Scale for Anxiety (HRS-A)</i> .	The suggested follow-up in this study is for health workers who are in direct contact with kidney failure patients to provide more interventions to improve patient knowledge. Further research is also recommended to explore the effective use of coping mechanisms for patients in preparing for hemodialysis	The results showed a significant relationship between the level of knowledge and the level of anxiety of patients with chronic kidney failure. The chi-square statistical test showed a value of $p = 0.001$, which means there is a relationship between the client's knowledge and anxiety levels. The higher the patient's knowledge of the disease, the better they can cope with the anxiety they experience
The relationship between spirituality levels and anxiety in chronic kidney failure patients undergoing hemodialysis therapy	The target population of this study was 50 patients with chronic kidney failure undergoing hemodialysis therapy. The research sample consisted of 50 patients who were	This research is a type of correlational descriptive research with a cross-sectional approach. The research was conducted at Kertha Usada Buleleng Hospital in	After data collection is carried out by providing a questionnaire in the hemodialysis room, the collected data is then tabulated into a data collection matrix and data analysis is carried out using the Spearman Rank correlation test.	The results of the analysis showed a significant negative relationship between the level of spirituality and anxiety in patients with chronic kidney failure undergoing hemodialysis therapy, with a p -value = 0.000 and a strength of relationship value (r) of -0.617. This

(Widyasari et al., 2023)	selected using a non-probability sampling technique, namely total sampling. Inclusion criteria included GKK patients with routine hemodialysis 2x a week, stable TTV during hemodialysis, and willing to be respondents. The exclusion criteria were patients undergoing cito hemodialysis therapy.	April-May 2021. The WHOQOL – SRPB questionnaire is used to measure the level of spirituality, while the Hamilton Rating Scale for Anxiety (HRS-A) is used to measure the level of anxiety.		suggests that the higher the patient's level of spirituality, the lower the level of anxiety experienced.
<i>Mediating effect of anxiety and depression between family function and hope in patients receiving maintenance hemodialysis: a cross-sectional study</i> (Wang et al., 2023)	The population studied was patients undergoing maintenance hemodialysis (MHD) at two tertiary hospitals in Wuhan, Hubei Province, China. A total of 250 MHD patients were invited to participate, and 227 of them agreed, resulting in a response rate of 90.8%. Inclusion criteria include patients who have undergone MHD for at least 3 months, are	The method used was a cross-sectional descriptive survey that followed the STROBE guidelines.	The follow-up of this study involved an analysis of the relationship between family function, anxiety, depression, and patient expectations.	The results of the study showed that family function can predict the expectations of MHD patients directly and also through depression mediation. The analysis showed that family function had a significant direct impact on expectations ($\beta = 0.352$, $p = 0.001$), and depression acted as a mediator between family function and expectations. In addition, the results showed that anxiety and depression had a chain mediating effect in the relationship between family function and expectations. The total effect size is 28.31%, with a total indirect effect value of 0.139 and a total effect value of 0.491.

	at least 18 years old, and have no cognitive or communication problems.			
<i>The relationship between anxiety, stress, spiritual health, and mindfulness among patients undergoing hemodialysis: A survey during the COVID-19 outbreak in Southeast Iran</i> (Dehghan et al., 2021)	The study population consisted of patients undergoing hemodialysis at two hemodialysis centers affiliated with the Kerman University of Health Sciences in southeastern Iran. Of the 208 patients present, 149 were eligible to participate, but only 144 patients ended up completing the questionnaire.	This study used a cross-sectional and analytical study design. Participants were asked to fill out several questionnaires, including the Demographic and Clinical Characteristics Form, the Corona Disease Anxiety Scale (CDAS), the stress subscale of the DASS-21, the Freiburg Awareness Inventory - Short Form (FMI-SF), and the Spiritual Health Scale.	This study suggests the need for further studies to evaluate stress and depression in hemodialysis patients as well as other factors that may influence the relationship. Longitudinal research is also recommended to understand the cause-and-effect relationship.	The results showed that 28.5% of participants experienced moderate to severe anxiety, and 54.2% experienced moderate to severe anxiety based on the CDAS psychological symptom subscale. Research has also found that mindfulness can be used as an additional intervention to manage emotions and reduce anxiety, although it has no effect on stress.
<i>Effectiveness of Spiritual Therapy on Depression, Anxiety, and Stress in Hemodialysis Patients</i> (Fashion et al., 2020)	The population in this study was patients with chronic kidney disease (CKD) who underwent hemodialysis at the Birjand special disease center in 2019-2020. A total of 70 patients were selected based on inclusion criteria and randomly divided into two groups:	This study uses a semi-experimental design. Patients who met the inclusion criteria were taken using the available sampling methods. After obtaining approval and explaining the purpose of the study, patients fill out a demographic profile form and a depression,	Follow-up was conducted one week and three months after a spiritual therapy session, during which depression, anxiety, and stress questionnaires were refilled by patients in both groups. After the intervention, the content of the training session was also given to patients in the control group.	The results showed that the average scores of anxiety, depression, and stress in the experimental group were significantly lower compared to the control group after the intervention. Spiritual therapy has been shown to be effective in reducing anxiety and depression in hemodialysis patients.

	the experimental group (35 patients) and the control group (35 patients).	anxiety, and stress questionnaire . The experimental group received a session of spiritual therapy, while the control group did not.		
<i>Relationship between spiritual health with stress, anxiety and depression in patients with chronic diseases</i>	The population in this study was patients with chronic diseases who were treated at Pasteur Hospital in Bam, Iran. The sample taken amounted to 360 patients, which were selected using the convenience sampling method. Inclusion criteria include patients over 20 years of age, suffering from certain chronic illnesses, and not having mental disorders or taking psychotropic drugs. (Najafi et al., 2022)	This study uses an analytical descriptive design. Data was collected through a questionnaire that included demographic information, a DASS-21 questionnaire to measure stress, anxiety, and depression, and a 20-item spiritual health questionnaire designed by Palutzian and Ellison. Data analysis was carried out using SPSS with descriptive and inferential statistics.	The study suggests that more attention should be paid to the spiritual health of patients with chronic illnesses as part of a treatment program to prevent negative effects such as stress, anxiety, and depression. It is also recommended to follow up on the patient after discharge from the hospital and group training in the field of spirituality by the care staff.	The results showed that the spiritual health score was at a moderate to high level (80.62), while the average scores for stress, anxiety, and depression were 10.58, 6.70, and 7.32, respectively. There was a significant inverse relationship between the dimensions of spiritual health and levels of stress, anxiety, and depression, suggesting that higher spiritual health was associated with lower rates of mental disorders.
<i>The impact of spiritual care interventions on spiritual well-being, loneliness, hope and life satisfaction of intensive care unit patients</i>	The study involved 64 patients treated in intensive care units, of which 32 patients were in the intervention group and 32 patients were	This study was conducted as an intervention study with an experimental study design in pre-test, post-test, and randomized control groups. The	After the intervention, measurements were taken to assess the effects of the spiritual care intervention on the patient's spiritual well-being, loneliness, hope, and life satisfaction.	The results showed that spiritual care interventions had a significant positive effect on the spiritual well-being of patients, with a value of $t = -10.382$, indicating an improvement in spiritual well-being

(Bulut & Altay, 2023)	in the control group.	intervention given to the intervention group consisted of eight spiritual treatment sessions conducted twice a week, based on the Tradition-Reconciliation-Understanding-Seeking-Guru model. Meanwhile, the control group received routine nursing care.		after the intervention.
The Effectiveness of Health Education On the Anxiety Level of Chronic Kidney Failure Patients who are hemodialysed at RSKG Mrs. Ra Habibie Bandung	The number of samples in this study was 60 respondents who were taken by purposive sampling technique	The method used in this study is a pre-experimental research design with a one-group pre-post test design approach. Data analysis consisted of univariate analysis and bivariate analysis, where bivariate analysis was carried out using Wilcoxon statistical tests.	The follow-up of this study involves the role of nurses who must be able to optimize their functions as caregivers, educators, communicators, teachers, counselors, advocates, and leaders to prevent and overcome anxiety problems through the provision of holistic and comprehensive care according to the characteristics of the sufferer.	The results showed that before being given health education, most chronic kidney failure patients undergoing hemodialysis had a severe anxiety rate of 68.3%. After health education was carried out, the results using Wilcoxon's statistical test analysis showed a p-value of 0.00 which means that there is a significant influence of health education on the patient's anxiety level.
(Manalu, L.O., 2021)				
The Effect of Spiritual Support on Hemodialysis Readiness of Chronic Kidney Failure Patients at Klaten Islamic Hospital	The population of this study is 20 patients with chronic kidney failure who undergo hemodialysis at Klaten Islamic Hospital. Of the total population, the number	The type of research used was pre-experiment with pre-test and post-test group design. This research was carried out at the Klaten Islamic Hospital from January	After being given emotional support, there is a change in the patient's readiness to undergo hemodialysis. The data showed that before emotional support, hemodialysis readiness in patients was 60%. After emotional support, 3 (15%) of patients were unwilling to undergo hemodialysis, while 17	The results of the study show that emotional support has an effect on. Readiness to undergo Hemodialysis in Patients with Chronic Kidney Failure before being given spiritual support is 60% ready. Readiness to Undergo

(Elsera et al., 2022)	of samples taken for the study was 20 people	2022 to July 2022. The tool used to collect data is a survey, and data analysis is done using the Wilcoxon test	(85%) of patients showed readiness.	Hemodialysis in Patients with Chronic Kidney Failure after being given spiritual support is 85% ready There is an effect of providing spiritual support on readiness to undergo hemodialysis in patients with chronic kidney failure at Klaten Islamic Hospital with p value = 0.025 ($p < 0.05$). Providing spiritual support for readiness to undergo hemodialysis in patients with chronic kidney failure.
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4. Discussion

Chronic kidney disease (CKD) is one of the terminal diseases that has a significant impact on the quality of life of patients, disrupting the balance in biological, psychological, social, and spiritual aspects. These four aspects need to be balanced, including the spiritual aspect. Spirituality is considered an essential element in achieving overall health. Spirituality refers to the way a person gives meaning to life and faces the challenges he faces. The life problems experienced can cause anxiety. Therefore, individuals who have a strong spirituality tend to manage anxiety better (Widyasari et al., 2023).

Spirituality serves as one of the main adaptation strategies that enables individuals to face critical situations as well as stressful conditions. Spirituality is a crucial element for patients in maintaining resilience when dealing with chronic and terminal illnesses. Spirituality values actively act as a protective factor that maintains the stability of the mental health of hemodialysis patients. This phenomenon is reinforced by the findings of various studies showing that patients who undergo dialysis routinely construct their spiritual well-being as a stress management instrument to cope with emotional distress while overcoming physical limitations due to end-stage kidney disease (Durmuş et al., 2024).

Spirituality makes a positive and significant contribution to educational therapy in patients undergoing hemodialysis therapy. Spirituality includes self-forgiveness, compassion, gratitude, and a sincere acceptance of the realities of life effectively. Spirituality channels the energy of hope and meaning in life that transcends physical, space, and material boundaries, which ultimately plays a crucial role in depression recovery. Spiritual interventions work through cognitive reconstruction mechanisms that transform the patient's perspective on his or her illness; Under the influence of personal beliefs, self-control, and religious values, patients can objectively identify the stressor and then apply adaptive coping strategies to align themselves with the existing condition (Moodi et al., 2020).

Anxiety is a form of worry that is not clearly defined and can spread, often related to feelings of uncertainty and helplessness. In patients with chronic kidney failure, problems arising from suboptimal kidney function occur continuously and can be a source of physical stress that affects various aspects of their lives, including bio-psycho-socio-spiritual. Understanding the need for a sense of security for clients is an important component of a holistic approach in nursing care, especially in addressing the anxiety experienced by chronic kidney failure patients, which requires adjustment and intervention in order for anxiety to be reduced (Najafi et al., 2022).

This knowledge will help reduce anxiety and allow patients to live a better life even if they face a chronic kidney failure condition, which ultimately requires hemodialysis measures. Therefore, it is important to provide information or education to patients diagnosed with chronic kidney failure before starting hemodialysis. In this case, nurses have a crucial role in helping patients manage anxiety through health education that can improve their understanding of the disease (Najafi et al., 2022).

In line with research by Tri et al., (2023) found that motivation is the most dominant factor in therapy adherence. The implication is that nursing practitioners can provide in-depth education on therapeutic adherence to foster patient awareness of the crucial consistency in undergoing the recommended therapy program, which ultimately aims to minimize the manifestation of clinical symptoms in patients with chronic kidney disease undergoing hemodialysis.

Based on the findings in the research of Durmuş & Ekinici, (2021), it is empirically proven that spirituality education therapy is able to significantly reduce the degree of anxiety and depression in individuals. These positive results also address clinical problems identified in the previous literature, where low spiritual well-being consistently acts as a major risk factor that triggers the escalation of profound anxiety and depression in hemodialysis patients. The success of this intervention also reinforces previous scientific evidence that reinforcing the dimension of spirituality effectively suppresses the anxiety level of patients undergoing hemodialysis therapy. Finally, the alignment of these findings with the global literature constellation makes it clear that the spiritual approach as one of the non-pharmacological therapies provides a real therapeutic impact in reducing negative psychological symptoms while minimizing the accumulation of burdens psychosocial patients during the dialysis process.

5. Conclusion

Chronic kidney disease is a significant health problem, affecting millions of people worldwide. In Indonesia, the number of chronic kidney failure patients undergoing hemodialysis continues to increase, demonstrating the importance of attention to the psychological aspects of patients, including anxiety. The anxiety that the patient feels can be triggered by a variety of factors, and it serves as a response to unpleasant situations. Hemodialysis, as the primary method of therapy, requires patients to adapt to life changes that can disrupt an individual's physical, mental, and social health.

Emotional and spiritual support plays an important role in helping patients manage anxiety. Spirituality can provide meaning and strength in dealing with illness, as well as serving as an effective coping mechanism. Nurses have an important role in providing this support, so that patients can go through the treatment journey better. Overall, a holistic approach that includes physical, psychological, social, and spiritual aspects will help patients in dealing with the challenges faced during hemodialysis therapy.

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Data Availability Statement: The data I enter according to the research findings available in articles and publications included in the systematic literature review process and can be obtained through data used in previous research.

References

- Badria, L., & Fatmawati, F. (2023). Knowledge of the anxiety level of clients with chronic kidney failure. *Jurnal Ilmiah Kesehatan Sandi Husada*, 12(1), 288–293. <https://doi.org/10.35816/jiskh.v12i1.1143>
- Bulut, T. Y., & Altay, B. (2023). The effect of spiritual care interventions on the spiritual well-being, loneliness, life expectancy, and life satisfaction of intensive care unit patients. *Intensive and Critical Care Nursing*, 77, 1–9. <https://doi.org/10.1016/j.iccn.2023.103438>
- Dehghan, M., Namjoo, Z., Mohammadi Akbarabadi, F., Fooladi, Z., & Zakeri, M. A. (2021). The relationship between anxiety, stress, spiritual health, and mindfulness among patients undergoing hemodialysis: A survey during the COVID-19 outbreak in Southeast Iran. *Health Science Reports*, 4(4), 1–10. <https://doi.org/10.1002/hsr2.461>
- Durmuş, M., & Ekinici, M. (2021). The effect of spiritual care on anxiety and depression level in patients receiving hemodialysis treatment: A randomized controlled trial. *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-021-01386-4>

- Durmus, M., Meta, B., & Study, A. (2024). The effectiveness of spiritual interventions in improving the mental health of patients receiving hemodialysis treatment in nursing care: A meta-analysis study. *Journal of Nursingology*, 27(3). <https://doi.org/10.17049/jnursology.1416289>
- Elsera, C., Permata Sari, D., & Surya Mahendra, A. (2022). The effect of spiritual support on hemodialysis readiness of chronic kidney failure patients at Klaten Islamic Hospital. *Proceedings of the Unimus National Seminar*, 5, 481–495.
- Hapsari Retno Agustiyowati, T., et al. (2023). Hemodialysis patients: Factors affecting adherence to treatment.
- Manalu, L. O., et al. (2021). The effectiveness of health education provision on the anxiety level of chronic kidney failure patients who are hemodialysed at RSKG Mrs. Ra Habibie Bandung. *Researchology*, 6(1a), 70–75. <https://doi.org/10.47028/j.risenologi.2021.61a.215>
- Moodi, V., Arian, A., Moodi, J. R., & Dastjerdi, R. (2020). Effectiveness of spiritual therapy on depression, anxiety, and stress in hemodialysis patients. *Modern Care Journal*, 17(4). <https://doi.org/10.5812/modernc.108879>
- Najafi, K., Khoshab, H., Rahimi, N., & Jahanara, A. (2022). Relationship between spiritual health with stress, anxiety, and depression in patients with chronic diseases. *International Journal of Africa Nursing Sciences*, 17, Article 100463. <https://doi.org/10.1016/j.ijans.2022.100463>
- Şanlı, M. E., Dinç, M., Öner, U., Buluş, M., Çiçek, İ., & Doğan, İ. (2023). The role of spirituality in anxiety and psychological resilience of hemodialysis patients in Turkey. *Journal of Religion and Health*, 62(6), 4297–4315. <https://doi.org/10.1007/s10943-023-01855-y>
- Suharyono, Dewi, Y. S., & Pratiwi, I. N. (2021). The effect of virtual reality-based rehabilitation in reducing pain intensity in postoperative orthopedic surgery patients: A systematic review. *Forikes Journal of Voice Health Research*, 12(7), 391–397.
- Wang, X., Xia, F., & Wang, G. (2023). Mediating effect of anxiety and depression between family function and hope in patients receiving maintenance hemodialysis: A cross-sectional study. *BMC Psychology*, 11(1), 1–9. <https://doi.org/10.1186/s40359-023-01169-4>
- Widyasari, P. R., Manangkot, M. V., & Juniarta, I. G. N. (2023). The relationship between spirituality levels and anxiety in chronic kidney failure patients undergoing hemodialysis therapy. *Coping: Community of Publishing in Nursing*, 11(4), 360. <https://doi.org/10.24843/coping.2023.v11.i04.p14>
- Yuwono, T., & Ellina, A. D. (2025). Overcoming anxiety in hemodialysis patients with spiritual-based guided imagery therapy in the hospital. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*, 4(1), 38–45. <https://doi.org/10.55018/jakk.v4i1.70>