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REVIEW ARTICLE

A literature review of benson relaxation technique for reducing anxiety in patients with chronic kidney disease

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Abstract

Hemodialysis is cleaning blood through an artificial kidney or dialyzer assisted by a machine. Kidney failure patients undergoing therapy experience anxiety due to various stressors. One way to overcome fear is to use relaxation therapy, including Benson relaxation. Benson relaxation is a breathing relaxation technique with the addition of an element of belief in the form of words that express the anxiety that the patient is experiencing. This literature aims to determine the effectiveness of Benson's relaxation on reducing stress in chronic kidney failure patients undergoing hemodialysis. A literature review comparing some literature through the journal databases used is Pubmed, Google Scholar, ScienceDirect, Garuda Portal, and Jane Semantic. The keywords are "Benson relaxation, anxiety, chronic renal failure and hemodialysis," "Benson relaxation technique on the anxiety of patient hemodialysis," "Benson relaxation for anxiety disorders," or "Benson relaxation for patients undergoing hemodialysis" or "non-pharmacological therapy for reduce anxiety from 2016-2021 full text. There are seven journals reviewed and used in this literature review. The results show that Benson relaxation is proven effective in reducing anxiety in chronic kidney failure patients undergoing hemodialysis.

Keywords: Kidney disease; nursing care; relaxation technique; anxiety; psychological outcomes

Introduction

Kidneys are the essential organs in maintaining the composition of the blood in controlling body fluids to remain balanced, preventing the accumulation of waste and maintaining stable levels of electrolytes such as potassium, sodium and phosphate (Noni et al., 2020). A study stated that kidney failure is a disease related to the kidneys, which is difficult to heal (Beizae et al., 2018). In addition, this disease must also be accompanied by routine outpatient care in a short time. Chronic renal failure (CKD) is associated with abnormal kidney function and a progressive loss of glomerular filtration rate (Heshmati Far et al., 2020). A study explained that the prevalence of kidney failure is relatively high, with an estimated 8-16% of the world population (Nuri et al., 2016). Treatment of chronic kidney failure is divided into two stages: conservative management and renal replacement therapy (Haryanti & Nisa, 2015). Conservative management of renal failure consists of measures to prevent the progression of renal failure, stabilize the patient's condition and treat any reversible factors.

Based on PERNEFRI (Indonesian Nephrology Association) data in 2012, the types of service facilities provided by the renal unit are hemodialysis (78%), Continuous Ambulatory Peritoneal Dialysis (3%), transplant (16%) and Continuous Renal Replacement Therapy (3%). The goals of conservative therapy in patients with renal failure are to prevent progressive deterioration of renal function, relieve complaints due to accumulation of azotemia toxin, optimally improve metabolism and maintain fluid and electrolyte balance. The conservative measures that can be given are diet management in patients with chronic kidney failure (Haryanti & Nisa, 2015). Renal replacement therapy is performed in stage 5 chronic kidney disease, with a GFR of less than 15 ml/minute. The therapy can include hemodialysis, Continuous Ambulatory Peritoneal Dialysis (CAPD) and kidney transplantation. Dialysis is a kidney replacement therapy that can treat and save millions of lives in End Stage Renal Disease (ESRD) patients. Advances in understanding kidney failure and its complications have resulted in developing interventions for chronic kidney disease that can slow progression and improve disease complications (Haryanti & Nisa, 2015). Hemodialysis is a routine treatment for End Stage Renal Disease (ESRD). In the Renal Registry of Indonesia, it was

noted that the type of service most frequently used was hemodialysis services, showing a usage percentage of 82%. If conservative management is no longer able to maintain kidney function, then kidney replacement is carried out, namely hemodialysis, which is the most used therapy for kidney failure patients; CAPD can be used as an alternative to dialysis therapy, and kidney transplantation is the most preferred treatment for kidney failure patients but requires expensive funds.

The high rate of therapy with hemodialysis services is a concern for patients with chronic kidney failure. Hemodialysis is cleaning the blood with an artificial kidney or dialyzer, and its implementation is assisted by a machine tool (Noni et al., 2020). Kidneys that can no longer function properly can be assisted by hemodialysis therapy. However, this therapy affects patients who suffer from kidney failure in the form of biological and psychological disturbances. The function of hemodialysis is to help patients to have a quality of life that can be maintained. However, hemodialysis is not a therapy that can help the healing process or recovery from kidney failure suffered by the patient. Patients with kidney failure undergoing hemodialysis therapy will face various problems, including anxiety (Faruq & Purwanti, 2020). Patients with CKD or chronic kidney failure undergoing therapy feel anxiety due to various stressors (Suwanto et al., 2020). The causes of anxiety are equipment and machines that make them uncomfortable. Patients who feel anxious can be given medication or non-pharmacological interventions.

To minimize patient anxiety, nurses can use benson therapy. This therapy is one way to reduce anxiety in patients when nurses routinely monitor the effects of anxiety. Benson relaxation can be defined as a method of breathing relaxation by giving confidence to the patient in the form of words that contain the anxiety the patient feels (Faruq & Purwanti, 2020). The essence of Benson's relaxation is using words or sentences regularly and repeatedly. In addition, the form of the spoken word or sentence must also contain an element of surrender to God Almighty. This is done by making the body position to relax first through deep breathing and in the right way to reduce the tension and stress experienced by the patient. The advantage of practicing relaxation techniques compared to other relaxation techniques is that relaxation techniques are easier to do even under any conditions and do not have any side effects (Morita et al., 2020). In addition, the Benson relaxation technique can also improve the patient's sleep quality (Nuri et al., 2016). Benson relaxation therapy usually takes only 10-20 minutes, even under any conditions and has no impact on the patient (Anisah & Maliya, 2021). This relaxation can be used once but must consider one condition: the place used must be calm and comfortable.

The action of hemodialysis in several cases of chronic kidney failure has an impact, one of which is anxiety, which can affect the patient's physical and psychological. One of the ways to treat patient anxiety is using Benson's relaxation therapy. Benson relaxation can reduce physical and psychological anxiety and increase confidence in healing the disease because, in relaxation, Benson pleads for healing from God Almighty. Therefore, the study aimed to investigate the effectiveness of Benson relaxation in reducing anxiety in chronic kidney failure patients undergoing hemodialysis.

Method

The study used a literature review according to the publication nationally and internationally based. The inclusion criteria in the journal search include: Indonesian and English articles published in the last five years (2013-2022), and the articles used are full text. The journal databases used are Pubmed, Google Scholar, ScienceDirect, Portal Garuda and Jane Biosemantic. The keywords used are "benenson relaxation, anxiety, chronic renal failure and hemodialysis", "benenson relaxation technique on the anxiety of patient hemodialysis", "benenson relaxation for anxiety disorders", or "benenson relaxation for patients undergoing hemodialysis" or "therapy non-pharmacological to reduce anxiety. To determine the effectiveness of the intervention, the keywords used were the effect of gasoline relaxation, quality of life, and chronic kidney disease. From the results of a literature review, the level of effectiveness of Benson relaxation in reducing anxiety in hemodialysis patients can be seen. The authors selected the article carefully to review the study finding.

Results

The following is the detail of our finding, which describes the benefits of benson therapy (**Table 1**). We collected seven studies using benson therapy for reducing anxiety in patients with chronic kidney disease.

Discussion

Kidney failure is a permanent chronic disease that cannot be cured and requires treatment and outpatient treatment for a long time (Zees & Lapradja, 2021). Chronic kidney disease is often known as CKD or chronic kidney disease.

CKD can be defined as a process of kidney function that begins to decline irreversibly through pathophysiological processes with various etiologies. This can make patients often referred to as patients with kidney failure.

Table 1. Study finding

Authors, years	Method	Results
Noni et al., 2020	A quasi-experimental study	Benson therapy decreases the patients' anxiety
Maloh et al., 2022	A systematic review study	Benson therapy has benefits for anxiety.
Faruq et al., 2020	A quasi-experimental study	Benson therapy reduces anxiety
Eroglu et al., 2022	A quasi-experimental study	Benson's relaxation technique is effective
Nuri et al., 2016	A quasi-experimental study	Benson therapy has benefits for anxiety
Imanian et al., 2022	A randomized controlled trial	Benson therapy reduces psychological symptoms
Mahdavi et al., 2013	A quasi-experimental study	Benson therapy reduces adverse outcomes

End-stage CKD causes the patient to undergo hemodialysis as renal replacement therapy. Kidneys that can no longer function properly can be assisted by hemodialysis therapy. However, this therapy affects patients who suffer from kidney failure in the form of biological and psychological disturbances. This therapy only helps patients to have a good quality of life. A study believes that patients suffering from kidney failure should undergo dialysis therapy to get a new kidney transplant through surgery. Therapy is usually carried out 1-3 a week by the patient as long as he lives. This condition can cause biological, psychological, social, and spiritual imbalances. Patients with chronic kidney failure, especially those undergoing hemodialysis for a long time, will experience psychological problems such as anxiety. Anxiety is usually triggered by financial problems, role conflict, difficulty maintaining a job, and disrupted relationships with close friends (Rokhyati et al., 2019).

Patients with chronic kidney failure undergoing hemodialysis often feel mild to severe anxiety. Severe anxiety will affect the human nervous system, namely the hypothalamus, which controls and regulates the autonomic nervous system. In anxiety conditions, this nervous system will release norepinephrine through the secretions of the nerve endings associated with the end of the person being addressed (Prajayanti & Mustika Sari, 2017). As a result, the client's heart rate increases because peripheral vasoconstriction causes blood pressure to increase. Other physiological responses caused include occasional shortness of breath, mild stomach symptoms, wrinkled face and trembling lips (Ariwijaya et al., 2020). A study stated that most hemodialysis patients experience moderate to severe anxiety (Zees & Lapradja, 2021). The level of anxiety experienced by patients with chronic kidney failure is due to a lack of knowledge related to hemodialysis, lifestyle changes, the time needed for therapy, depression due to kidney failure, and the cost of therapy is quite expensive (Zees & Lapradja, 2021). Anxiety in people undergoing hemodialysis can be reduced by various methods, such as therapy with antidepressants, psychological interventions, regular exercise and relaxation therapy and techniques (Gerogianni et al., 2019). One of the therapies used to reduce anxiety is Benson relaxation, including in chronic kidney failure patients undergoing hemodialysis. Benson's relaxation combines with beliefs (Prajayanti & Mustika Sari, 2017). Benson's relaxation method reduces stress and anxiety in hemodialysis patients because it includes various rhythmic breathing relaxation techniques, such as slow breathing, deep breathing, breathing meditation and abdominal breathing. In this case, this relaxation contains two activities: the belief factor and the relaxation itself (Rahman et al., 2020). Benson relaxation works by inhibiting sympathetic nerve activity, which reduces oxygen consumption by the body. Then the body's muscles will relax so that the client feels calm and comfortable.

Anxiety suffered by patients with kidney failure can be minimized through Benson relaxation, which includes activities that reduce muscle tension and cortisol secretion. This relaxation affects the respiratory function, heart rate, and cardiac workload of patients with kidney failure. Therefore, Benson's relaxation can positively impact stress by providing a sense of relaxation and decreasing cortisol secretion. Cortisol is the first hormone secreted by the adrenal glands in response to stress and sleep disturbances (Yoon & Park, 2019). Benson relaxation has been shown to reduce anxiety in hemodialysis patients by doing twice a day for 10-15 minutes for 4 weeks. The essence of Benson's relaxation is using words or sentences regularly and repeatedly. In addition, the form of the spoken word or sentence must also contain an element of surrender to God Almighty. This is done by making the body position to relax first through deep breathing. It does not match that the pretest and posttest anxiety values in the two groups range from moderate to mild (Nuri et al., 2016). In addition, the two data did not show a significant difference between the intervention and comparison groups. This is probably because the intervention time given to the intervention group was shorter, namely 2 weeks, and the number of respondents differed.

Conclusion

Benson relaxation reduces anxiety by reducing muscle tension and cortisol secretion. Implementation for the nursing profession to increase willingness to teach, guide and apply Benson relaxation therapy. In addition, it can improve the ability of the nursing profession to provide interventions and implementation, improve communication skills and interact with clients. Further research is needed to evaluate the benson's effectiveness in different populations.

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