The Effect Of Benson Relaxation Therapy Against Fatigue Of Chronic Kidney Failure Patients Those Who Are Taking Hemodialization In Metro City

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Abstract

Background: The increase in the prevalence rate of patients with chronic kidney failure reported by the Indonesian Renal Registry (IRR) in 2017 reached 30,831 cases and was actively undergoing hemodialysis therapy. Patients suffering from chronic kidney failure who have undergone hemodialysis cause various nursing problems, generally anxiety, shortness of breath, and fatigue (weakness). Weakness is one of the most common symptoms at an advanced stage felt by chronic disease patients, so it can cause anxiety disorders. Changes in body conditions that cause weakness due to a long-lasting decline in kidney function can reduce productivity and reduce quality of life. Nursing actions to overcome fatigue (weakness) problems, one of which is Benson relaxation, which is believed to be combined with deep breathing techniques with spiritual practice which is done repeatedly correctly, can reduce the patient's level of weakness, thereby reducing further problems. The purpose of this study was to determine the effect of Benson relaxation on fatigue in chronic renal failure patients undergoing hemodialysis in the Metro City area.

Methods: This type of quantitative research with a quasi-experimental design is treated by pre-test and post-test with the control group and purposive sampling technique which is considered representative of the sample from all populations. Filling out the initial FACIT questionnaire was given to all samples and then Benson relaxation technique was performed in the intervention group, then the post-implementation evaluation questionnaire was given back which was then compared with the control group.

Result: Benson relaxation therapy on fatigue of chronic kidney failure patients undergoing hemodialysis after intervention in the group showed a p-value of 0.745 (p>0.005) which means that there was an effect of Benson relaxation therapy on fatigue of chronic kidney failure patients undergoing hemodialysis in Metro City. Benson relaxation is a deep breathing relaxation technique by combining spiritual elements that can increase a person's calm and peace so that they can release endorphins to increase adrenaline.

Conclusion: Benson relaxation can be done to increase a person's strength so as to reduce fatigue problems that occur in chronic kidney failure patients undergoing hemodialysis.

Keywords: Benson relaxation, Fatigue, chronic renal failure patients undergoing hemodialysis.

Introduction

Chronic kidney disease (CKD) is a progressive and irreversible decline in kidney function where there is a failure of the body's ability to maintain metabolic, fluid and electrolyte balance resulting in uremia or azotemia [1]. This disease has become a public health problem worldwide. The report of The global burden of kidney disease and the sustainable development goals funded by WHO states that in 2015 as many as 1.2 million people died from kidney failure or an increase of 32% since 2005. It is estimated that in 2010 an increase of 5-10 million people died every year due to kidney disease.
Based on the 2017 Indonesian Renal Registry (IRR) report, it increased to 30,831 patients. Meanwhile, for active patients, both new patients in 2017 and old patients from the previous year who are still undergoing routine hemodialysis therapy and are still able to survive. The year 2017 increased sharply from 52,835 in 2016 to 77,892 in 2017 (IRR, 2017).

Kidney disease causes a variety of nursing problems faced by chronic kidney failure patients undergoing hemodialysis generally are anxiety, shortness of breath, and fatigue (weakness). The perceived weakness causes anxiety disorders in chronic kidney failure patients undergoing hemodialysis related to changes in health conditions. Anxiety can persist and even increase even though a truly threatening situation is not present, and when these emotions grow excessively compared to the actual danger, these emotions become unadaptive, which can have a detrimental impact on the mind and body (Cutler, 2004). Marunung, 2016). While fatigue or weakness itself is one of the most common symptoms in clients with advanced disease. Chronic diseases that last a long time and cause fatigue problems can cause physical and psychological helplessness so that patients are unable to carry out activities as usual (Aditya B, 2018). This is a condition that is very disturbing and impairs the quality of life. Clients who experience weakness in general will feel a loss of energy, feel fatigue, increased desire to rest, loss of motivation, loss of concentration, and disturbed mood (Butar-butar, 2014).

Fatigue experienced due to decline in kidney function can be overcome with one of the nursing interventions that are believed to help clients overcome the problem of weakness, including through strategies for providing relaxation therapy. Relaxation techniques that are believed to reduce symptoms such as anxiety, nausea and fatigue are Benson Relaxation which is a combination of relaxation and factors of philosophical or religious beliefs held by a person. The focus of this relaxation is found in certain expressions that are repeated using a regular rhythm accompanied by a resigned attitude. The expressions used can be in the form of the names of God or words that have a calming meaning for the patient. Repeated reading on the element of belief, faith in God can cause a strong relaxation response (Malisa, Ibrahim, 2017).

Research conducted by Arintoko, Maliya, &Kusnanto, (2019) showed that Benson relaxation was proven to have an effect on fatigue in patients undergoing hemodialysis therapy at RSUD Ir. SoekarnoSukoharjo. Research conducted by Malisa, Ibrahim, &Mardiah, (2017) showed that Benson relaxation was proven to have an effect on the fatigue level of patients undergoing hemodialysis.

Based on the above phenomenon, the authors are interested in conducting research on the effect of Benson relaxation on fatigue of chronic kidney failure patients undergoing hemodialysis with the aim of this study being to determine the effect of Benson relaxation on fatigue of chronic kidney failure patients undergoing hemodialysis in Metro City in 2020.

**Research Method**

This type of research is quantitative by using a quasi-experimental design (quasi-experimental design) in the form of Nonequivalent control group design/non-randomized control group pretest posters design, namely experimental research conducted by selecting two groups in the study group but not randomized and then given a pretest to Knowing the initial state and then given the treatment, the researcher then conducted a post test to see the effect of the treatment given. The overall population of the subjects studied while the samples were taken from the entire object under study by purposive sampling technique. and considered to represent the entire population using the experimental group and the control group totaling 32 people.

The data collection instrument to measure the level of fatigue used the FACIT Fatigue Scale questionnaire which was developed by David Cella, Ph.D in 2005 and has been validated. Which was given to the subject in the form of a questionnaire, then Benson relaxation technique intervention was carried out, and re-evaluation was carried out after treatment (Sihombing et al., 2016).Based on data collection and analysis, the following research results were obtained.

**Table 1**

Distribution of Chronic Renal Failure Patients by age
The table above explains that the average age of patients with kidney failure undergoing hemodialysis in the intervention group and the control group is equivalent (p-value 0.515), where the average age of respondents in the intervention group is 51.69±7.648 years and the average age of respondents in the intervention group is 51.69±7.648 years. The age of the respondents in the control group was 50.00±6.802 years.

The table above explains that the sexes of the two groups have equality (p-value 0.722) where most of the respondents are male, namely 18 people (56.3%) and 14 women (43.8%). In the intervention group, most of them were men as many as 10 people (62.5%) and in the control group both the number of men and women were the same, namely 8 people each (50.0%). Based on employment status, most of the respondents are housewives, as many as 13 people (40.6%). In the intervention group, most of them worked as entrepreneurs as many as 6 people (37.5%) and in the control group were housewives as many as 8 people (50.0%), the results of the equivalence test showed that the jobs of the two groups were equal (p-value 0.388). Furthermore, judging from the level of education in both the intervention group and control group, most of them graduated from high school, namely 17 people (53.1%) where in the intervention group there were 9 people (56.3%) and in the control group 8 people (50 people). 0.0%), the results of the equivalence test showed that the education level of the two groups was relatively the same or had equality (p-value 0.859).
Fatigue level of control group before treatment (pretest) | 20.75 | 2.745 | 16-25 | 19.29-22.21 | 16

Table 4
Average Fatigue Rate of Chronic Kidney Failure Patients Undergoing Hemodialysis After Treatment (Posttest)

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Mean</th>
<th>SD</th>
<th>Min-Max</th>
<th>CI; 95%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>The level of fatigue of the intervention group after treatment (posttest)</td>
<td>22.81</td>
<td>2.613</td>
<td>19-28</td>
<td>21.42-24.21</td>
<td>16</td>
</tr>
<tr>
<td>The level of fatigue of the control group after treatment (posttest)</td>
<td>19.58</td>
<td>2.316</td>
<td>17-24</td>
<td>19.58-22.05</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 5
Fatigue Level Normality Test Before and After Treatment

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Shapiro Wilk(sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Pretest fatigue</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Posttest fatigue</td>
<td>16</td>
</tr>
<tr>
<td>Control</td>
<td>Pretest fatigue</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Posttest fatigue</td>
<td>16</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that the results of the Shapiro Wilk test for the intervention group and control group both before and after the intervention obtained p>0.05, so it can be concluded that all data groups are normally distributed.

Table 6
Differences in Average Fatigue Levels Before and After Treatment between the Intervention Group and the Control Group

<table>
<thead>
<tr>
<th>Fatigue</th>
<th>Mean Difference</th>
<th>t</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean±SD</td>
<td>Mean±SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before (pretest) treatment</td>
<td>21.06±2.645</td>
<td>20.75±2.745</td>
<td>0.313</td>
</tr>
</tbody>
</table>
Based on the table above, it can be seen that the results of the analysis using the independent t-test obtained the average level of fatigue before treatment (pretest) in the intervention group of 21.06 ± 2.645 and in the control group 20.75 ± 2.745 with an average difference the mean between the intervention and control groups was 0.313, p-value was 0.745 (p > 0.05) meaning that before the pre-treatment (pretest) there was no significant difference in the level of fatigue between the intervention group and the control group. Meanwhile, after treatment (posttest) the average fatigue level of the intervention group was 22.81 ± 2.613 and in the control group was 20.81 ± 2.316 with the average difference between the intervention group and control group was 2,000, p-value 0.029 (p < 0.05) means that after treatment there is a significant difference in the level of fatigue between the intervention group and the control group, or in other words Benson relaxation has been shown to have an effect on the fatigue level of chronic kidney failure patients undergoing hemodialysis where the treated group has a better level of fatigue compared to those who were not treated.

**Discussion**

The Effect of Benson Relaxation on Fatigue Levels in Chronic Kidney Failure Patients Undergoing Hemodialysis

Fatigue is a feeling of helplessness both physically and psychologically so that the patient cannot carry out activities properly. Fatigue is an unpleasant subjective feeling and is manifested by weakness and limited energy. The causes of weakness in chronic disease patients include chronic kidney failure undergoing hemodialysis causing metabolic disorders (Nugraha B, 2018).

From the results of the analysis using the independent t-test, the average level of fatigue before treatment (pretest) in the intervention group was 21.06 ± 2.645 and in the control group was 20.75 ± 2.745 with the average difference between the intervention and control groups was 0.313, p-value 0.745 (p > 0.05), meaning that before treatment (pretest) there was no significant difference in the level of fatigue between the intervention group and the control group. There are several factors that influence changes in the intervention to the level of fatigue of kidney failure patients undergoing hemodialysis, including physical, psychological conditions, duration of hemodialysis, the development of the disease itself, and monitoring the patient's diet.

Meanwhile, after treatment (posttest) the average fatigue level of the intervention group was 22.81 ± 2.613 and in the control group was 20.81 ± 2.316 with the average difference between the intervention group and control group was 2,000, p-value 0.029 (p < 0.05) means that after treatment there is a significant difference in the level of fatigue between the intervention group and control group, or in other words Benson relaxation has been shown to have an effect on the fatigue level of chronic kidney failure patients undergoing hemodialysis where the treated group has a better level of fatigue compared to those who were not treated. Benson relaxation is a deep breathing relaxation technique by combining spiritual elements that can increase one's calm and peace of mind, so that the concentration effect caused helps release endorphine hormones from one's body so that it produces impulses from the hypothalamus and responds to a more relaxed body, the resulting relaxed condition increase sincerity and resignation so that it raises the spirit from within the body of someone who feels weak. This can be related to QS ArRadd verse 28, ... remember ... only by remembering Allah the heart becomes calm.

The results of this study are in line with the theory which explains that certain formulas that are read over and over again involving elements of belief, faith in religion, and in the worshiped God are believed to cause stronger relaxation than just relaxation without involving elements of belief in other things. that matter. In addition, the healing effect of such formulas is not limited to treating high blood pressure and heart disease or anxiety, but to the level of being able to relieve pain. Benson relaxation can block the work of sympathetic nerve hormones so that it can prevent anxiety or pain (Arintoko, 2019).

The results of this study are in line with research conducted by Malisa et al., (2017) which showed that there was a difference in the average fatigue score between scores before and after the Benson Relaxation intervention in the...
intervention group (pretest 27.16±3.325 and posttest 28.76±3.728) and control group (pretest 28.16±2.609 and posttest 28.36±3.040). There was a significant difference between the fatigue scores of the intervention group and the control group (p = 0.000). Improvements in fatigue levels were seen after five routine Benson Relaxations in the first two hours of intradialysis (p = 0.000). In general, the results of this study found that there was an effect of Benson Relaxation on the fatigue level of HD patients with changes in fatigue scores after the fifth treatment. Benson Relaxation is proven safe, without side effects, and easy to do.

Based on the description of the results of the study above, it can be explained that Benson relaxation has been shown to have an effect on the fatigue level of chronic kidney failure patients undergoing hemodialysis, this can occur because Benson relaxation is a relaxation technique that uses a formula in the form of soothing expressions for patients so that it can reduce the sympathetic response to stress and increases the parasympathetic system to calm and help the self-healing process, also stimulates the pituitary gland to produce endorphins that cause a happy, happy effect for the patient. Expressions that contain elements of belief in Benson's relaxation technique will block the work of sympathetic nerve hormones, causing a calming response.

Nursing problems faced by many patients with chronic kidney failure undergoing hemodialysis are generally anxiety, shortness of breath, and fatigue (weakness). Anxiety disorders in patients with chronic kidney failure undergoing hemodialysis increase the patient's weakness (fatigue), this is because there is a relationship associated with changes in health conditions. Anxiety can persist or even increase even when a truly threatening situation is not present, and when these emotions outgrow the actual danger, they become unadaptive, which can have detrimental effects on the mind and body that increase feelings of weakness and anxiety. fatigue (Cutler, 2004 in Marunung, 2016). Therapies that are believed to be able to reduce fatigue in patients undergoing hemodialysis therapy include Benson relaxation.

The results of this study are in line with research conducted by Arintoko et al., (2019) that after giving Benson Relaxation twice a day, each for 15 minutes and the patient was advised to do this procedure twice for 15 minutes, it was proven that Benson Relaxation affect the anxiety level of patients undergoing hemodialysis. Research by Patimah, Suryani, &Nuraeni, (2015) also showed that the average anxiety score before treatment was 18.47±3.6 and the average after treatment was 13.83±3.52, the results of the analysis obtained p-value 0.000 (p<0.05) where the remembrance therapy proved to have an effect on the anxiety of CKD patients undergoing hemodialysis.

Based on the description of the results of the study above, it can be explained that Benson relaxation has been shown to have an effect on the anxiety level of chronic kidney failure patients undergoing hemodialysis, this can occur because this relaxation is basically a combination of deep breathing relaxation techniques followed by calming expressions accompanied by a resigned attitude so that the patient will easily feel relaxed and calm.

**Conclusion**

Based on the results of the study and the description in the previous chapter, the following conclusions can be drawn: Characteristics of patients with chronic renal failure undergoing hemodialysis in the intervention group had an average age of 51.69±7.648 years and the control group 50.00±6.802 years, the most gender was male (56.3%), household household work (40.6%), high school education (53.1%). The average fatigue level of patients with chronic renal failure undergoing hemodialysis in the intervention group before treatment was 21.06±2.645 and in the control group was 20.75±2.745. After treatment, the average fatigue level of patients with chronic renal failure undergoing hemodialysis in the intervention group was 22.81±2.613 and in the control group was 20.81±2.316. There is an effect of Benson relaxation on the fatigue level of patients with chronic renal failure undergoing hemodialysis with an average difference between the intervention group and the control group after treatment of 2,000 (p-value 0.029). Chronic kidney failure patients undergoing hemodialysis should be able to use Benson's relaxation therapy independently and regularly because apart from being easy to do, this therapy has been proven to be effective in reducing fatigue levels. For health workers, especially nurses in the hemodialysis room, they should be able to use Benson relaxation as a form of management for patients who experience fatigue and anxiety, because this technique has been proven to be effective in helping to overcome fatigue and anxiety problems. For other researchers who want to conduct research related to efforts to reduce fatigue levels, it is better to
take a wider research location so that it can be used by the community, especially for chronic kidney failure patients undergoing hemodialysis.

References


