# Reduce the Level of Anxiety in Chronic Renal Failure Parients those Undergoing Hemodialysis Through Guide Imagery Relaxation Texhniques

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## REDUCE THE LEVEL OF ANXIETY IN CHRONIC RENAL FAILURE PATIENTS THOSE UNDERGOING HEMODIALYSIS THROUGH GUIDE IMAGERY RELAXATION TECHNIQUES

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#### **ABSTRACT**

In Chronic Renal Failure (CRF) Patients with hemodialysis explanation about procedure, using tool attached to the part arm or abdomen effects and risks use tool could trigger emergence reaction psychological form anxiety, even at the beginning of the hemodialysis process the level of anxiety can be higher because CRF patients undergoing hemodialysis experience the process of installing a device, which may fail even several times due to various factors. For reduce worry could applied technique relaxation Guide imagery. Destination study this is knowing Influence technique Relaxation Guide Imagery Against Anxiety Levels in CRF Patients with hemodialysis at home William Booth Hospital Surabaya. Pre-experimental research design with one group pre-test-post test design. The population is whole CRF patients with hemodialysis at William Booth Hospital Surabaya. The sampling technique used purposive sampling so that reach amount sample research 51 respondents. Data collection with give intervention Relaxation *Guide Imagery* and using the *Hamilton* questionnaire Anxiety Rating Scale (HARS) for identification level anxiety. Results Analyst a data of the 51 respondents who had not given intervention part big have level worry light ie 51% and after given intervention part big no experience worry namely 56.9%. Based on results the Wilcoxon test obtained a p value = 0.000, which means that there is an influence of the guided imagery relaxation technique on the anxiety level of CRF patients on hemodialysis. Researcher recommend availability SOP on relaxation techniques guide imagery for Becomes reference and nurse have a choice of actions that effectively reduce anxiety and can apply in services to help reduce patient anxiety.

Keywords: Guide imagery, Anxiety, CRF with hemodialysis.

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#### Introduction

Hemodialysis is management therapy patient Fail Kidney Chronic (CRF) stage end for guard body permanent healthy (Arafat et al, 2016). Danger from CRF can resulted various complications among them hyperkalemia, hypertension, and disease bone. Hemodialysis could reduce risk Dead but no could treat the whole disease



fail kidney as well as no can minimize loss work metabolism is carried out kidneys and effects from disease fail kidney along therapy to quality life sufferer so that sufferer need obey operate therapy hemodialysis. Hemodialysis is something method for Secrete excess fluid and toxins moment blood patient circulate through kidney artificial (Hurst, 2015) using tool attached to the part arm or abdomen. This process is frequent raises anxiety in patients undergoing hemodialysis. Effect side from hemodialysis this form change psychological so that occur anxiety. Worry CRF patients are response CRF patients against situations experienced that are threatening and constitute normal things that happen that come with it development, change, experience new, as well in find identity himself and his life

Anxiety is feeling problem characterized by deep and ongoing feelings worry and of pain, experiencing disturbances in assessing reality, personality is still intact, behavior is disrupted but still within normal limits (Jaya, 2014). In Indonesia, based on the results of research from Wakhid (2019) on the anxiety of Chronic Kidney Failure patients undergoing hemodialysis in Semarang Regency, it was found that most respondents experienced severe levels of anxiety. Basic Health Research Data for 2018 in Indonesia, the percentage of chronic kidney disease shows a figure of 3.8%, with the lowest prevalence of 1.8% and the highest prevalence of 6.4%. Chronic kidney failure increases with age. The highest percentage occurs in residents aged 6574 years. The prevalence of chronic kidney failure is higher in men 4.17% than in women 3.52%, chronic kidney failure is more common in urban communities

An effective non-pharmacological effort to reduce anxiety in CRF patients undergoing hemodialysis is relaxation techniques. One of the relaxation techniques that can be applied to reduce anxiety is the guided imagery technique. According to Kaplan & Sadock (2010) Guide imagery is a relaxation method to imagine or imagine places and events associated with a pleasant sense of relaxation. At William Booth Hospital in Surabaya, the results of interviews with several nurses from the hemodialysis installation stated that to deal with anxiety in CRF patients undergoing hemodialysis, deep breathing relaxation was given, but the degree of patient anxiety had not reduced, even at the beginning of the hemodialysis process the anxiety level could increase because in CRF patients undergoing Hemodialysis experience the process of installing a device, which can fail even several times due to various factors.

From the phenomena that occur at the Hemodialysis Installation at William Booth Hospital, Surabaya, researchers conducted a study aimed at finding out the effect of the guide imagery technique on the anxiety level **CRF** patients undergoing Hemodialysis at the Hemodialysis Installation at William Booth Hospital, Surabaya, so that they can provide alternative options for the actions given. in patients experiencing anxiety.

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#### Method

The research design used is preexperiment with design One Group Pretest-Posttest. Population research CRF patients undergoing hemodialysis done from date December 2021 to with January 9, 2022 in Installation hemodialysis House William Booth Hospital Surabaya. Respondents are taken researcher with method purposive sampling a total of 51 people. Instruments used in data collection is sheet questionnaire worry with use scale HARS (Hamilton Rating Scale for Anxiety) which consists of on

14 representative questions \_ group symptom described anxiety in a manner more specific. Data retrieval is done 2x namely before and after intervention technique relaxation given. imagery technique guide relaxation guide imagery is given 2x each for 10-30 minutes, the first moment patient will conducted installation tool hemodialysis and the second when already patient completion of the hemodialysis process. Data analysis on research this Wilcoxon Z test

#### Results

#### General data

This data describe about distribution respondent based on demographic data that includes age, type gender, education and Ever Hemodialysis or no before.

a. Characteristics Respondents Based on Age

Table 5.1 Distribution of respondents by age in hospital William Booth Surabaya December 2021

Age	Frequency (f)	Percentage (%)
17-25 Years	8	15,7
26-35 Years	12	23.5
36-45 Years	4	7,8
46-55 Years	8	15,7
> 56 Years	19	37,3
Total	51	100.0

Based on table 5.1 can is known that respondents aged 56 years to the top is respondent the most with a total of 19 patients (37.25%).

b. Characteristics Respondents Based on gender

Table 5.2 Distribution of respondents by gender in hospital William Booth Surabaya December 2021

Gender	Frequency (f)	Percentage (%)
Woman	24	47,1
Man	27	52,9
Total	51	100.0



Based on Table 5.2 appears part big respondent manifold gender man as many as 27 patients (52.9%).

#### c. Characteristics Respondents Based on Education

Table 5.3 Distribution of respondents based on Education in Hospitals. William Booth Surabaya December 2021

Education	Frequency (f)	Percentage (%)
Primary school	5	9,8
Junior High School	14	27.5
Senior High School	16	31,4
Higher education	16	31,4
Total	51	100.0

Based on Table 5.3 is known that respondent with level high school and university education tall the amount same big and is respondent most each as many as 16 patients (31.4%).

 d. Characteristics Respondents Based on Have been on hemodialysis or no previously
 Table 5.4 Distribution of respondents based on Ever Hemodialysis or no previously in hospital William Booth Surabaya December 2021

Experience Hemodialysis previously	Frequency (f)	Percentage (%)
Yes	43	84.3
Not	8	15,7
Total	51	100.0

Based on Table 5.4 is known that part big respondent been on hemodialysis previously as many as 43 patients (84.3%).

#### Special data

Distribution of data regarding results measurement level worry before and after given intervention technique relaxation *guide imagery* with results as following:

a. Measurement results level worry before being given intervention technique relaxation *guide imagery* 

Table 5.5 Frequency Distribution level worry respondent before being given the intervention technique relaxation *guide imagery* 

Anxiety Level	Frequency (f)	Percentage (%)
Not there is worry	0	0
Worry Light	26	51.0



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Moderate Anxiety	24	47.1
Worry Heavy	1	2.0
Total	51	100.0

Based on table 5.5, it can be seen that most of the respondents before being given the intervention had a relatively mild level of anxiety, namely 26 patients (51%).

b. The results of measuring the level of anxiety after being given the intervention of the guided *imagery relaxation technique* 

Table 5.6 Frequency distribution level worry respondent after being given the intervention technique relaxation *quide imagery* 

Anxiety Level	Frequency (f)	Percentage (%)
Not there is worry	29	56.9
Worry Light	22	43.1
Moderate Anxiety	0	0
Worry Heavy	0	0
Total	51	100.0

Based on table 5.6 it can be seen that most of the respondents after being given the intervention showed no symptoms of anxiety, namely 29 patients (56.9%).

c. The Effect of *Guide* Imagery Relaxation Techniques on the Anxiety Level of CRF Patients Hemodialysis William Booth Hospital Surabaya

Table 5.7 Tabulation cross level worry before and after the intervention was given technique relaxation *quide imagery* 

Criteria	Pre Test		Posttest	
	Frequency	Percentage	Frequency	Percentage
Not there is worry	0	0	29	56.9
Worry Light	26	51.0	22	43.1
Moderate Anxiety	24	47.1	0	0
Worry Heavy	1	2.0	0	0
Total	51	100.0	51	100.0
Z value	-6,343			
P Value	P = 0.000			

Based on table 5.7 it can be seen that the results of the study showed the anxiety level of CRF patients who were hemodialyzed before being given the guide imagery relaxation technique intervention, respondents who had

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mild anxiety levels were 26 patients (51%), moderate anxiety were 24 patients (47.1%) and severe anxiety by 1 person (2%). Meanwhile, after the intervention of the guided imagery relaxation technique, the anxiety level decreased, namely 29 patients (56.9%) had no anxiety and 22 patients (43.1%) had mild anxiety. Then data from before and after the intervention of the guided imagery relaxation technique, the anxiety level of the respondents was analyzed using the Wilcoxon Z test through computerization with a degree of significance p <0.05, it was found that the average pre-test anxiety level was 2.5098, the post-test average was 1 .4314 and the Z value obtained was -6.343 with a p value of 0.000 so that it can be said that the hypothesis is to accept H1, which means that there is a significant difference from the results of the pre test and post test there is an effect of the guide imagery relaxation technique on the anxiety level of CRF patients with hemodialysis.

#### Discussion

Table 5.5 shows that before being given imagery guided relaxation technique, 26 respondents (50.98%) had moderate levels of anxiety and 24 respondents (47.1%) had moderate levels of anxiety. Mild anxiety is normal anxiety that usually becomes part of everyday life and causes a person to be alert and increase attention (Stuart, 2007). Mild anxiety that occurs in CRF patients on hemodialysis can be caused by the patient's experience undergoing treatment/medical procedures and the medical conditions that patients with CRF on hemodialysis must undergo, during the process of installing equipment and the dialysis process.

From table 5.2 the results of the research on the characteristics of respondents based on gender show that the majority of respondents were male, 27 patients (52.9%). Strengthened by theories related to anxiety in men and women by Sunaryo, (2004) in Suriani (2018) who wrote in his book that in general an adult male has a strong mentality towards something that is considered a threat to him compared to women. Men are more reality oriented, generally according to Myers (1983) men are more active, explorative, and men are more relaxed than women. This is what causes most respondents to experience mild anxiety before undergoing the hemodialysis process.

Moderate anxiety that occurs in CRF patients on hemodialysis causes a person to become nervous or panicked but is still able to process information, solve problems and learn new things with help from others. From table 5.1 the results of the research on the characteristics of respondents based on age, it was found that respondents aged 56 years and over were the most respondents with a total of 19 patients (37.25%). According to Pudji Astutik (2003) old age is an advanced stage of a life process which is characterized by a decrease in the body's ability to adapt to environmental stress which has the potential to experience greater anxiety than anxiety that occurs in middle age. This research is in line with the opinion of Rindayati, et al (2020) in her research entitled Description of events and anxiety levels in the elderly, setbacks that occur in the elderly can affect the anxiety of most elderly people so that when undergoing the

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hemodialysis process the elderly can experience moderate anxiety.

According to the researchers, most CRF patients with hemodialysis experience anxiety caused by feelings of worry about matters related the to hemodialysis process, where this concern arises because patients do not know the situation in the hemodialysis room, the process of installing dialysis equipment and the possibility of changing conditions after hemodialysis running which the patient had never felt before. Mild and moderate anxiety that occurs at the time before the hemodialysis procedure depends on several influencing factors including age, gender and having had or not had hemodialysis before.

### Guided imagery relaxation technique was carried out

From table 5.6 the results of measuring anxiety levels after being given the guided imagery relaxation technique, the anxiety level of CRF patients with hemodialysis has decreased, as shown by the results of respondents who had no anxiety as many as 29 respondents (56.9%) and those who experienced mild anxiety as many as 22 respondents (43,1%). According to the results of the post test in this study, it showed that anxiety in CRF patients hemodialysis, which was originally at moderate and mild degrees, decreased to mild degrees and there was no anxiety, this was caused by applying guided imagery relaxation technique, the visual cortex of the brain processes the imagination that has a strong relationship with the autonomic nervous system which controls involuntary movements including: pulse, breathing and physical

response to stress, and helps release endorphins so that relaxation processes occur and anxiety decreases (Potter & Perry, 2010).

From table 5.3 it is known that the characteristics of respondents based on education were obtained respondents with high school and university education The number of heights is the same and the most respondents are 16 patients (31.4%) each and all respondents get the same information from researchers about guided imagery relaxation techniques to reduce anxiety. This is in accordance with Stuart's theory (2016) which states that anxiety levels are influenced by extrinsic factors, education level and access to information. A sufficient level of education will make it easier to identify stressors within oneself and from outside oneself. The level of education also affects the awareness and understanding of the stimulus.

In this study, patients undergoing the hemodialysis process will feel the sensation of the preparation process and the process of installing the dialysis device for approximately 3-5 hours. During the hemodialysis process, respondents who are conscious are taught the guided imagery relaxation technique. In accordance with the opinion of Solso, et.al (2007) that one of the factors that strengthens the memory of something is repetition, in this case it is associated with the success of the intervention because the respondent is willing to be fully active undergoing the intervention including doing it independently in the hemodialysis room. According to Wulandari (2015) there are 2 things that influence the success of providing guide imagery interventions, namely

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internal factors including cooperativeness, no hearing loss and easy concentration and external factors, namely a calm and comfortable environment.

According to the researchers, a sufficient level of education and the provision of the same and repeated information to each respondent about guided imagery relaxation technique can reduce the anxiety level of CRF patients with hemodialysis, because with sufficient education the patient is easier to accept the information provided and can understand and apply relaxation reduce techniques. informed to anxiety.

## Guided Imagery relaxation techniques on the anxiety level of CRF patients on hemodialysis

guided imagery relaxation technique on the anxiety level of CRF patients with hemodialysis using the Wilcoxon Z test showed a p value of 0.000  $<\alpha$  (0.05). These results indicate that there is an effect of the guided imagery relaxation technique on the anxiety level of CRF patients on hemodialysis.

This research is in accordance with the theory stated by Smeltzer & Bare (2008) which states that this technique is used to manage coping by imagining or imagining something that starts with a relaxation process in general, namely asking the patient to slowly close their eyes and focus On exhaling, the patient is encouraged to empty the mind and then fills the mind with images to create peace and quiet.

imagery relaxation techniques are effective in reducing anxiety in CRF patients on hemodialysis because the components in guide imagery involve

all the five senses in the form of smell, hearing, taste and taste to change one's thoughts, emotions and behavior. Through the use of several senses can affect individual perspectives themselves and the surrounding environment, so that relaxation occurs which will reduce anxiety that occurs. The success of reducing the anxiety level of CRF patients with hemodialysis is supported by several things including the provision of good and appropriate relaxation techniques according to the module at the same time for each patient as well as the patient's willingness and activeness in applying the techniques being taught.

#### **Conclusions and Suggestions**

Based on the results of the research and discussion of the effect of the guided imagery relaxation technique on the anxiety level of CRF patients on hemodialysis, it can be concluded that the anxiety level of the respondents before being given the guide imagery relaxation technique was mostly mild anxiety, 26 respondents (51%). While the anxiety level of the respondents after being given the guide imagery relaxation technique , the majority were not anxious as many as 29 respondents (56.9%). So that in this study there was an effect of the guided imagery relaxation technique on the anxiety level of CRF patients with.

The results of this study are expected to be input for the profession in the development and planning of nursing, future researchers can add insight and knowledge in the field of nursing and can carry out quasi-experimental research methods on other patients. Respondents can receive useful information to reduce anxiety. in

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nature, and this research is expected to provide alternative options for effective measures to reduce anxiety in CRF patients with hemodialysis by making SOPs and implementing them in services.

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