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The Influence of Supportive Psychotherapy toward Patient Anxiety to Pre-Hyperbaric Therapy



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Abstract



Keywords

Patient anxiety; Port health center; Pre-hyperbaric therapy; Supportive psychotherapy; West Nusa Tenggara; The used of Hyperbaric therapy at Port Health Center of West Nusa Tenggara keeps increasing. There were fifteen patients with thirty-six times of visit during 2011. Meanwhile, there was twelve type of cases in which forty-two patients came eighty-one times in 2012. However, this therapy also meets an annulment due to a psychological condition such as patients' anxiety. There were three cases found in 2011 whereas five patients could not perform this therapy in 2012. The annulment of therapy caused by fear and anxiety factors. This information was obtained from patients. Moreover, according to Port Health Center of West Nusa Tenggara in 2012 reported "physical assessment that is conducted indicated the increasing of blood pressure, pulse rate frequency, and excessive of sweat. The objective was to find out the influence of supportive psychotherapy toward patients' anxiety against pre-hyperbaric therapy at Port Health Center. The research was done at Hyperbaric therapy chamber from July to November 2012. The research design employed pre and post-test. The sample in the research was the patients of pre Hyperbaric therapy who attended at the first time with a total number of sample was twenty people. Accidental sampling Probability utilized in the research and data analysis utilized the Wilcoxon test. The findings indicated p=0.00 < 0.05. In short, there was an influence of supportive psychotherapy toward patients'anxiety in pre-hyperbaric therapy at Port Health Center. This findings, therefore, can be suggested to the chair of the institution, particularly the nursing management of Hyperbaric therapy chamber in order to maintain and improve the performance by conducting an effort of non pharmacologic in decreasing patient's anxiety in order to undertake this therapy properly.

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1. Introduction

Hyperbaric therapy has been developing in developed countries as well as in developing countries and has been used as the main medication and as an additional medication for various types of ailments. Hyperbaric oxygen therapy requires vigilance because besides being beneficial this therapy can also cause oxygen poisoning. Therefore, this therapy must be conducted with carefulness and by using the proper procedure and dosage.

Azizah (2011), Hawari (2003), Hyperbaric therapy has developed in Indonesia in the 1960s and kept growing until this time. Initially, this therapy only found in four locations in Indonesia, for instance: Tanjung Pinang, Jakarta, Surabaya, and Ambon. The research on hyperbaric therapy continues until present-day, thus it is expected that in the future the number of diseases that can be treated is increasing. According to Ananggadipa M (2012) Hyperbaric therapy in LAKESLA Surabaya in June 2012 indicated that thirty-two patients who interviewed, there were four patients (12.5%) had mild anxiety, twelve patients (37.5%) had moderate anxiety, eleven patients (34.375%) experienced severe anxiety, and five patients (15,625%) were extremely severe anxiety. In addition, Ibrahim (2011) stated that "significantly, anxiety affects 5-7% of the general population and 25% or more in the patient population of the medical field, at an unspecified time".

Kesehatan (2014), Keliat (2006), Hyperbaric oxygen therapy began to use in West Nusa Tenggara in 2007, precisely at Port Health Center of West Nusa Tenggara, nevertheless its services were limited to decompression patients. The services started to improve in 2011 by accepting a referral for other cases namely burns. There were fifteen patients with thirty-six visits during 2011. Meanwhile, there were twelve types of cases found in 2012, forty-two patients visited The Port Health Center by eighty-one times. However, there is still an annulment of therapy due to psychological conditions such as patients' anxiety. Three cases found during 2011and five cases of patients who canceled hyperbaric therapy in 2012. According to Port Health Center of West Nusa Tenggara (2012) reported "annulment of therapy caused by fear and anxiety expressed by the patients. When they had previous physical examination noticed that there is an increase in blood pressure, pulse rate frequency, and excessive sweating" (Wirawan, 2018).

Anxiety is a manifestation of various emotional processes that associate within individuals. The anxious feeling is usually associated with certain situations in which high and low of anxiety depends on the individual who experiences it. According to Sudjiwanati (2008) "a high level of anxiety can interrupt the balance; consequently, the behaviors or somatic physiological functions are disturbed whereas anxiety within certain limits can be a warning of the existence of threats thus the individual can prepare a more effective self-adjustment process". Furthermore, Atkinson (1991) in Sudjinawati (2008) stated that each person's reaction to anxiety can be classified into two aspects, namely physiological reactions, and psychological reactions. Physiological reactions can include increased heart rate, increased stomach acid, excessive amounts of urine and sweat, while psychological reactions can be tense, confused, worried, difficult to concentrate, feel helpless and other psychological reactions. Purwadi (2010), Rijadi (2009), Everyone reacts to anxiety at certain times, but some people who experience anxiety as a routine thing and have a negative effect on their life thus it requires a manner to overcome the problem.

According to Ramaiah (2003) stated that "there are several approaches to overcome anxiety such as psychotherapy, relaxation, and medication approaches". The psychotherapy approach is a more widely used approach than medication. This psychotherapy approach can be dynamic psychotherapy, supportive psychotherapy, and cognitive behavioral therapy. Dynamics psychotherapy is an approach by focusing on

dysfunctional relationships, cognitive behavioral psychotherapy is a combination of cognitive and effective behavior on whole anxiety. Whereas supportive psychotherapy is an approach with a regular contact, full attention and empathy from health workers continuously. At the Port Health Center of West Nusa Tenggara, a supportive psychotherapy approach has been carried out, only limited to an explanation of the action and only done once, namely at the beginning of the visit.

Research problem

Based on the identification of the problems, research question within this study is "How does the effect of supportive psychotherapy toward patients' anxiety to hyperbaric therapy at Port Health Center of West Nusa Tenggara?

Objective study

- 1) General Purpose
 - To determine the effect of supportive psychotherapy toward patients' anxiety to pre-hyperbaric therapy at Port Health Office Class II of West Nusa Tenggara.
- 2) Special Purpose
 - a) Identify the level of anxiety before giving supportive psychotherapy interventions for prehyperbaric patients therapy at Port Health Center of West Nusa Tenggara
 - b) Identify the level of anxiety after giving supportive psychotherapy interventions for pre-hyperbaric patients therapy at Port Health Center of West Nusa Tenggara
 - c) Analyze the effect of supportive psychotherapy on patients' anxiety to pre-hyperbaric therapy at Port Health Center of West Nusa Tenggara.

Significance of the study

- 1) Theoretical
 - This study is highly expected to explain the effect of supportive psychotherapy on patients' anxiety to pre-hyperbaric therapy.
- 2) Practical
 - a) The research findings are highly expected to increase patients' knowledge and understanding of how to overcome anxiety before conducting hyperbaric therapy hence the implementation of therapy can be conducted in accordance with the applicable standard operating procedures.
 - b) Health services can add academical insight or nursing practitioners that supportive psychotherapy can reduce anxiety thus this approach can be implemented sustainably.

2. Materials and Methods

Location and time of the Research

The research was conducted at Port Health Center of West Nusa Tenggara from July to October in the year 2013.

Research design

This research utilized Pre-experimental using one group pretest-posttest (without using a control group). The design of this study was one type of experimental research to perceive the influence on the subject group. In this study, patients were observed for their anxiety level before conducting supportive psychotherapy (pretest) and reobserved after giving supportive psychotherapy (post-test) then comparing the results of the study (Nursalam, 2008).

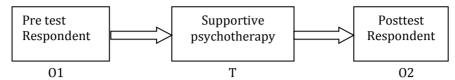


Figure 1. The research design for one group Pretest and Post-test

Annotation:

- T : Providing supportive psychotherapy
- 01: Measuring the anxiety level before having supportive psychotherapy
- 02: Measuring the anxiety level after having supportive psychotherapy

Population and sample

According to Arikunto S, (2002) said that "Population is a generalization area that consists of object or subject that have certain quantities and characteristics set by researchers to be learned, then conclusions drawn". The population in this study were patients with pre-hyperbaric therapy at Port Health Center of West Nusa Tenggara. Moreover, Nursalam & Pariani (2002: 64) said that "the sample is part of the population selected by certain sampling to be able to represent the population." The sample in this study was all pre-hyperbaric patients' therapy who visited the Port Health Office in July to October in the year 2013 by 20 people. The data collection used incidental sampling technique.

Data collection

Data collection used questionnaires to both pre and post supportive psychotherapy interventions. These questionnaires were given to a dependent variable, namely the assessment of the patient's anxiety level using anxiety scale (HARS) and used supportive psychotherapy interventions on independent variables through lecturing, question and answer, open interviews.

Data tabulation

Data tabulation was conducted by classifying data or answers based on each category. Each different answer categories was given a different code. If there were no symptoms at all, the score would be given 0, one symptom of the choices would be given score 1, half of the symptoms are given a value of 2, more than half of the symptoms were given a score of 3, and if all the symptoms were available, the score would be 4. Subsequently categorization: No anxiety <6, mild anxiety 6-14, moderate anxiety 15-27, severe anxiety 28-41, very severe anxiety 42-56.

Data analysis

The data analysis used non-parametric statistical tests (abnormal distribution) using data analysis of Wilcoxon signed with an ordinal scale. This test was conducted to determine whether there was any effect of supportive psychotherapy on patient's anxiety before and after this intervention with a confidence level of 95% α = 0.05 (significance if α = <0.05). it indicated that there was a significant effect between independent and dependent variables. H1 is accepted if p <0.05, thus there is an influence between supportive psychotherapy on patients' anxiety pre-hyperbaric oxygen therapy at Port Health Center of West Nusa Tenggara.

Ethical consideration

After receiving research approval from Port Health Center of West Nusa Tenggara, finally the research was conducted with these following considerations:

- 1) Informed Consent will be given after the respondent gets an explanation of the purpose of the study. If the respondent is willing, the respondent must sign the consent sheet but if the respondent is not willing, the researcher does not force and keep respecting the respondent's rights.
- 2) Anominity aims is to maintain secrecy, hence the researcher does not include the respondent's name, simply by giving the code to the questionnaire.

Hypothesis of the study

- H0: There is no effect of supportive psychotherapy on patients' anxiety to pre-hyperbaric therapy at Port Health Center of West Nusa Tenggara
- H1: There is the influence of supportive psychotherapy on patients' anxiety to pre- hyperbaric therapy at Port Health Center of West Nusa Tenggara

3. Results and Discussions

Results

Overview of research location

Port Health Center of West Nusa Tenggara is one of the Technical Implementation Units of the Ministry of Health. It is also responsible to the Director General of Disease Control and Environmental Health, which has a duty of implementing prevention of quarantine diseases, potential epidemic of disease, epidemiological surveillance, quarantine, control of environmental health impacts, health services, security against new diseases and old diseases that reappear as well as radiation protection in the area of airports, ports and cross-country land borders. To be able to carry out the main tasks and functions of the port health Center of Mataram has three sections, namely: quarantine section and epidemiological surveillance, environmental risk control section and cross-regional health effort section and one administration section. Whereas for the work area there are eight (8) seaport working areas and one (1) airport area.

Overview of respondent's characteristics

The description of the respondent's characteristics consisted of: education level, gender, and age of the respondent. For more details, see the following table:

1) Distribution of Respondents based on education level
The education level of respondents is grouped into primary education, secondary education, and higher
education. It is clearly described in the following table:

Table 1 Distribution of respondents by education level at port health center of West Nusa Tenggara in the year 2013.

No	Education	Amount	Percentage
1	Primary	4	20
2	Secondary	8	40
3	Higher	8	40
Total		20	100

Table 1 indicated that the majority of respondents (40%) have secondary and high education backgrounds and 20% who have a basic educational background.

2) Distribution of Respondents by Gender

Table 2
Distribution of respondents by gender at port health center of West Nusa Tenggara in the year 2013

No	Gender	Amount	Percentage
1	Male	15	75
2	Female	5	25
Total		20	100

Table 2 showed that the majority of respondents are male (75%) and 25% are female.

3) Distribution of Respondents by Age

Table 3
Distribution of age-based respondents at port health center of West Nusa Tenggara in the year 2013

No	Age	Amount	Percentage	
1	20 - 30	4	20	
2	31 - 40	6	30	
3	>40	10	50	
Т	Гotal	20	100	

The table above exhibited that the most respondents are at the age of more than 40 years (50%).

Data for findings

The following results of the study explain the respondents' anxiety level before conducting supportive psychotherapy and after implementing supportive psychotherapy and the analysis of the effect of supportive psychotherapy on the patients' anxiety to pre- hyperbaric therapy at Port Health Center of West Nusa Tenggara.

1) Respondents' Anxiety level before conducting Supportive Psychotherapy is grouped into no anxiety, mild anxiety, moderate anxiety, and severe anxiety. Data are presented in table 4.

Table 4
A distribution of respondents' anxiety level before implementing supportive psychotherapy at the port health center of West Nusa Tenggara in the year 2013

No.	Anxiety level	Amount	Percentage
1	No anxious	0	0
2	Mild anxious	9	45
3	moderate anxious	5	25
4	Severe anxious	6	30
	Total	20	100

Table 4 showed that the majority of pre-hyperbaric respondents' therapy before having supportive psychotherapy had mild anxious (45%) and no respondents who were not anxious about this intervention.

2) Respondents' Anxiety after conducting Supportive Psychotherapy can be described in the table below:

Table 5
Distribution of respondents' anxiety level after implementing supportive psychotherapy at the port health center of West Nusa Tenggara in the year 2013

No.	Anxiety level	Amount	Percentage	
1	No anxious	9	45	
2	Mild anxious	9	45	
3	moderate anxious	2	10	
4	Severe anxious	0	0	
	total	20	100	

Table 5 indicated that respondents who were not anxious and mild anxious had the same percentage of 45% and no respondents who experienced severe anxiety. Analysis of the effect of supportive psychotherapy on the patients 'anxiety to pre-hyperbaric therapy at port health center of West Nusa Tenggara in 2013. Analysis of research data was carried out using Wilcoxon and the results of p: 0.00, (p: 0.00 < 0.05) means that there is the influence of supportive psychotherapy on the Patients' anxiety Pre-Hyperbaric Therapy.

Discussion

- 1) The findings indicate that most of the pre-hyperbaric respondents' therapy before having supportive psychotherapy at the Port Health Center experience mild anxious (45%) and there are no respondents who are not anxious. According to Prasetyo (2005) stated that "anxiety is a normal reaction to situations that threaten individuals, and people may feel very anxious without experiencing emotional disorders at all". Furthermore, another idea revealed by Sudjiwanati (2008) stated that "anxiety can arise due to environmental conditions that influence the way of our thoughts to others and ourselves. The anxiety inpatients to pre-hyperbaric therapy can arise due to a recent environment".
- 2) The results exhibit respondents' pre-hyperbaric therapy who are not anxious and mild anxious after having supportive psychotherapy possess the same percentage (45%) and no respondents who experience severe anxiety. This is probably due to the respondents' strong motivation for treatment as well as the existence of a family and a supportive work environment (there are families and health workers who accompany outside the chamber from the beginning until hyperbaric therapy is completed). According to Ramaiah (2008) in Sudjiwanati (2011) stated that" one approach to reducing anxiety is in-depth psychotherapy approaches, in the form of stability in relationships with family, friends and work environment, the motivation for treatment and ability to face difficulties in life". The findings also supported by respondents' age and education. Most of the respondents are in middle age with a secondary and high education background in which they more open-minded to input and suggestions.
- 3) Based on the results of data analysis using Wilcoxon p: 0.00 <0.05, means that there is an effect of supportive psychotherapy on patients' anxiety to pre-hyperbaric therapy at Port Health Center of West Nusa Tenggara. According to Basford (2006) in Setiyoadi (2011) stated that "supportive psychotherapy is a type of individual psychotherapy that centers on understanding, which is characterized by attitude along with and always exists for clients. One indication of this therapy is in patients who experience emotional stress and fear". The results of interviews with pre-hyperbaric therapy patients stated that being alone in a narrow hyperbaric chamber made patients feeling scared. In addition, Rosenbaum & Covino, (2005) in Setyoadi (2011) stated that "supportive psychotherapy is a very simple therapy in which psychotherapists try to look for a logical solution in accordance with the patient's ability to recognize the problems and seek for better defense mechanisms dealing with problems". Anxiety can be reduced by recognizing the source, the solution must be thought proper, and the anxiety becomes weaker gradually in someone's mind eventually. Patients who have received supportive psychotherapy will have more insight about the therapy. It creates positive abilities thusthe patientshave confidence that will ultimately reduce anxiety. Another thing that supports the results of this study is the existence of nursing staffs who have higher

education level (bachelor) hence they capable of conveying information attentively, respect and empathy to the respondents. It is also in a line with the opinion of Paterson (1976) in Setyoadi (2011) stated that "some aspects to measure the success of supportive therapy are: congruent, positive appreciation and empathy". The existence of regular and attentive contact from the therapist, there is a guarantee that the anxiety experienced is not dangerous and the support given when supportive psychotherapy can reduce environmental stress, which can ultimately reduce client anxiety. Another study that supports the findings within this study is a study conducted by Purwadi. W (2010) about the Effect of Counseling on patients' anxiety with Diabetes Mellitus in District of Kebak Kramat. The results indicated that there was an effect of counseling on patients' anxiety with diabetes Miletus (p: 0.00 < 0.05).

4. Conclusion

The results of data analysis on the Effect of Supportive Psychotherapy toward Patients'anxiety to Pre Hyperbaric Therapy at Port Health Center of West Nusa Tenggara Province, the following conclusions can be drawn:

- 1) There are 45% of patients' pre-hyperbaric therapy experience mild anxious and 30% suffer from severe anxious before being given supportive psychotherapy
- 2) Patients' pre-hyperbaric therapy who experience mild anxious and are not anxious after having supportive psychotherapy have the same percentage of 45% and there are no patients with severe anxiety.
- 3) The results of data analysis indicate that there is an effect of supportive psychotherapy on patients' anxiety to pre-hyperbaric therapy.

Recommendations

Based on the conclusions above, suggestions that can be proposed to practitioners or the interest of further research as follows:

- 1) In order to prevent the failure of hyperbaric therapy, the health workers who are in charge at hyperbaric chambers of Port Health Center of West Nusa Tenggara to keep carrying out supportive psychotherapy before giving hyperbaric therapy. Compile the SOP of hyperbaric by including supportive psychotherapy. Besides, a chair especially nursing management should conduct efforts to improve sustainable education, carry out work rotations according to their interests and areas of expertise, provide rewards and work facilities should be added in order to improve work creativity.
- 2) It is recommended for the next researcher to examine the differences in the influence of spiritual psychotherapy and supportive psychotherapy in reducing anxiety.

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