

The Effect of Health Education Using Booklet on the Level of Anxiety in Breast Cancer Patients at RSUD Buleleng

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ABSTRACT

Introduction

Breast cancer is a malignant tumor that grows in the breast tissue. The disease is caused by many precipitating factors, including age, gender, genetic, reproductive history, alcohol consumption and obesity. Breast cancer has very complex effects on patient's physical, psychological, social and economic aspects. The level of anxiety is one of the psychological impacts of breast cancer diagnosis. This study was to analyze the effect of health education using of a booklet on the anxiety level of patients with breast cancer in RSUD Buleleng. Booklet is chosen because it is a printed media that can accommodate text and picture in large amount.

Methods

The research method used was pre-experimental study with one group pre posttest design. The sample consisted of 20 people chosen by total sampling. Data were collected by using a SRAS questionnaire before and after health education treatment.

Results

Data were analysed by using bivariate analysis with Wilcoxon Matched Pair analysis and showed the value of count $Z = 4.359$, which meant that health education using a booklet had a significant effect on breast cancer patient's anxiety level.

Conclusion

It is determined that there is an effect of health education using booklets on breast cancer patient's anxiety level in RSUD Buleleng.

Keywords

Anxiety, Breast Cancer, Health Education

BACKGROUND

Breast cancer is a malignancy derived from gland cells, gland duct, and breast support tissue, excluding the breast skin (RI, 2010). Breast cancer can occur in women and men with a ratio of 1 in 1000 (Baradero, 2007). Worldwide, breast cancer is regarded as one of the highest rates of cancer deaths after lung cancer, uterine cancer, liver cancer and colon cancer (Society, 2008).

The prevalence of breast cancer in Bali, especially in Buleleng has increased from 2013 to September 2014. Based on medical records at RSUD (Regional Public Hospital) in Buleleng in 2013, the incidence of breast cancer recorded as many as 108 cases of inpatient and outpatient. In September 2014, there have been 120 cases of breast cancer inpatient and outpatient with the discovery of new cases as many as 12 people. There are 20 people undergoing chemotherapy. Some have completed chemotherapy programs and some are not continuing treatment.

The diagnosis of cancer affects the physical, psychological, social and economic life of the individual (Smeltzer, 2002). One of the psychological problems that often occur in breast cancer patients is anxiety. According to research conducted by (Isdamayanti, 2011), anxiety in patients with breast cancer arises when patients know the diagnosis, cancer stage and treatment are obtained. The level of anxiety experienced differently in each individual, it is influenced by internal and external factors. If this is not handled properly, then the anxiety can hinder the process of treatment and may eventually decrease the quality of life of cancer patients. One way to improve the quality of life is by helping someone in improving the knowledge, motivation and opportunity to make decisions about their health (Beck, 2012).

Health education is a process of learning in delivering health messages to individuals, groups, and communities to improve their knowledge and skills, so as to improve the behavior and make a decision about his health, which aims to maintain or improve their health (Notoatmodjo, 2010). Health education can be done by various methods, such as with the print media, oral, and electronic media. One method to print media is in the form of a booklet. Booklet is media information in the form of a book that contains the information that aims to improve the knowledge of readers (Simanullang, 2012).

Health education in RSUD in Buleleng Regency especially in patients with breast cancer has often done, but the methods used so far have not used the media booklet and have not done research on the effects of this method against breast cancer patient's anxiety level. Based on this background, researchers are interested in conducting research on the effects of health education through the media booklet to help breast cancer patients in overcoming anxiety.

METHODS

Research Plan

This research is included in the type of quantitative research (pre-experimental). The study design is using one-group pretest-posttest design.

Sample and Population

The populations in this study are 20 breast cancer patients undergoing chemotherapy at RSUD in Buleleng Regency from 1 January to 31 January 2015. The sample used is 20 breast cancer patients.

Instrument

The instrument of data collection used in this research is questionnaire. The questionnaire about the anxiety level used is SRAS with ordinal scale.

Research Ethics

Ethical issues that must be considered by (Alimul Hidayat, 2009) are:

Informed Consent

This study provides informed consent to the respondent before the respondent answers the questionnaire. In the process of implementation, researchers have provided an explanation of the intent of the research to be conducted, and then the respondent will sign the consent letter to the respondent. Respondents have the right to refuse to be subjected to research, and the researcher should respect the rights of respondents.

Anonymity

To maintain the confidentiality of the respondent's identity, the researcher does not include the name of the subject on the measuring instrument sheet, but only write the code on the data collection sheets or research results presented

Confidentiality

The researcher ensures the confidentiality of the research results, both information and other issues and only certain data groups reported on the research results.

Data Collection and Data Analysis Procedures

Respondents were given approval sheets to sign. Furthermore, respondents were given a questionnaire. In the SRAS questionnaire sheets, the respondents were asked to fill in the demographic data and then answer the question of how the respondent felt before being given a health education. In filling out the questionnaires the researchers helped to read the contents of the questionnaire to the respondents and researchers fill out the questionnaire in accordance with the respondent's answer.

There are 20 questions, each question is rated 1-4 (1: never, 2: sometimes, 3: usually, 4: almost). There are 15 questions in the direction of increased anxiety and five questions to the direction of decreasing anxiety.. Assessment range 20-80, with the following groupings: normal or non-anxious 20-44 scores, 45-59 mild anxiety scores, 60-74 moderate anxiety scores and 75-80 scores: severe anxiety.

The collected data is not only tabulated and the frequency distribution is created but also interpreted after the encoding. Bivariate analysis using Wilcoxon test that aims to compare two data paired in the form of ordinal data.

RESULT

Characteristics of Respondents based on Age

Table 1. Characteristics of Respondents Based on Age

Age	Number	Persentase
31-40 yo	3	15%
41-50 yo	11	55%
51-60 yo	3	15%
61-70 yo	3	15%
Total	20	100%

Data from 20 breast cancer patients taken from 1 January to 31 January 2015 were identified. Patient characteristics are shown in table 1, 2 and 3. Data based on age listed in table 1. Based on table 1, the respondents were mostly 41-50 years old as many as 11 people (55%). While the frequency for other age categories is the same.

Characteristics of Respondents based on Profession

Table 2. Characteristics of Respondents based on profession

Profession	Number	Persentase
House wife	11	55%
Teacher	4	20%
Civil servant	1	5%
Private	4	20%
Total	20	100%

Judging from the characteristics of the type of profession, most of the respondents in this study worked as housewives as many as 11 people (55%) and only a small proportion of respondents worked as civil servants, namely 1 person (5%).

Characteristics of Respondents based on Education Levels

Table 3. Characteristics of Respondents based on education

Education	Number	Persentase
No school	2	10%
ED	4	20%
JHS	6	30%
SHS	3	15%
College	5	25%
Total	20	100%

Characteristics of the level of education, most of the respondents in this study had a junior high school education level of 6 people (30%) and only a small percentage did not attend school, namely 2 people (10%).

Results of Observation of Patient Anxiety Level Before and After Given Health Education

Table 4. Anxiety Levels Before Given Health Education

Anxiety levels	Number	Persentase
No worried	0	0%
Mild anxiety	5	25%
Moderate anxiety	13	65%
Heavy anxiety	2	10%
Total	20	100%

Table 5. Anxiety Levels After Given Health Education

Anxiety levels	Number	Persentase
No worried	4	20%
Mild anxiety	14	70%
Moderate anxiety	2	10%
Heavy anxiety	0	0%
Total	20	100%

The anxiety level of respondents before being given health education mostly existed at a moderate level of 13 people (65%) and there were no patients who were not anxious. Based on Table 5 most of the respondents had a mild anxiety level of 14 people (70%). Severe anxiety levels were not experienced by respondents after being given health education.

Table 6. Wilcoxon Statistical Test

Anxiety levels	N	Mean Rank	Z	p-value
Post Test < Pre Test	19	10.00	-4,359	.000
Post Test > Pre Test	0	.00		
Post Test = Pre Test	1			
Total	20			

Wilcoxon statistical test results of the influence of health education through booklets on the level of anxiety of breast cancer patients can be seen the value of Z count (-4.359) with p-value of 0.000 ($p < 0.05$) indicating health education has a significant effect on anxiety levels.

DISCUSSION

Characteristics of Respondents

Results of data analysis on characteristics are based on age. Of the total number of respondents, 11 people (55%) were 41-50 years old. These results are in line with a study conducted by (Nurpeni, 2013), which states that the group of breast cancer cases is widely available in the age range 36-45 years. In addition, Octaviana (2011) in (Nurpeni, 2013), states that the largest incidence of breast cancer is in the age range 40-49 years.

The education level of the majority of respondents is Secondary School. This characteristic is seen because the respondents not only come from the city, but come from villages that are quite far from the city. The result of this study is similar to the research conducted by (Lutfu, 2008) which states that most patients of breast cancer is Secondary School.

The Level of Anxiety

The result of the research before health education was obtained that 13 people (65%) had medium anxiety. And from 20 respondents, all experience anxiety at various levels. Respondents said that the anxiety they feel from chemotherapy (the effects of chemotherapy: hair loss, nausea, vomiting), breast removal, decline in physical function, loss of work, hospital costs, family circumstances at home and fear of death. This is also stated by (Liu, 2011) that the psychological stress of breast cancer patients comes from five main sources: health concerns, physical deterioration, occupation, daily life and social environment, and fear of families who will feel disadvantaged.

The results of research after the health education obtained that the level of anxiety majority respondents are mild anxiety. There were even 4 respondents who were not worried. This indicates that there is a decrease in the level of anxiety on respondents.

Seen from the results of research, the level of anxiety majority respondents are moderate anxiety. After the respondents were given health education their anxiety level decreased. So it can be said that more knowledge about breast cancer is needed to help respondents overcome his anxiety. The low level of knowledge that is the cause of anxiety has been improved by providing health education through booklet media.

Booklet entitled "My Book of Hope" contains information about breast cancer. This book contains all about breast cancer, starting from definition to how to handle it. The advantages of this book is to have a more detailed explanation and clearer, more durable, easy to carry anywhere, the respondents can be more independent and the information can be shared easily.

CONCLUSION AND SUGGESTION

Conclusion

Health education using booklets has an effect on the anxiety level of breast cancer patients. This is evidenced by the results of statistical tests where the value = 0.000, which means there is the effect of health education using booklet to the anxiety level of breast cancer patients.

Suggestion

For a hospital, a health education using a booklet to breast cancer patients about breast cancer itself can be an option that can be given to breast cancer patients before patients undergo treatment procedures, so that patients will be much more psychologically ready to undergo further treatment.

For the nursing profession, using booklets can be a good input for nurses who care for breast cancer patients in giving nursing care to breast cancer patients.

For patients, it is expected to add knowledge about breast cancer, not only based on booklets but also sourced from other information. So patients can understand every process of the management of the disease.

Declaration

Authors' contributions

The author contributes at every stage of the research, from the start of the process of designing research, data collection, analysis and interpretation of data, composing the manuscript and revising it.

Ethics approval and consent to participate

In this study ethical approval and approval to participate were carried out before data collection.

Consent for publication

The results of this study can be published because researchers have never previously published in one journal

Availability of data and materials

Due to the sensitive of patient and his condition in this study, surveys of respondents who were assured of raw data would remain confidential and would not be shared.

Competing interest

No competing interest relationship exists for any author

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