



EFFECTIVENESS OF EDUCATIONAL VIDEOS ON REDUCING ANXIETY IN PRE-ANESTHESIAN PATIENTS

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ABSTRACT

Surgery and anesthesia are actions that can cause problems for someone who will undergo them, one of the problems that is often found is anxiety. Several research results report that anxiety can affect 60-80% of patients undergoing surgery. Objective: To determine the effectiveness of health education using video media in reducing preoperative patient anxiety. Method: This research uses a pre-experimental method with one group pretest and posttest design. This research was conducted in March-April 2023 at Buleleng Regional Hospital. The sample in this study involved 42 patients undergoing elective surgery. The research instrument was a questionnaire sheet which was then analyzed using the Kolmogorov – Smirnov statistical test. Results: Providing complete anesthesia education was 42 (100.0%) respondents. The results of the pre-education research on gold were 23 (54.8%) respondents who were seriously anxious, 16 (38.1%) respondents were moderately anxious, 2 (4.8%) respondents were very anxious, 1 (2.4%) respondent was mildly anxious. The results of the post-education research were 25 (59.5%) respondents who were seriously anxious, 14 (33.3%) respondents were moderately anxious, 2 (4.8%) respondents were very anxious, and 1 (2.4%) respondent was mildly anxious. Conclusion: Effectiveness of educational videos on anesthesia is able to increase patient understanding and knowledge so that it can reduce the anxiety level of pre-anesthesia patients at Buleleng Regional Hospital.

Keywords: anesthesia; anxiety level; health education

INTRODUCTION

Surgery and anesthesia are actions that can cause problems for someone who will undergo them, one of the problems that is often found is anxiety. Anxiety usually occurs in surgical patients at all stages of surgery, but this anxiety will appear more clearly in the preoperative phase or before surgery. The problem that most often arises in the pre-anesthesia stage is anxiety. Several research results report that anxiety can affect 60-80% of patients undergoing surgery (Jlala et al., 2010). Increased anxiety can influence pathophysiological responses such as hypertension and cardiac dysrhythmias, which can lead to rejection of planned surgery. In 2005 there were 50 out of 700 patients whose operations were canceled due to psychological factors, namely anxiety. The results of research conducted by (Blu et al., 2013). At the hospital, RSUP Prof. Dr. RD Kondou Manado, from 12 June to 5 July 2013, with a total of 15 respondents and the results obtained were that patients who experienced preoperative anxiety were experiencing mild anxiety as many as 2 respondents, moderate anxiety as many as 8 respondents, severe anxiety as many as 5 respondents.

General anesthesia or general anesthesia is an act of central pain relief accompanied by loss of consciousness which can be recovered (reversible). The level of anxiety about surgical operations using general anesthesia techniques is higher compared to spinal techniques. In general anesthesia during induction and during patient recovery, the anxiety experienced by the patient causes the possibility of death during anesthesia to be around 8-55%, awareness during anesthesia is around 5-54%, post-operative pain is around 5-65% and post-operative nausea and vomiting is 5-48% (Budianti et al., 2018) Actions to reduce anxiety levels can be taken by mentally preparing the patient. The advantage of video media in providing health education is that it is able to display moving images and sound,

which is an attraction in itself because messages or information can be absorbed using more than one sense. Video media as a health education medium will have a good impact on patients, where other media such as brochures, posters and visual media rarely provide information that is easily understood by patients, and sometimes patients rarely want to read. With video media, patients can be given information that is easier to understand (Ulfah, 2021).

Based on the background description above and the researcher's observations, it is clear that the success of surgery and anesthesia is closely related to understanding the importance of providing pre-anesthesia health education. Therefore, researchers are interested in researching "The Effectiveness of Health Education Using Video Media to Reduce the Anxiety Level of Pre-Anesthesia Patients who will undergo elective surgery at Buleleng District Hospital". The aim of this research is to determine the effectiveness of health education using video media in reducing pre-operative patient anxiety at Buleleng Regional Hospital.

METHOD

This study adopts a quantitative approach utilizing a pre-experimental research design with a one-group pretest and posttest design. The research was conducted between February and March 2023. The population in this study consisted of a large sample determined using the Slovin formula, resulting in 42 respondents. A non-probability sampling technique, specifically purposive sampling, was employed in this research. Samples were selected based on predetermined inclusion and exclusion criteria. Data collection was facilitated through an observation sheet. Initially, researchers met with patients one day prior to anesthesia administration. Pre-anesthesia, the researchers assessed the respondents' levels of pre-test anxiety using a mandatory questionnaire. Subsequently, participants were administered a pre-test questionnaire for 5 minutes. Following this, a health education intervention was provided using video media. To ensure the validity and reliability of the study, validity and reliability tests were conducted. Validity refers to the extent to which an instrument accurately measures what it is intended to measure. In this study, validity was assessed by examining whether the questions in the questionnaire effectively captured the true levels of pre-test anxiety in patients before surgery. Reliability, on the other hand, pertains to the consistency or dependability of the measurement instrument.

Reliability was assessed through tests such as test-retest reliability, where the questionnaire was administered to the same group of patients at different times to determine if their scores remained consistent. Additionally, internal consistency reliability was assessed using techniques such as Cronbach's alpha to ensure that all items in the questionnaire were consistent with one another. Carried out for 10 minutes using a laptop and the media used will be facilitated by researchers. After carrying out the health education intervention using video media for 10 minutes, the researchers again measured the post-test anxiety level using a mandatory questionnaire. AnalysisThe data in this research includes assumption tests, univariate analysis, and bivariate analysis. The normality test used in this research was Shapiro Wilk. The data that has been processed is then presented in the form of tables and narratives. Bivariate test analysis was used to determine the effect of the effectiveness of health education using video media in reducing patient anxiety levels. The analysis used is a non-parametric test, namely the Wilcoxon signed ranks test.

RESULT

Table 1.
Frequency Distribution of Characteristics Based on Gender, Occupation, Education Level, Age Category, Type of Anesthesia

Characteristics	f	%
Gender		
Man	13	31.0
Woman	29	69.0
Work		
Doesn't work	2	4.8
Student	3	7.1
Self-employed	12	28.6
Etc	25	59.5
Education		
JUNIOR HIGH SCHOOL	11	26.2
SENIOR HIGH SCHOOL	20	47.6
S1	7	16.7
Diploma	4	9.5
Age category (years)		
17 - 35	16	38.1
36 – 55	26	61.9
Types of anesthesia		
General	28	66.7
Regional	14	33.3

Table 2.

Shapiro Wilk normality test results for anxiety levels in patients pre and post anesthesia education

	Shapiro Wilk		
	f	statistics	P-value
Anxiety Level (Pre-Test)	42	,943	,037
Anxiety Level (Post-Test)	42	,949	,061

Table 3.

Wilcoxon Sign Rank Test normality test results on anxiety levels in patients pre and post anesthesia

Total Posttest Score–Total Pretest Score	N	Mean Ranks	Sum Of Ranka
Negative Ranks	40 ^a	22.31	892.50
Positive Ranks	2 ^b	5.25	10.50
Ties	0 ^c		
Total	42		
Pre test - Post test patient anxiety level			
Z		-5.522 ^b	
Asymp.Sig. (2-tailend)		,000	

DISCUSSION**Anxiety levels of pre-anesthesia patients before being given health education using video media**

The results of research before being given health education using video media showed that the majority of respondents tended to experience severe anxiety, 23 (54.8%) respondents. This shows that the level of anxiety among respondents was still high before the intervention was carried out by providing health education videos. This research is in line with research conducted by (Mustika Aji Nugroho et al., 2020) regarding the effect of health education using video media on pre-operative patient anxiety at RSU PKU Muhammadiyah Bantul where the results of this research showed that out of 35 respondents,

29 respondents (82.9%) experienced severe anxiety before providing health education. Pre-anesthesia or pre-operative anxiety in patients occurs due to feelings of discomfort accompanied by fearful thoughts about the anesthesia and surgery that will happen to them as a result of a lack of knowledge about anesthesia and surgery.

According to research conducted by (Amalia et al., 2022), preoperative anxiety is anxiety that usually occurs in preoperative patients which causes feelings of discomfort that usually occur during the operation process. Anxiety can hinder pre-anesthesia and intra-anesthesia, excessive physiological responses can burden and hinder anesthesia, this activity will affect a body system such as cardiovascular which can trigger heart palpitations, high blood pressure, high pulse rate and experience fainting. This condition requires pharmacological and non-pharmacological treatment. The results of this study are in line with research conducted by (Wicaksana & Dwianggimawati, 2022), which states that pre-anesthesia patient anxiety can be reduced by providing information and education so that the patient's condition becomes stable for surgery. Preoperative education has been shown to be effective in reducing anxiety, speeding recovery time and increasing patient satisfaction with the information provided (SPRECKHELSEN & CHALIL, 2021).

Pre-anesthesia anxiety level after being given health education using video media

The research results showed that 42 (100.0%) experienced a decrease in anxiety after being given a health education intervention using video media. In general, it can be said that respondents assessed that the pre-anesthesia health education using video media was well responded to and received. The results of the research show that reducing the anxiety level of pre-anesthesia patients after being given health education can increase understanding of anesthesia procedures because the discussion is structured and systematic starting from anesthesia preparation to ending anesthesia, which reduces anxiety also because patients are given health education through video media. interesting for patients to accept and understand. This research is in line with the results of research conducted by (Budianti et al., 2018) It was found that the reduction in preoperative anxiety levels after being given video intervention was 40% higher compared to giving oral or verbal intervention which was only 12.7%. These results are also in line with research conducted by Nugroho et al (2020), it was found that from the group that underwent an intervention providing health education using video media, 29 respondents (82.9%) of 35 respondents did not experience severe anxiety. Health education using video media in this study resulted in a positive influence on respondents to increase their knowledge about the anesthesia procedure that they would follow, this was proven by looking at the difference in respondents' anxiety levels before and after being given health education using video media, which was out of 42 respondents. at pre-education, the majority were seriously anxious, namely 23 respondents (54.8%), then at post-education, the majority were moderately anxious, namely 25 respondents (59.5%).

Health education using video media will have a positive impact on patients. Surgery or surgery will result in psychological reactions, namely anxiety or worry. Anxiety usually occurs in surgical patients at all stages of surgery, but anxiety will appear more clearly in the pre-operative phase. Educational actions as one of the health education actions need to be emphasized in this phase (Ulfah, 2021). This is in line with research conducted by (Nainggolan, 2022). The results of pre-video education anxiety research showed that the majority had severe anxiety, 16 respondents (53.3%), while post-video education showed the majority had mild anxiety, 15 respondents (50%), so there was significant influence in providing education using videos about spinal anesthesia procedures on reducing anxiety scores with the Asymp value. Sig. (2-tailed) is 0.000 which means $p < 0.05$. Media Educational videos about spinal anesthesia procedures can be used as a tool to reduce the anxiety level of patients pre-surgery with spinal anesthesia.

Preoperative anxiety is very dangerous for patients, one of the causes is lack of information. Sophisticated technology makes it possible to present health education not only in the form of images but also audio-visual with moving images accompanied by music and sound. One of them is providing health education using audio-visual spinal anesthesia applications to reduce pre-operative anxiety. To determine the effect of Android audio visual health education on the anxiety of preoperative spinal anesthesia patients at RSU PKU Muhammadiyah Bantul. This research uses a quasi-experimental type with a pre-test and post-test with control group design (Mustika Aji Nugroho et al., 2020).

The influence of the effectiveness of health education using video media on reducing anxiety levels in pre-anesthesia patients

The results of the research based on a questionnaire sheet using an analysis test with the Wilcoxon Signed-Rank Test statistical test showed a significant p-value = 0.000 $\alpha < 0.05$, which means H_a was accepted so that there was an influence on the effectiveness of health education using video media on reducing the anxiety level of pre-anesthesia patients who were about to undergo elective surgery. The reduction in anxiety levels is believed by researchers to be the influence of the intervention carried out. After providing pre-anesthesia health education using video media within 10-15 minutes, it was stated that there was a decrease in anxiety levels in pre-anesthesia patients. Where pre-anesthesia health education using video media is able to convey health messages regarding anesthesia procedures in the form of interesting anesthesia education videos for patients to accept and understand, because video media involves clear live video and audio elements so that respondents do not only use their sense of hearing (Edwar et al., 2024). but it is also balanced with the sense of sight so that it can help remember the pre-anesthesia health education material presented. Based on the principle that every human being's knowledge is received and captured through the five senses, so that the more senses are used, the clearer the understanding or knowledge obtained (Fauziah, 2023).

Information obtained from the Buleleng District Hospital revealed that so far the hospital has only provided general pre-anesthesia health education verbally or orally which is given in an unstructured and systematic manner in its explanations because there are no standard operating procedures or SOPs that serve as a guide in providing pre-anesthesia health education. anesthesia. With the knowledge gained through health education using video media about anesthesia procedures, it will shape changes in patient knowledge and attitudes about better anesthesia procedures.

CONCLUSION

Based on the research results, it can be concluded that before providing health education using video media, the majority of the 42 respondents, 23 (54.8%) of whom experienced severe anxiety. This was due to the patient's lack of knowledge about anesthesia procedures and many of the patients were first-timers. times carrying out anesthetic and surgical procedures. After being given health education about anesthesia, the anxiety level of the respondents decreased. Some of the respondents, namely 42 respondents, 25 (59.5%) had an anxiety level in the moderate anxiety category after providing anesthesia health education using video media. From the results of the Wilcoxon Signed-Rank Test, it shows that there is a significant influence on the patient's anxiety level from the pretest value to the posttest value after being given the intervention of providing health education about anesthesia using video media. The anxiety level results were obtained with a significance value of p-value 0.000 ($\alpha < 0.05$). Based on this, the research results show that H_a is accepted so it can be concluded that there is an influence of the effectiveness of health education using video media on the anxiety level of pre-anesthesia patients who will undergo elective surgery at the Buleleng District Hospital.

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