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PRE EXPERIMENT

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Introduction:
Data obtained from the Word Health Organization (WHO) the number of patients undergoing surgery has increased every year. In 2017 surgery reached 140 million patients in all hospitals in the world and in 2019 the data increased to 148 million (Medvedev et al., 2019). In Indonesia, surgery in 2019 reached 1.2 million people. Data from the Ministry of Health of the Republic of Indonesia (Depkes RI) in 2019 stated that surgery occupied the 11th position out of 50 actions in the hospital with a percentage of 12.8% (Alidina et al., 2019). Surgical action is usually accompanied by the provision of anesthesia. The techniques provided are general and regional anesthesia (Djari et al., 2021). The regional anesthesia technique that is often used is spinal anesthesia. Spinal anesthesia is a local anesthetic that blocks the subarachnoid space and is often used because it only blocks the lower extremities and is fast during healing (Asra
Surgery and anesthesia are actions that some people find frightening. Someone who will perform surgery mostly experiences anxiety and fear (Hartuti, 2019). WHO data reports that 50% of preoperative patients in the world feel anxiety, age 5 - 20 years with a percentage of anxiety of 5 - 25% and age 50 years with a percentage of anxiety of 50%. The anxiety level of preoperative patients reaches 534 million people (Oxyandi et al., 2018). Anxiety disorders are often found in the preoperative room and can affect the success of surgery and the risks that will be caused are dangerous for patients (Pefbrianti et al., 2018). Handling given to reduce patient anxiety can be done by pharmacology and non-pharmacology. Non-pharmacological actions include providing education through health education (Fajriani, 2019). Preoperative health education can be done through discussion sessions, can also use visual aids and can also use demonstration media (Fajriani, 2019). The distribution of information or education itself can be through various kinds of media. And the media is divided into three, namely print media, electronics and can be through media boards (Affandi et al., 2017).

This study is in line with the results of research conducted by Hartuti (2019) that there is an effect of providing information through audio visual on the anxiety level of preoperative patients. The results of research with 50 patients who will undergo laminctomy surgery at RSO. Prof. Dr. R Soeharso Surakarta before providing information through audio visuals with a moderate anxiety category of 68% and after providing audio visual information anxiety decreased to mild by 82%. The purpose of this study was to determine the effect of audio-visual health education using video media on spinal anesthesia on the anxiety level of preoperative patients with spinal anesthesia at Hj Anna Lasmanah Banjarnegara Hospital.

Method:

The research method used in this research is quantitative with a pre-experimental design approach. The form of pre-experimental design used by researchers is the form of one group pre test post test design. The sample technique in this study used purposive sampling of 92 pre-anesthesia patients. This research has received approval from the Harapan Bangsa University Research Ethics Review Board with approval number No. B.LPPM-UHB/1994/06/2023 on June 31, 2023. This research instrument uses questionnaires and health education through audio visuals.

Study Design

This analysis uses primary data from the results of questionnaires conducted on the respondents studied, namely pre-anesthesia patients before and after being given education through audio visuals about spinal anesthesia. This research instrument uses questionnaires and health education through audio visual. With inclusion criteria for elective surgery patients, patients aged 17-65 years, patients with ASA 1 and 2, and willing to become respondents. Exclusion criteria in this study were patients with hearing, vision and mental disorders, receiving anti-sedative and depressant therapy before, patients with cito / emergency surgery, patients with ASA 3, 4, 5.

This study was conducted by giving the APAIS questionnaire to assess preoperative anxiety before and after being given Health Education through audio visual. Before being given a video, the patient is given an APAIS questionnaire as a pre-test, after which a video about spinal anesthesia is given with a video duration of 3 minutes. After giving the video the patient is allowed to ask questions about the video. After that the patient was given the APAIS questionnaire again as a post test.
Data Collection and Outcome Measurement

Researchers process data using a computer program, then do editing, marking samples, entering data, cleaning data, and tabulating.

This study focused on measuring anxiety levels in pre-anesthesia conditions.

Anxiety Levels

Anxiety levels were measured using the Amsterdam Preoperative anxiety and Information Scale (APAIS) questionnaire. APAIS ‘1-6’ no anxiety, ‘7-12’ mild anxiety, ‘13-18’ moderate anxiety, ‘19-24’ severe anxiety, ‘25-30’ very severe anxiety (Firdaus 2014).

Statistical analyses

All statistical analysis in this study used SPSS statistics with Version 23.0; IBM. Analysis of anxiety levels before and after being given health education through audio visuals in preoperative patients with spinal anesthesia. Then test the results of measuring the effect of the level of anxiety of preoperative patients with spinal anesthesia before and after being given health education through audio visual.

Bivariate analysis is used to see the relationship between two variables. The two variables mean the main variables, namely the influence variable (free) and the influence variable (not free). Bivariate analysis to determine the effect of anxiety levels of preoperative patients with spinal anesthesia before and after providing health education through audio visual.

Before being analyzed, a data normality test was performed. Data normality test is a test conducted to assess the distribution of data taken, whether the data distribution is normally distributed or not. In this study, the data normality test used the Kolmogorov-Smirnov test because the number of respondents > 50. The normality test of the anxiety level of preoperative patients with spinal anesthesia before and after being given health education through audio visual obtained results of 0.000 and 0.000 <0.05, which means that the data is not normally distributed.

After that, parametric and non-parametric tests are Paired Sample T-Test and Wilcoxon. The data analysis test used in this study is the Wilcoxon test (paired test). Because it is known that the data is not normally distributed, so for data processing using the Wilcoxon test. Wilcoxon test results with a P value of 0.000 <0.05 which means Ho is rejected and Ha is accepted. It can be concluded that there is an effect on anxiety levels before and after being given audio-visual health education on the anxiety level of preoperative spinal anesthesia patients at Hj. Anna Lasmanah Banjarneagara Hospital.

Table 1. Characteristics Of Respondents

<table>
<thead>
<tr>
<th>Respondents’ Characteristics</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 17-25 Years</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>b. 26-35 Years</td>
<td>33</td>
<td>35.9</td>
</tr>
<tr>
<td>c. 36-45 Years</td>
<td>28</td>
<td>30.4</td>
</tr>
<tr>
<td>d. 45-55 Years</td>
<td>11</td>
<td>12.0</td>
</tr>
<tr>
<td>e. 56-65 Years</td>
<td>13</td>
<td>14.1</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>2. Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Male</td>
<td>54</td>
<td>58.7</td>
</tr>
<tr>
<td>b. Women</td>
<td>38</td>
<td>41.3</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>3. ASA Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. ASA I</td>
<td>62</td>
<td>62.4</td>
</tr>
<tr>
<td>b. ASA II</td>
<td>30</td>
<td>37.6</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>4. Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Primary Education</td>
<td>11</td>
<td>12.0</td>
</tr>
<tr>
<td>b. Secondary Education</td>
<td>66</td>
<td>71.7</td>
</tr>
<tr>
<td>c. High Education</td>
<td>15</td>
<td>16.3</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>5. Surgical History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Never Been</td>
<td>74</td>
<td>80.4</td>
</tr>
<tr>
<td>b. Never</td>
<td>18</td>
<td>19.6</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100</td>
</tr>
</tbody>
</table>

The results of data analysis showed that the age grouping of most respondents is 26-35 years old, namely 38 respondents (41.3%). The gender of the respondents was mostly male, 54 respondents (58.7%). ASA status in most patients with ASA 1 status is 62 respondents (62.4%). The level of education obtained by respondents was...
mostly secondary education, 66 respondents (71.7%). Respondents' surgical history, most patients have never had a history of surgery, 74 respondents (80.4%) (Table 1).

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. No Anxiety</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. Mild Anxiety</td>
<td>23</td>
<td>25.0</td>
</tr>
<tr>
<td>c. Moderate Anxiety</td>
<td>42</td>
<td>45.7</td>
</tr>
<tr>
<td>d. Severe Anxiety</td>
<td>20</td>
<td>21.7</td>
</tr>
<tr>
<td>e. Severe Anxiety / panic</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100</td>
</tr>
</tbody>
</table>

The results of data analysis showed that before being given the video, mild anxiety was found to be 23 respondents (25.0%), moderate anxiety was 42 respondents (45.7%), severe anxiety was 20 respondents (21.7%) and severe anxiety was 7 respondents (7.6%) (Table 2).

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. No Anxiety</td>
<td>24</td>
<td>26.1</td>
</tr>
<tr>
<td>b. Mild Anxiety</td>
<td>47</td>
<td>51.1</td>
</tr>
<tr>
<td>c. Moderate Anxiety</td>
<td>20</td>
<td>21.7</td>
</tr>
<tr>
<td>d. Severe Anxiety</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>e. Severe Anxiety / panic</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100</td>
</tr>
</tbody>
</table>

The results of data analysis showed that anxiety after being given the video was found, no anxiety as many as 24 respondents (26.1%), mild anxiety as many as 47 respondents (51.1%), moderate anxiety as many as 20 respondents (21.7%) and severe anxiety as many as 1 respondent (1.1%) (Tabel 3).

Based on the table above, it provides information on the results of the Wilcoxon test with a P value of 0.000 <0.05, which means Ho is rejected and Ha is accepted. It can be concluded that there is an effect on anxiety levels before and after being given audio-visual health education on the anxiety level of preoperative spinal anesthesia patients at Hj. Anna Lasmanah Banjarnegara Hospital (Table 4).

### Discussion

**Characteristics of Spinal Anesthesia Preoperative:**

**By Age**

The results showed that most of the respondents were aged 26-35 years as many as 33 respondents (35.9%). In line with research by Rizki et al. (2019), it was found that the majority of respondents studied were aged 19-35 years, namely in the intervention group as many as 11 respondents (73.3%) and in the control group as many as 8 respondents (53.3%). According to Notoatmodjo (2013) in Rizki et al. (2019) which states that the older a person is, the level of maturity and strength will be more developed in thinking and addressing the problems faced.

According to the researcher's assumption, most respondents are at the age of 26-35 years because most of them experience surgery due to the risk of the work they do every day such as negligence while working such as hernias or fractures in the leg area and so on.

**By Gender**

The results showed that gender was obtained, 54 respondents were male (58.7%) and 38 respondents were female (41.3%). In line with research by Sulastri et al (2019), the gender of respondents in this study had the same proportion of women 50% and men 50%, but female respondents had a higher level of anxiety than male respondents. According to the researcher's assumption, most of the respondents are
male because men experience higher activity in terms of work, sports and also injuries caused by traffic accidents but in terms of anxiety men and women are not much different.

**By ASA Status**

The results of ASA status research obtained, ASA I as many as 62 respondents (62.4%) and ASA II as many as 30 respondents (37.6%). The majority of respondents had ASA I status, with a percentage of 62.4%. In line with the research of Niluh Nita Silviana et al. (2019) based on physical status most of the respondents in this study were ASA I as many as 39 people (73.6%). According to Pramono (2015) ASA status is made with the aim of evaluating the degree of pain and choosing the right anesthetic drug used for anesthesia.

According to the researcher's assumption after observation, ASA physical status affects anxiety, because the higher the patient's ASA physical status, the higher the level of patient complications, which results in the patient feeling anxious about these factors, and supporting factors such as the pain felt by the patient, the history of the disease, and self-perception.

**By Level Of Education**

The results of the study were mostly middle education as many as 66 (71.7%). In line with the research of Tj et al (2022), the results of the last education of the most respondents were high school, namely 9 patients (53%) with 2 patients with mild anxiety and 7 patients with moderate anxiety.

According to Hawari (2013) in Tj et al. (2022) one of the factors triggering anxiety is the level of education, because a person will be able to seek information or receive information well so that he will quickly understand the condition and severity of the disease and in this situation will cause increased anxiety.

According to the researcher's assumption after observation, a person's level of education is very important and useful. The higher a person's level of education, the easier it is to receive information. But that does not mean that someone with a low education has low knowledge as well, because knowledge is gained from experience and people around. Education can also change behavior and decision making. Education will influence the mindset to be more aware in identifying stressors that influence decision making.

**By Surgical History**

Based on the results of the surgical history obtained, 74 respondents (80.4%) have never been and 18 respondents (19.6%) have. In line with Hartuti's research (2019) on the effect of providing information through audio visual on the anxiety level of preoperative patients, there are 42 patients who have never carried out a surgical history, experience is an important and decisive part of an individual's mental state, so there is a relationship between surgical history and the anxiety level of preoperative patients. Anxiety after undergoing previous surgery can be influenced by previous unpleasant experiences or the psychological impact of these experiences.

According to the researcher's assumption, patients who have had surgery before have lower anxiety than those who have never undergone surgery, because those who have been operated on know the actions that will be taken. And patients who are the first to have surgery tend to think more about the pain after the surgery performed compared to patients who have not had surgery before.

**Anxiety Level of Preoperative Patients with Spinal Anesthesia Before Video Treatment**

Based on the results of the study, most respondents experienced moderate anxiety as many as 42 respondents (45.7%). Research conducted by
Sulisetyawati et al (2020) states that moderate anxiety levels are shown by the patient's condition in the form of increased blood pressure, looking restless and unable to rest calmly. According to Purnomo (2019) preoperative anxiety occurs because there is no correct knowledge from the patient about the actions that will be taken. The information received is as it is, this results in the patient's wrong or even excessive assessment of the actions to be taken.

According to the assumptions of researchers, the causes of anxiety in preoperative patients are various - such as an unsupportive environment, the threat of a more severe illness, cost problems, lack of knowledge. Lack of knowledge is one of the causes of anxiety in preoperative patients, especially patients who will be planned with spinal anesthesia, because when spinal anesthesia is performed the patient is still conscious so that the explanation of spinal anesthesia must be given optimally.

**Anxiety Level of Postoperative Patients with Spinal Anesthesia After Video Treatment**

Most respondents after being given a video experienced a decrease from moderate anxiety to mild anxiety as many as 47 respondents (51.1%). This shows that there is an effect of providing audio-visual health education to respondents. According to Palamba et al (2020) the purpose of providing health education is to help an individual, community and family maintain health, help reduce anxiety in individuals due to the condition of the disease suffered.

According to the researcher's assumption, the decrease in anxiety in spinal anesthesia preoperative patients after video administration is because the video given to respondents contains information about spinal anesthesia such as spinal anesthesia procedures, how it works, complications. So that it can increase the patient's knowledge of the spinal anesthesia action that will be performed. When after providing information provided through health education, it is hoped that the patient will become better prepared to face the anesthesia process and get optimal results.

In this case, nurses play a role in determining the educational needs given to patients to reduce anxiety (Mohammad Arifin Noor et al (2023). Providing health education using audio visual can help patients with spinal anesthesia understand the surgical process that will be undertaken so that patients are better prepared to undergo anesthesia (Nugroho et al., 2020).

**The effect of audiovisual health education on the anxiety level of preoperative spinal anesthesia patients**

Based on the results of the normality test using the Wilcoxon test, the p value = 0.000 (<0.05) means that there is a significant effect of audiovisual health education on the anxiety level of spinal anesthesia preoperative patients at Hj. Anna Lasmanah Banjarnegara Hospital.

Surgical action will cause fear and anxiety for patients, although responses vary. Some patients can explain fears specifically and clearly. And some patients also feel the fear but do not know the cause (Mohammad Arifin Noor et al., 2023). According to Fadli et al., 2019, one way to reduce the anxiety level of preoperative patients is to provide health education to patients, for example explaining surgical procedures to patients, creating a trusting relationship, showing caring and empathy. The media used in health education is very diverse, for example audio visual media. Audio visual is a form of information that conveys through sound elements and moving images (Agustina, 2018).

In line with research conducted by Hartuti (2019) there were 50 respondents who were given audiovisual health education at RSO. Prof. Dr. R. Soeharso Surakarta. The results of the study obtained...
p = 0.00 that Ho was rejected and Ha was accepted or there was an effect of audiovisual provision on the anxiety level of preoperative laminectomy patients at Prof. Dr. R. Soeharso Surakarta. In this study, the provision of audiovisuals explained the purpose, process of surgery, complications of laminectomy surgery. According to the assumptions of researchers, the provision of health education is able to reduce anxiety levels quite well, because the provision of health education is able to change a person’s mindset to better understand and understand what actions will be taken. And it is also hoped that providing health education to patients can control the state and anxiety they feel.

Limitations and Future Research

Limitations in this study are the less conducive environment caused by family and people who are in the patient's environment. A less conducive environment around the patient at the time of video delivery can affect the patient's focus while watching the video and the video sound is not heard clearly, so the researcher must play the video repeatedly.

Conclusion

1. The characteristics of respondents were mostly aged 26-35 years as many as 38 people (41.3%), male gender as many as 54 people (58.7%), ASA I as many as 62 respondents (62.4%), secondary education as many as 66 (71.7%), have never experienced surgery as many as 74 respondents (80.4%).

2. The anxiety level of preoperative patients with spinal anesthesia at RSUD Hj. Anna Lasmanah Banjarnegara before being given audiovisual health education most of the respondents with moderate anxiety as many as 47 respondents (51.1%).

3. The anxiety level of preoperative patients with spinal anesthesia at Hj. Anna Lasmanah Banjarnegara Hospital after being given audiovisual health education, the anxiety level became mild anxiety as many as 47 respondents (51.1%).

4. There is an effect of audiovisual health education on the anxiety level of preoperative patients with spinal anesthesia at Hj. Anna Lasmanah Banjarnegara Hospital.

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