Relationship between Family Support and Anxiety Level in Preoperative Elderly with Spinal Anesthesia Action at AR Bunda Prabumulih Hospital, South Sumatra

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Introduction:
Preoperative anxiety is a predictive or anticipatory reaction to an experience that the sufferer may perceive as a threat to his role in life, bodily integrity, or life itself Brunner & Suddarth, (2013) in [1]. Reducing preoperative anxiety is very important, because psychological and physical stress will increase the risk of surgery HIPKABI (2014) in [2]. Preoperative anxiety can have devastating consequences if left untreated, including longer wound healing and patient recovery, increased postoperative pain, and longer hospitalization. [3] Preoperative anxiety is a predictive or anticipatory reaction to an experience that the sufferer may perceive as a threat to his or her role in life, bodily integrity, or life itself. Brunner & Suddarth, (2013) dalam [4]. Reducing preoperative anxiety is very important, because psychological and physical stress will increase the risk of surgery HIPKABI (2014) in [5]. Preoperative anxiety can have devastating consequences if left untreated, including longer wound healing and patient recovery.
recovery, increased postoperative pain, and longer hospitalization [6].

Based on research (Muttaqin and Sari, 2009 in [7] states that preoperative anxiety causes physical and psychological changes that activate the sympathetic autonomic nervous system, increase heart rate, blood pressure, and respiratory rate, and generally reduce the patient's energy level, affecting the operation, which may ultimately harm the patient himself. When physical and psychological changes such as high blood pressure occur, doctors may consider postponing or even canceling the scheduled operation.

The World Health Organization (WHO) reports that 50% of patients worldwide suffer from anxiety. Preoperative patient anxiety levels reached 534 million. This number is expected to continue to increase every year with an indication of the level of anxiety of Pre Operative patients WHO (2012) in [8]. In Indonesia, the prevalence of anxiety is estimated to be 9%-21% of the general population, while the rate of preoperative patients experiencing anxiety is 80% [9].

In research on Tamher and noorkasiani in [10] revealed the most common psychosocial problems in the elderly such as loneliness, sadness, depression and anxiety. Aging is the final stage of human maturation. In the elderly there are biological, emotional and psychosocial changes that have the potential to cause health problems, one of which is anxiety.

According to Maramis (2009) in research [11] lack of adaptability to change, will cause psychosocial problems including anxiety. Based on research by John W. Santrock, (2002) states that the elderly have a higher risk of anxiety disorders than depression. The use of tranquilizers and anxiolytics actually reduces anxiety, but has negative side effects such as drowsiness, shortness of breath and affects patient recovery time [8].

Anxiety factors according to Stuart (2013) in [12] There are several factors associated with anxiety levels who will undergo medical treatment such as age, gender, education level, socioeconomic status, family support. In. Anxiety disorders can develop at any age, are more common in adults, and are more common in women. Women are more concerned about their disability than men, men are more active and curious, while women are more sensitive [9].

At the level of education, (Notoatmodjo, 2003) in [10] suggests that education can influence people's lifestyle, especially their motivation to engage in health services. At the social and economic level, socioeconomic status is also associated with patterns of mental disorders. Thus, weak or inadequate financial circumstances can increase anxiety in patients. In family support, family support is also related to a person's anxiety level when the role of the family is normatively expected of a person in certain situations to meet expectations conflicts in the family can cause anxiety Setiadi (2008) dalam [10]

Anxiety is not only felt by the patient but also felt by the family, so family support serves an important function in managing the patient's emotions, most importantly the anxiety felt due to the disease Lekka (2014) in [13] Patients tend to express the anxiety they experience to their family or closest people who can provide a sense of comfort and reduce the fear of facing surgery.

Support provided by the family is able to provide a feeling of pleasure, security, and comfort. Family support is very necessary in the care of preoperative patients, and is believed to be able to encourage patients in the next treatment process. [11] Support in the family is needed by each member to be able to adapt, survive, solve problems, increase motivation, reduce stress and provide confidence in their ability to deal with
problems Nurullah (2012) in [14]. Anxiety related to all the unfamiliar procedures that the patient has to undergo and also the threat to life safety due to surgical procedures and anesthesia [12].

Based on data obtained during the last 3 months there were elderly patients with spinal anesthesia, namely from August to October as many as 169 patients, the results of a preliminary survey conducted at the AR Bunda Prabumulih Hospital in South Sumatra on 10 elderly patients who will be operated on obtained data 80% experience anxiety and 20% do not experience anxiety.

The rationale underlies the author, so he is interested in conducting a study entitled "Relationship between Family Support and Anxiety Level in Preoperative Elderly with Spinal Anesthesia Action".

Material and Methods:
This study uses a quantitative descriptive method with a cross sectional approach. The place of this research was in the Central Surgical Installation Room (IBS) of AR Bunda Prabumulih Hospital, South Sumatra. This study took place from October 2022 to August 2023, with data collection carried out on June 24 to July 23, 2023. The population who became the subject of this study were all elderly patients who underwent surgery using spinal anesthesia techniques. The pre-survey results showed that for 3 months at Juanda Kuningan Hospital there were 169 patients who underwent surgery with spinal anesthesia.

The sampling method used is Consecutive Sampling which determines the sample by considering special factors. The sample size in this study was calculated by the formula According to [13] said that if the subject is less than 100, then the entire population becomes the research sample. But if the subject is more than 100 then 10-15% or 15-25% can be taken. Isaac Michael based on the above definition can be said the result of the summation of this research sample is $169 \times 20\% = 33.8$ multiplied to 34 so that the sample taken is 34 people.

The variables in this study are independent and dependent variables, namely the independent variable: Family support, gender, education level and dependent variables: Preoperative elderly anxiety level. Furthermore, the ethical number in this study is No. B.LPPM-UHB/2126/07/2023.

Data Collection and Outcome Measurement
In this study, researchers used a data collection technique that used a questionnaire filling method which included written questions used to obtain information. Questionnaire technique or questionnaire technique (list of questions) is a technique for collecting data in the form of a list of questions that are systematically arranged to be filled in [14].

Statistical Analysis
The data analysis used in this study was univariate and bivariate analysis. Univariate analysis Univariate analysis in this study aims to identify the level of anxiety, family support, gender and education level of the elderly at AR Bunda Prabumulih Hospital, Bivariate analysis to test the relationship between the two research variables, namely the independent and dependent variables in this study.

Findings/Result
This study was conducted on June 24 to July 23, 2023 at AR Bunda Prabumulih Hospital, South Sumatra. The number of samples in this study were 34 patients with sampling techniques using consecutive sampling while data analysis used univariate and bivariate tests. From this study the following results were obtained:

1. Univariate Analysis
Based on table 1, it is known that most of the respondents in this study were mostly women as many as 25 respondents (73%) with mild anxiety levels as many as 7 (70%) and medium anxiety levels as many as 18 (75%) and men as many as 9 respondents (26.5%) with mild anxiety levels as many as 3 (30%) and moderate anxiety as many as 6 (25%).

Table 2. Overview of Gender with Anxiety Levels in Preoperative Elderly Patients with Spinal Anesthesia in the Operating Room of AR Bunda Prabumulih Hospital in 2023.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Anxiety Level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mild</td>
<td>Medium</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>26.5%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>21.2%</td>
<td>52.9%</td>
</tr>
</tbody>
</table>

Based on table 4.2, it is known that most of the respondents in this study were mostly women as many as 25 respondents (73%) with mild anxiety levels as many as 7 (70%) and medium anxiety levels as many as 18 (75%) and men as many as 9 respondents (26.5%) with mild anxiety levels as many as 3 (30%) and moderate anxiety as many as 6 (25%).

Table 3. Overview of education level with anxiety level in preoperative elderly patients with spinal anesthesia in the operating room of AR Bunda Prabumulih Hospital in 2023.

<table>
<thead>
<tr>
<th>Education</th>
<th>Anxiety Level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mild</td>
<td>Medium</td>
</tr>
<tr>
<td>ELEMENTARY</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>JUNIOR HIGH</td>
<td>0</td>
<td>16</td>
</tr>
</tbody>
</table>
|                 | 0%            | 11.8% | 11.8%
| HIGH SCHOOL    | 7             | 16    | 2   |
|                 | 7%            | 66.7% | 66.7%
| Higher Education| 3             | 3     | 6   |
|                 | 3%            | 17.6% | 17.6%

Based on table 3, it is known that most of the respondents in this study were mostly high school as many as 23 respondents (67.6%) with mild anxiety levels as many as 7 (70%) and medium anxiety levels 16 (66.7%).

Table 4. Relationship between Preoperative Anxiety Level and Family Support in the Operating Room of AR Bunda Prabumulih Hospital in 2023.

<table>
<thead>
<tr>
<th>Anxiety Level</th>
<th>Family Support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medium</td>
</tr>
<tr>
<td>Mild</td>
<td>F</td>
</tr>
<tr>
<td>Medium</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
</tr>
</tbody>
</table>

Based on table 1, it is known that most of the respondents in this study were mostly women as many as 25 respondents (73.5%), and the amount of family support was 23 respondents (67.6%) with moderate support, most of the respondents in this study had a moderate level of anxiety as many as 24 respondents (70.6%).

2. Bivariate Analysis

Table 2. Overview of Gender with Anxiety Levels in Preoperative Elderly Patients with Spinal Anesthesia in the Operating Room of AR Bunda Prabumulih Hospital in 2023.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Anxiety Level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mild</td>
<td>Medium</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>26.5%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>21.2%</td>
<td>52.9%</td>
</tr>
</tbody>
</table>

Table 4. Relationship between Preoperative Anxiety Level and Family Support in the Operating Room of AR Bunda Prabumulih Hospital in 2023.
The results of the Spearman Rank test to determine the relationship between anxiety levels and family support in preoperative respondents in the operating room of the AR Bunda Prabumulih Hospital presented in table 4 show that most respondents have a moderate level of anxiety with moderate family support as many as 16 people (47%).

### Discussions

**Family support for preoperative elderly with spinal anesthesia at AR Bunda Prabumulih Hospital, South Sumatra**

Based on Table 4.1 family support in elderly patients who will undergo surgery with spinal anesthesia at AR Bunda Prabumulih Hospital shows that the majority of family support is moderate 23 respondents (67.6%). According to the researcher, this shows that most patients who undergo surgery get moderate or sufficient family support because the researcher analyzes the family support questionnaire on question number one, the majority of families answer that they often accompany patients in treatment. This is supported by the theory [15] which states that most patients who will undergo surgery get moderate support from the family, both from parents, wife or husband, children and relatives who are waiting. Family support according to Friedman (2013) in research [16] is the attitude, behavior of family acceptance by family members, in the form of information support, assessment support, and spiritual support tools. Therefore, family support is a form of interpersonal relationship including attitudes, actions, and acceptance for family members, so that family members feel that someone is paying attention.

<table>
<thead>
<tr>
<th>Anxiety Level</th>
<th>F</th>
<th>%</th>
<th>F</th>
<th>%</th>
<th>Total</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>7</td>
<td>20.5</td>
<td>3</td>
<td>8.9</td>
<td>10</td>
<td>29.4</td>
</tr>
<tr>
<td>Medium</td>
<td>16</td>
<td>47</td>
<td>8</td>
<td>23.6</td>
<td>24</td>
<td>70.6</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>67.5</td>
<td>11</td>
<td>32.5</td>
<td>34</td>
<td>100</td>
</tr>
</tbody>
</table>

Anxiety level of preoperative elderly with spinal anesthesia at AR Bunda Prabumulih Hospital, South Sumatra

Based on Table 1 about the level of anxiety, research that has been conducted at the AR Bunda Prabumulih Hospital from 34 respondents found the results of anxiety levels in preoperative elderly with spinal anesthesia actions the majority of moderate categories, namely as many as 24 respondents (70.4%), according to the researcher's assumption this is because the patient knows that the type to be performed is relatively not a major operation, this is supported by research by [12] which states that there is a relationship between anxiety and the type of surgery because patients have the perception that major surgery will cause severe pain and there is a possibility of failure while the operation is in progress, while in mild to moderate surgery the possibility of mild to moderate anxiety the patient will have the thought that the surgery is not too burdensome and does not cause severe pain.

Preoperative anxiety is a predictive or anticipatory reaction to an experience that the patient can perceive as a threat to his role in life, body integrity, or life itself. According to (Long, C. Barbara, 2004) in [10] there are 4 categories of anxiety, namely mild anxiety, moderate anxiety, severe anxiety, panic anxiety. According to research [17] moderate category anxiety is a reaction that is generally too focused. Increased blood pressure, indigestion, sensory disturbances, restlessness, often difficult to get advice, disturbed sleep quality and unstable emotions.

**Anxiety level of preoperative elderly with spinal anesthesia at AR Bunda Prabumulih Hospital South Sumatra based on gender**

In this study the majority of gender was in women as many as 25 respondents (73.5%) with a moderate level of anxiety 16 (66.7%). According to the assumptions of researchers related to anxiety in men and...
women, women are more anxious about their inability than men, men are more explorative while women are more sensitive, women are easier to show the anxiety they experience than men. This is supported by research which states that there is a significant difference in the average anxiety level of male and female respondents, women are easier to show the anxiety they experience than men. According to Santrock (2005) in [18] the developmental psychology approach emphasizes that adaptations during human development produce different psychologies between men and women due to the different roles of women and men who face different pressures.

In research by Kaplan and Sanlock, (2001) in research [10]. Found that women are described as gentle, maternal, and emotional beings. In another study also mentioned Nurjannah, 2004 in [10] found that men are more relaxed than women. Women are more vulnerable to environmental stress than men. Women are also more anxious, impatient and tearful. In addition, various general anxiety studies have found that women are more anxious than men.

**Analyzing the relationship between family support and anxiety levels in preoperative elderly with spinal anesthesia at AR Bunda Prabumulih Hospital, South Sumatra**

Based on Table 4.2 the results of statistical tests using Rank Spearman obtained a p-value of 0.032 so that the p-value $< \alpha$ (0.05). This shows that H0 is rejected and Ha is accepted, meaning that there is a relationship between the level of anxiety of preoperative respondents and family support during treatment in the operating room of the AR Bunda Prabumulih Hospital.

According to the researcher's assumption that family support for patients who will perform surgery, the family support provided must be adequate, because it is very important and needed by sick people to adapt, survive, solve problems, increase motivation, reduce stress and provide confidence in their ability to face problems, a sense of comfort, a sense of being loved and motivate patients to give confidence that the operation can run smoothly. This is supported by research [16] which states that family support is important for sufferers because the family can make sufferers comfortable, if the family support is inadequate then the patient will feel alienated or not considered by the family, so that someone will easily experience anxiety in undergoing surgery. Family
support is a form of interpersonal relationship including attitudes, actions, and acceptance for family members, so that family members feel that someone is paying attention. People in a supportive social environment often have better conditions than their peers, who are without this advantage, because family support is considered acceptable to reduce or minimize the impact on individual mental health.

This research is in line with research [1]. Stating that there is a relationship between family support and anxiety levels with the results of the Spearman Rho test shows the significant value is $p = 0.001$ ($p < 0.05$) the correlation coefficient value is 0.687 which indicates a strong correlation.

**Limitations and Future Research**

In this study, the limitations exist in the perception of respondents' answers, namely in terms of data validity where respondents do not necessarily fill in according to the actual situation, and researchers do not correct the answers to the questionnaire with the circumstances.

**Conclusion**

The results of this study illustrate that there is a relationship between family support and anxiety levels in preoperative lasnia with spinal anesthesia at AR Bunda Prabumulih Hospital, South Sumatra, the results of statistical tests using Rank Spearman obtained a $p$-value of 0.032 so that the $p$-value < $\alpha$ (0.05). And for further researchers to be able to develop this research to look for variables and factors that may be associated with the incidence of anxiety levels after spinal anesthesia in surgery patients.

**Acknowledgments**

My gratitude goes to all elderly patients with spinal anesthesia at AR Bunda Prabumulih Hospital who have been willing to become research respondents, thanks also to the supervisor who has provided direction, guidance, advice and time to researchers during the research, and thanks to AR Bunda Prabumulih Hospital, South Sumatra, which has been willing to give permission for this research.

**References**


19. Yanti Dam, Anggraeni S, Sulistianingsih A, Maryanti L. Hubungan Pendidikan Dengan Kecemasan Pasien Pre Operasi Seksio Sesaria (Sc) Di Ruang Kebidanan Rumah Sakit Urip