Development Nursing Research

Received: 05-02-2025; Revised: 17-02-2025, Publish Online: 27-02-2025

ORIGINAL RESEARCH Open Access

The Relationship Between Family Support And Anxiety Levels In Patients Who First Underwent Surgery

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Abstract

Background: Particularly among first-time surgical patients, anxiety is still a common issue among those having preparatory procedures. The mental and physical health of the patient might be impacted by anxiety levels before to surgery. One of the many elements that affects the mental health of patients before surgery is the level of support they get from loved ones. This research to finding out how patients' anxiety levels correlated with the amount of support they received from family members was the driving force behind this research at Regional General Hospital 45 Kuningan.

Methods: Using a cross-sectional design, this research employs correlative analytics. The 136 participants who participated in this research were all first-time surgical patients. Purposive sampling was used in the sampling process. This study's tools included the Amsterdam Preoperative Anxiety and Information Scale (APAIS) and a family support questionnaire.

Results: Anxiety levels are positively correlated with family support, with a correlation value of -0.370 showing a negative or unidirectional link

Conclusions: Based on the results of the Spearman Rank test analysis, which included 136 participants, with a resulting P value of 0.000 <0.05, it can be inferred that patients whose first surgery was at 45 Kuningan Regional General Hospital had a significant correlation between anxiety levels and family support..

Keywords: family support, anxiety level, first-time surgery patients

Introduction

The field of surgery has played a significant role in medicine for over a hundred years. The surgical treatment of around eleven percent of the world's diseases is feasible. In order to solve health concerns, the world needs at least 321.5 million operations (1). According to statistics compiled by the World Health Organization (WHO) in 2021, the annual rate of surgical procedures rose sharply, with an estimated 165 million operations carried out globally that year. Out of fifty different medical conditions treated in Indonesian hospitals, surgery accounts for around 12.8% (2), placing it eleventh. The patient is vulnerable to a number of hazards during surgery. An increase in both physiological and psychological stress responses may occur after surgery, among other procedures.

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Anxiety is a typical reaction that many people experience before surgery. There was a 55.7% prevalence of preoperative anxiety in 5575 surgical patients, according to studies conducted globally (3). Preoperative anxiety disorder affects between 6 and 7 percent of Indonesians. Prevalence is greater among women than males (4). Particularly for first-time surgery patients, the prospect of surgery may be terrifying (5). Patients' levels of anxiety are greater before their first operation compared to those who have had previous procedures. Because every event serves as a teaching moment for how to handle adversity, a person's past may shape their anxiety response (6). As a result of the mental and physical fortitude gained from this encounter, anxiety levels tend to drop (7).

Patients' mental and physical health might be impacted by preoperative anxiety (8). Anxiety has the ability to quicken the heart rate by activating the autonomic nervous system, which in turn increases adrenal gland function. This medical condition raises the risk of hypertension, which in turn raises the risk of hemorrhage after surgery. Surgery may be disrupted by stress, which might lead to postponement or even cancellation of the procedure (9). Social support accounted for 14.2% of the total anxiety-inducing factors identified in the research. A person may get social support in the form of familial assistance, for example. Here, the most important thing for patients going under the knife is to have their loved ones' support (10).

One of the best ways to cope with challenges and lessen worry is to have the support of one's family. Emotional support may also come from loved ones, in the form of trust, attention, listening, good attitudes, and communication with patients. Also, there is instrumental support and assessment support (11). Particularly for first-time surgical patients, family support is invaluable. This lines up with findings from a study of 53 participants, which showed that 60.4% of them felt moderate anxiety when their families were very supportive, and 3.8% felt severe anxiety when they were not. The findings indicate that patients report lower levels of anxiety when they have strong support from their families (12).

In Kuningan Regency, the primary and referral hospital, Regional General Hospital (RSUD) 45 Kuningan, has the highest surgery rate. The average number of patients undergoing surgery in the last three months reached 677 from September to November 2023, according to data collected prior to the poll. Reportedly, 36 patients had their surgeries postponed or even canceled due to lengthy delays in the previous three months. Documentation of RSUD 45 Kuningan 2023 on medical matters. Out of ten patients who were scheduled for surgery, eight (or 80%) reported severe anxiety, shown by elevated blood pressure, agitation, and increased frequency of urinating. On top of that, two other patients said that their families didn't always wait for them while they were getting treatment; in fact, they indicated that they would only wait until other family members got home from work.

Methods

A cross-sectional research strategy, this study uses correlational analysis. One hundred thirty-three individuals who were undergoing their first surgical procedure made up the study's sample. Purposive sampling was used in the sampling process. A sheet of the APAIS anxiety questionnaire and a sheet measuring family support were used as the study instrument. The study spanned the years 2023 and 2024. In December 2023, data was collected at Regional General Hospital 45 Kuningan. Patients who had their first operation at RSUD 45 Kuningan made up the study's population.

Results

Table 1. Frequency Distribution Based on Respondent Characteristics (n=136)

Characteristics	Total	
	f	%
Age		
<25 years	29	21,3
26 – 35 years	24	17,6
36 – 45 years	21	15,4
>45 years	62	45,6
Gender		
Male	58	42,6
Female	78	57,4
Education Level		
Bot in School	0	0
SD	49	36,0
SMP	21	15,4
SMA/SMK	55	40,4
Higher Education	11	8,1
Job Type		
Civil Servant	4	2,9
Employee/Contract Employee	8	5,9
Self-employed/Merchant	35	25,7
Farmer	10	7,4
Not Working	79	58,1

The results of the research from 136 respondents are shown in table 4.1. Among them, 62 people (45.6% of the total) were older than 45 years, 78 people (57.4% of the total) were female, 55 people (40.4%) had a high school diploma or less, and 79 people (58.1% of the total) did not have a job.

Table 2. Family Support in Patients Who Underwent Surgery for the First Time

Family Support	f	%
Low Family Support	3	**2.2**
Medium Family Support	37	**27.2**
High Family Support	96	**70.6**
Total	136	**100**

Based on table 2. describes the results of family support in patients who first underwent surgery with a total sample of 136 respondents, the majority of family support in the high support category as many as 96 people (70.6%).

Table 3. Frequency Distribution of Anxiety Levels in Patients Who First Time Undergoing Surgery

Family Support	f	%
Low Family Support	3	**2.2**
Medium Family Support	37	**27.2**
High Family Support	96	**70.6**
Total	136	**100**

Based on table 3 shows that the level of anxiety in patients who first underwent surgery from 136 respondents, the majority of respondents experienced mild anxiety as many as 96 people (70.6%).

Table 4. Relationship between Family Support and Anxiety Level in Patients Who First Underwent Surgery

Family Support	**Anxiety Level**				**Correlation Coefficient**	***P value***
	f	f	f	f		
Low	0	1	2	3		
Medium	1	26	10	37	-0,370	0.000
High	21	69	6	96		

The results of the spearman rank test, as shown in table 4, indicate that the resultant P value is 0.000. So, "Ha is accepted" as 0.000 is less than 0.05. This suggests that patients' anxiety levels are related to the amount of assistance they get from their families after their first operation at Kuningan 45 Hospital. The negative sign in Spearman's correlation value (-0.370) indicates a negative link; hence, the more family support a patient receives, the less anxious they would feel.

Discussion

The age distribution of the participants in this research revealed that 62 participants were over the age of 45. Consistent with these findings, Musyaffa (2023) found that 31.3% of respondents fell into the age bracket of 46–55, which was the most common for those receiving surgery. There are a number of health issues that become more common with age and often need surgical correction. The researcher postulates that, for a variety of reasons, including the increasing frequency of degenerative illnesses and the physiological changes that transpire, older people are more prone to have surgery. There were 78 female responders (57.4% of the total) according to the study's gender breakdown. The majority of those who reported experiencing anxiety were women (61.5%), which is consistent with the results of the research by Sitinjak (2022). Due to variations in emotional reaction and event handling, researchers believe that women experience higher levels of anxiety compared to males. Because a patient's degree of comprehension is influenced by their level of education, it is noteworthy that most responders with a high school or vocational education level suffer minor anxiety. Patients who have completed more years of schooling are more likely to fully grasp the potential benefits and hazards of their medical treatments (7). This is in line with the results found by Kistan (2019), who found that preoperative anxiety levels were correlated with patients' levels of education. Researchers presume that more educated individuals may better react to their worry by drawing on their knowledge. According to the findings, 79 out of 136 respondents (58.1%) did not have jobs. There is no correlation between the majority's work position and their reliance on family assistance (13). With the patient in the hospital and about to have surgery, the presence of supportive family members may have a more significant role in reducing anxiety levels before the procedure (14). Half of all respondents reported moderate anxiety, which is consistent with the findings of Putri's study (2022) showing that patients without jobs have more severe anxiety. According to their research, patients who are unemployed are more likely to experience worry in the days leading up to their surgical procedures. In addition to the fact that physical health has an impact due to reduced bodily function, the fact that most respondents' occupations are no longer functioning implies that they have no money and must depend on presents from their children.

Family Support in Patients Who First Underwent Surgery

Research on family support in patients who had their first operation found that most people surveyed fell into the "high support" group. As many as 96 (or 70.6% of the total) out of 136 respondents shown strong support. Since the majority of patients' relatives are present throughout treatment, this indicates that most patients who will have surgery get high or adequate support, according to the researcher's analysis of the data. This lines up with the idea of family support as put forward by

Lubis (2024), who states that factors such as family engagement, emotional support, instrumental support, informational support, appraisal support, and patient preparation all contribute to a high level of family support in first-time surgery patients. This study's results corroborate those of Pesik (2020), who found that patients with high levels of family support had substantial emotional and practical help from loved ones in the days leading up to surgery. Preoperative anxiety and nervousness are lessened when patients know their loved ones are rooting for them. Patients might benefit from their families' emotional support and knowledge when they are mentally prepared for surgery (15).

A lack of knowledge about the condition and its potential complications among family members might make it difficult for patients to get strong support from their loved ones. Patients may experience a lack of attention and support as a result of this (9). A lack of consistent or close family presence could reduce the effectiveness of strong family support. Because of this, patients may not receive the attention they need and may even go unsupported (11). Patients whose loved ones don't encourage them to have surgery end up with less family support, which in turn makes the support system less effective (16). Having a strong support system from family may make you feel appreciated, put you at ease, and improve your emotional state (17). Contrary to what Walangadi (2021) found, this study found that patients are more likely to worry about biological dangers and physiological limitations as a consequence of surgery. Some of these considerations include worries about the effects on one's body and how one's surroundings will adapt or be accepted. It is believed by the researcher that people react differently to situations that they perceive as dangerous. But there are things that may help us feel safe in dangerous circumstances, and the family is one of those things. This agrees with the results of Nuriyah & Mirasari (2020), who found that having loved ones around to encourage and reassure patients before surgery is crucial to their recovery.

Anxiety Level in Patients Who First Underwent Surgery

According to the study's findings, moderate anxiety was reported by the majority of respondents (96 out of 136; or 70.6% of the total) among patients who had their first surgery. This study's findings corroborate those of Cahyanti (2020), who found that 57.1% of the patients surveyed suffered from mild anxiety. Mild anxiety was most often reported by participants older than 45 years old, placing them in the early elderly demographic, according to the study's findings. Preoperative anxiety is more common in younger patients than in older ones, who are better able to cope with it, since their perspectives and experiences with illness and other events are different (Nuriyah, 2020). Studies have shown that older people tend to worry less about their mental health and more on becoming well. That there is a correlation between a person's anxiety level and their age is supported by Zulda's study (2023). Patients undergoing surgery often experience anxiety, a psychological reaction shown by a variety of physical symptoms. Improper management of the patient's anxiety prior to surgery might hinder the healing process (Handayani, 2024). various people deal with their health issues in various ways, and every patient has their own unique style of dealing (18).

Concerns about the anesthetic treatment and its possible adverse effects are the main causes of anxiety in individuals undergoing preanesthesia. According to the study's findings, the majority of patients reported fear of anesthesia and seemed agitated and uneasy just before the procedure. The results of this study are consistent with those of Mangera and Rusman (2019), who found that 34 out of 53 participants (64.2% of the total) reported minor anxiety in the minutes leading up to their anesthesia. Walangadi (2021) discovered that 27 respondents, or around 50.9%, experienced a significant degree of worry. This was due to the fact that the respondents were unprepared to confront the changes that would occur as a consequence of the operation. Consequently, this study contradicts those results. The majority of patients suffer moderate anxiety (51.5%), according to Handayani's study (2024). According to the researchers, a mild amount of anxiety in this context is likely indicative of the fact that the majority of patients experience anxiety, but that this degree of worry is still manageable

Relationship Between Family Support and Anxiety Level of First-Time Patients Undergoing Surgery

A substantial association between family support and anxiety levels was found in patients having their first surgery at 45 Kuningan Hospital, according to the results of the Spearman rank correlation statistical test indicated earlier. A rank-Spearman correlation test yielded a -0.370 correlation coefficient and a 0.000 P value. So, "Ha is accepted" as 0.000

is less than 0.05. This suggests that patients' anxiety levels are related to the amount of assistance they get from their families after their first operation at 45 Kuningan Hospital. When the brain registers a perceived danger, anxiety often sets in. This view develops as a result of both internal and external influences, including one's genes and one's life experiences. The cerebral cortex, limbic system, reticular system, and hypothalamus are all parts of the central nervous system that receive, transmit, and process impulses. The hypothalamus initiates the process by sending signals to the pituitary gland, which then produces hormones that act as mediators. These hormones are directed towards the adrenal glands, which in turn activate the autonomic nerves via additional hormones. Support from family and health care providers are elements that can alleviate anxiety, according to Susanty (2021).

Family members may be a great source of support and guidance. That is consistent with the view expressed by Andriyani (2024) that a good atmosphere may be fostered via excellent assistance. When people are in a pleasant setting, they feel appreciated and at ease, which in turn creates a positive emotional climate and makes them happy. The study's premise is that patient's benefit from having their loved ones there for them emotionally, both in terms of knowledge and presence, which in turn boosts their confidence. Patients report less worry when they have family members they can lean on in times of need. Having the right kind of family support during surgery may make a huge difference for the patient, their recovery, and their chances of a successful outcome. Rangkuti (2021) found that patients' anxiety levels before surgery are correlated with the amount of support they get from family members. The findings of a p-value of 0.000, which is less than the significance level of 0.05, reveal this. This study's findings are at odds with those of Walangadi's (2021) research at RSU Negara Bali, which failed to find a correlation between family support and preoperative patients' anxiety levels (p = 0.139, very low correlation level, positive correlation direction), suggesting that the two variables do not significantly relate to one another. The researcher has hypothesized that the difference between this study and Walangadi's (2021) research stems from the fact that the majority of respondents in the former were between the ages of 26 and 35 (Early Adulthood), while the majority of those in the latter were over the age of 45 (Early Elderly). It is said that anxiety is more common among younger people than to older ones. The rationale for this is that people's perspectives and experiences with illness vary with time, making it more effective for coping mechanisms that are older. Anxiety reactions might also differ from one person to another and from one circumstance to another.

Conclusion

Out of 136 respondents, 62 (or 45.6%) were between the ages of 18 and 45; 78 (or 57.4%) were female; 55 (40.4%) had completed elementary school; and 79 (or 58.1%) were unemployed. The majority of patients who had surgery for the first time had family support, with as many as 96 individuals (or 70.6% of the total) falling into the strong support category. As many as 96 individuals (or 70.6% of the total) reported mild anxiety levels before their initial operation. In patients who first had surgery at RSUD 45 Kuningan, there is a notable correlation between the amount of support from family members and their anxiety level. With a correlation value of -0.370, the negative sign indicating a link, we can deduce that the patient's anxiety level decreases in direct proportion to the strength of their family's emotional support.

Limitations

The fact that patients were led to the operation room prior to completing the questionnaire posed a significant challenge to data collecting. Because of this, the researcher had to seek out more respondents, which prolonged the investigation.

Acknowledgements

The author would like to thank the supervisor, RSUD 45 Kuningan, and respondents who have helped and facilitated this research so that it can be completed on time.

Author's contributions

Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data: IY, SS, HSM, AM, TH; Involved in drafting the manuscript or revising it critically for important intellectual content: IY, SS, HSM; Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content: IY, SS, HSM, AM, TH; Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved: IY, SS, AM. All authors read and approved the final manuscript.

Funding

Open access funding provided by University There was no external funding in this research

Availability of data and materials

The data that support the findings of this study are available from the corresponding author, [IY], upon reasonable request

Declarations

Ethics approval and consent to participate
Not applicable

Competing Interest

The authors declare no competing interest

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