



Family Support and Social Support in Preoperative Anxiety Status

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A B S T R A C T

Anxiety is vital in determining the decision of appendectomy surgery. Anxiety may be reduced with support from family and society. This study aimed to analyze the relationship between family and social support on the anxiety of preoperative appendectomy patients. This study used an analytical descriptive quantitative method with a cross-sectional approach on 15 preoperative appendectomy patients in the operating room. Collecting data was using a questionnaire from one month. Data analysis was using Spearman rank test. The study's results indicate that family support has a significant value of 0.904 for anxiety, while social support has a significant value of 0.059. This study shows that family and social support do not affect the anxiety status of preoperative appendectomy patients. Therefore, future research on the current topic is recommended but with a larger sample to prove the hypothesis.

INTRODUCTION

Appendicitis is an inflammation of the vermiform appendix. It usually presents acutely, within 24 hours of onset, but can also present as a more chronic condition. Appendicitis initially presents with generalized or periumbilical abdominal pain that later localizes to the right lower quadrant. This activity reviews the presentation, evaluation, and treatment of appendicitis and emphasizes the role of the interprofessional team in evaluating and treating patients with this condition.

According to (Yang et al., 2022), in 2019, there were 17.70 million new cases of appendicitis globally, with an age-standardized incidence rate of 229.86 per 100,000 population. There are 259 million cases of undiagnosed appendicitis in men worldwide, while in women, there are 160 million cases of undiagnosed appendicitis. 7% of the population in the United States suffer from appendicitis, with a prevalence of 1.1 cases per 1,000 people per year. The incidence of acute appendicitis has increased from 7.62 to 9.38 per 10,000 from 1993 to 2008. The incidence of acute appendicitis in developing countries is lower than in developed countries. In Southeast Asia, Indonesia ranks first with the highest incidence of acute appendicitis, with a prevalence of 0.05%. Followed by Philippines, with a prevalence of 0.022% and Vietnam of 0.02%. The incidence of acute appendicitis in developing countries is lower than in developed countries (Wijaya et al., 2020).

In Southeast Asia, Indonesia ranks first as the highest incidence of acute appendicitis with a prevalence of 0.05%, followed by the Philippines at 0.022% and Vietnam at 0.02% (Wijaya et al., 2020). From January to December 2021, the incidence of appendicitis at Sele Be Solu General Hospital, of the total number of inpatients, was recorded as many as 127 patients with appendicitis. All these patients had to undergo surgery. This proves the high number of cases of appendicitis at Sele Be Solu Hospital, Sorong City.

Acute appendicitis represents 4.5% of abdominal pain and is the most common emergency that general surgeons encounter. In Western countries, the lifetime risk of acute appendicitis is calculated to be 1 in 15 people. The severity and associated morbidity can be correlated with the period between initial signs and symptoms and initiation of treatment. Appendicitis in Indonesia ranks highest among several other cases of abdominal emergency (Stephanie, 2022).

The appendix empties itself inefficiently, and its lumen is small, easily obstructed, and prone to infection (appendicitis). Therefore, it is essential to provide treatment to patients with appendicitis immediately. Appendicitis can be treated in two ways, namely, surgery and non-surgical. In mild cases, appendicitis can be cured only with medication, but for appendicitis that has an extensive infection, an appendectomy must be carried out immediately. Appendectomy is surgery to remove inflamed appendicitis.

Anxiety often occurs in preoperative appendectomy patients that affect the course of surgery, such as impacting the cardiovascular system by increasing blood pressure so that the operation can be canceled. Everyone's response to surgery differs, but most people experience fear and anxiety (Gill & Goldstein, 2022; Lan et al., 2022; Qi et al., 2022). Patient anxiety is caused by various reasons, including anxiety about the operating room and operating equipment, anxiety about body image in the form of defects or restrictions on limb movement, anxiety, and fear of dying while under anesthesia, worry about the effects of surgery if it fails, and worry about costs (Piras et al., 2022; Rodziewicz et al., 2022).

Some patients who experience severe anxiety are forced to postpone the scheduled surgery because the patient feels that he is not mentally ready for surgery. Differences in anxiety levels can affect preparation for surgery. Social support and family support are a source of coping with stress and affect one's health condition (Hanalis-Miller et al., 2022; Salzman et al., 2022; Wang et al., 2022). One of them is constantly being near the patient, motivating the patient to give confidence that the operation can run smoothly. Social support for patients undergoing surgery will lighten the patient's burden, thereby reducing patient anxiety, and patients will be better prepared for surgery, impacting calm and comfort patients. Therefore, patients who will face surgery need family and social support. The absence of family and social support can affect the psychological of the these patients. This study aims to assess the relationship between family support and social support with the anxiety level of preoperative appendectomy patients.

METHOD

This research design is descriptive-analytic with a cross-sectional approach. The sample consisted of 15 patients who were going to undergo appendectomy, aged between 15-65 years and had been treated for at least 24 hours before. CITO surgery or perforated appendectomy was not included in this study. All samples were recruited by purposive sampling technique. Data collection used four questionnaires: demographic, family support, social support, and anxiety. The demographic questionnaire contains age, gender, education, occupation, living with family, marital status, a caregiver at home, and length of time suffering from appendicitis. Veber Ali Sabana (2016) adopted the family support questionnaire, which consisted of 16 statements containing informational, hopeful, natural, and social support. This statement uses a Likert scale with always, often, sometimes, and never choices. The social support questionnaire consists of 29 statements: Emotional or esteem support, Tangible instrumental support, Informational support, and Companionship support. This statement uses a Likert scale with the choices strongly agree, agree, seldom, and never. This anxiety questionnaire uses The Amsterdam perioperative anxiety and information (APAIS) (ÇETİNKAYA et al., 2019), consisting of 4 statements. This statement will be filled with Likert scale answer choices: not at all, not much, a little, quite a bit, and a lot. This research was conducted in November - December 2022 in the operating room of Sele Be Solu Hospital, Sorong City. The results of this study were processed using the Spearman rank test.

RESULT

A total of 15 respondents contributed to this study. Respondents in this study were dominated by female respondents (53.3%) who were married (60%) and aged 16-25 years (33.3%) and 26-35 years (33.3%) who had junior high school education (40%) and worked in the private sector (46.7%). Most of the respondents had appendicitis for more than six months (53.3%) and lived with their families (100%) and were therefore cared for by their partners (53.3%). The data is presented in Table 1 below.

Table. 1. Characteristic of respondents

Characteristics	n	(%)
Age (years)		
16-25	5	33.3
26-35	5	33.3
36-45	2	13.3
46-55	2	13.3
56-65	1	6.7
Gender		
Man	7	46.7
Woman	8	53.3
Education		
Elementary School	1	6.7
Junior High School	6	40
Senior High School	4	26.7
College	4	26.7

Profession		
Unemployed	3	20
Self-employed	4	26.7
Civil Servant/Police/Soldier	1	6.7
Private	7	46.7
Live with family		
Yes	15	100
Marital status		
Not married yet	6	40
Marry	9	60
Caring at home		
Couple	8	53.3
Others (siblings)	7	46.7
Long suffered appendicitis (months)		
<1-2	2	13.3
3-4	1	6.7
5-6	4	26.7
>6	8	53.3

A. Family support

Relationship between family support and anxiety level of preoperative appendectomy patients

The distribution of family support based on the anxiety level of preoperative appendectomy patients is presented in Table 2 below.

Table 2. Family support based on the anxiety level of preoperative appendicitis patients

Family support	Anxiety Level							
	Light		Currently		Heavy		Total	
	f	%	f	%	f	%	f	%
Low	2	50	0	0	2	50	4	100
Currently	1	14.3	2	28.6	4	57.1	7	100
Tall	1	25	2	50	1	25	4	100
Total	4	26.7	4	26.7	7	46.7	15	100

Table 2 shows that most respondents who experienced severe anxiety received moderate family support (57.1%). Only a few respondents who experienced mild anxiety received moderate family support (14.3%).

The relationship between family support and the anxiety level of patients with preoperative appendectomy data is presented in Table 3 below.

Table 3. The relationship between family support and the anxiety level of preoperative appendicitis patients

		Level of Family Support	Anxiety Level
Spearman's rho	Level of Family Support	<i>Correlation Coefficient</i>	1,000
		<i>Sig. (2-tailed)</i>	-.034
		<i>N</i>	.904
	Anxiety Level	<i>Correlation Coefficient</i>	15
		<i>Sig. (2-tailed)</i>	-.034
		<i>N</i>	.904
		15	15

The results of the Spearman rank analysis showed a correlation coefficient (ρ) of 0.034 with a significant value (p) of 0.904. Based on the analysis above, it was found that the value of $p=0.904$ was more significant than the significance level of 0.05 ($p<0.05$), so there was no relationship between family support and the anxiety level of preoperative appendicitis patients.

B. Social Support

The relationship between social support and the anxiety level of preoperative appendectomy patients Social support based on the anxiety level of patients with preoperative appendectomy is presented in Table 4 below.

Table 4 Distribution of social support based on the anxiety level of patients with preoperative appendicitis

Social Support	Anxiety Level							
	Light		Currently		Heavy		Total	
	f	%	f	%	f	%	f	%
Low	0	0	1	33.3	2	66.7	3	100
Currently	2	20	3	30	5	50	10	100
Tall	2	100	0	0	0	0	2	100
Total	4	26.7	4	26.7	7	46.7	15	100

Table 4 shows that most respondents who experience severe anxiety receive low social support (66.7%). There were no respondents who experienced mild anxiety, who received low social support, and severe anxiety, who received high social support (0%).

The relationship between family support and the anxiety level of patients with preoperative appendectomy is presented in Table 5 below.

Table 5. The relationship between social support and the anxiety level of preoperative appendectomy patients

		Anxiety Level	Level of Social Support
<i>Spearman's rho</i>	Anxiety Level	<i>Correlation Coefficient</i>	1,000
		<i>Sig. (2-tailed)</i>	-.498
		<i>N</i>	.059
	Level of Social Support	<i>Correlation Coefficient</i>	15
<i>Sig. (2-tailed)</i>		-.498	
<i>N</i>		.059	
		15	

The results of the Spearman rank analysis showed a correlation coefficient (ρ) of 0.498 with a significant value (p) of 0.059. Based on the analysis above, it was obtained that the $p=0.059$ was more significant than the significance level of 0.05 ($p<0.05$), so there was no relationship between social support and the anxiety level of preoperative appendicitis patients.

DISCUSSION

Relationship between family support and anxiety level of preoperative appendectomy patients

This study's results found that there was no relationship between family support and the anxiety level of preoperative appendicitis patients. This study's results are different from research conducted by Jenita (2010) titled "Relationship of Family Support with Preoperative Patient Anxiety Levels in Room RB2 of HAM Hospital North Sumatra," obtaining the result that there is a relationship between family support and anxiety level of preoperative patients from 62 study respondents analyzed using the Spearman Rank test with the most incredible family support is a good category 53.2%, and the least is the less category 17.7%. For anxiety, the highest category is mild anxiety, 46.8%, and the least is the heavy category, 24.2%.

Family support is also related to a person's level of anxiety, where the role of the family is expected normatively from someone in certain situations to fulfil expectations. However, the anxiety can occur in the conflicted family (Dickson et al., 2022; Morelli et al., 2022)

From the research results that have been done showed that there is no relationship between family support and anxiety levels. Hence, family support must be increased, especially in assessment support, to reduce anxiety in preoperative patients. In addition, health workers need information from the patient's family to always pay attention to their family members because the effects of family support on health and well-being function together (Brandt et al., 2022; Pestana-Santos et al., 2022; Zemp et al., 2022).

More specifically, adequate family support is associated with reduced mortality, easier recovery from illness, cognitive function, and physical and emotional health. Besides that, the positive influence of family social support is on adjustment to stressful life events. Family support should not be in the medium or low category because it directly affects the patient's anxiety level. The level of closeness that is felt will directly impact the client who will undergo surgery. The family can be the closest part of the client, so maximum support must be given (Gao et al., 2022; Schwab et al., 2022; Shi et al., 2022; Theberath et al., 2022).

The relationship between social support and the anxiety level of preoperative appendectomy patients

This study's results found that there was no relationship between social support and the anxiety level of preoperative appendectomy patients. Anxiety about surgery is a dangerous and unpleasant situation that individuals experience during preparation, before, and during surgery. Several factors influence anxiety, namely internal factors such as lack of self-confidence, low self-concept, inadequate preparation by health workers, fear of failure, excessive worry, and irrational thoughts of failure in surgery: external factors, environment, and social support, both material and non-material social support (Akyirem et al., 2022; El-Zoghby et al., 2022; Gatti et al., 2022; Kechine et al., 2022; Zachciał et al., 2022).

That the absence of appropriate social support is a significant determinant for the emergence of anxiety, balance in social exchange will produce interpersonal relationships that satisfy experience, or reciprocal exchange makes individuals believe more than others assist. The high anxiety of facing surgery reflects the need for psychological readiness of the patient. This condition reflects the need for more confidence from the patient in facing surgery (Atalay et al., 2022; Edú-Valsania et al., 2022; Egger & Huber, 2022).

Anxiety is an emotional state characterized by physiological arousal, unpleasant tension, and an uneasy feeling that something terrible will happen. If this condition persists in the long term, it can cause stress or mental pressure, undoubtedly fatal for the person concerned. So, to anticipate mental stress, we need other parties who can provide an easy-to-understand understanding of the problems faced so that anxiety levels can be reduced, and stress can be avoided (Prasko et al., 2022; Putwain et al., 2023; Spiegel2022).

The practical contribution of social support to anxiety about surgery is 40.6%. This sizable contribution is due to a lack of self-confidence and self-concept that makes students unable to calm down and assess themselves as unable to face surgery well. In such conditions, social support is needed in providing alternative solutions to a problem that the person concerned responds to. Surely it will be able to reduce the anxiety that arises.

As part of society, health workers should be able to provide moral support, information, and support facilities during patient care to reduce the patient's anxiety level. Among other things, this can be done by providing the information/counseling needed by the family about the patient's treatment and socializing about patient safety so that the patient is not afraid of undergoing surgery.

CONCLUSION

This study's results indicate that there is no relationship between family support and the anxiety level of preoperative appendicitis patients. This investigation aimed to assess the role of social and family support in preoperative patient anxiety. The most apparent finding from this study is that social and family support does not affect a patient's anxiety about being operated on. Although this study focuses on anxiety, these findings may have something to do with the subjective experience of the surgical situation. This paper suggests that anxiety in a surgical situation is an emotional problem, so external support is not strong enough to influence one's subjective perception. Limited to a small sample size, this would be a fruitful area for further research. Therefore, there is a definite need for a larger sample in this study.

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