

# Family Support and Social Support in Pre-Operative Anxiety Status

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## Abstract

**Introduction:** Anxiety is vital in determining the decision of appendectomy surgery. Anxiety may be reduced with support from family and society.

**Purpose:** The purpose of this paper is to review the relationship between family and social support on the anxiety of preoperative appendectomy patients.

**Methods:** This study used an analytical descriptive quantitative method with a cross-sectional approach on 15 preoperative appendectomy patients in the operating room. Collecting data using a questionnaire from one month. Data analysis using spearman rank.

**Results:** The results of this study indicate that family support has a significance value of 0.904 for anxiety, while social support has a significance value of 0.059.

**Conclusion:** This study shows that family and social support do not affect the anxiety status of preoperative appendectomy patients. Therefore, future studies on the current topic are recommended but with a larger sample to prove the hypothesis.

**Keywords:** Pre-surgery • Social support • Family support • Anxiety • Appendectomy

## Introduction

Appendicitis is 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, in 2019, there were 17.70 million new cases of appendicitis globally, with an age-standardized incidence rate of 229.86 per population of 100,000. There are 259 million cases of undiagnosed appendicitis in men worldwide, while in women, there are 160 million cases of undiagnosed appendicitis [1]. 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 the Philippines at 0.022% and Vietnam at 0.02%. The incidence of acute appendicitis in developing countries is lower than in developed countries [2].

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 the incidence 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 [3].

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. Anxiety in preoperative patients impacts the course of surgery, such as impacting the cardiovascular system by increasing blood pressure so that the operation can be cancelled. Everyone's response to surgery is different, but most people will experience fear and anxiety [4-6]. 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 anaesthesia, worry about the effects of surgery if it fails, and worry about costs [7,8]

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 [9-11]. 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, family, and social support are needed by patients who will face surgery. If there is no family support and social support, it will have a psychological impact on these patients. This study aims to assess the relationship between family support and social support with the anxiety level of preoperative appendectomy patients.

## Methods

The design of this research is descriptive-analytic with a cross-sectional approach. The sample consisted of 15 patients who were undergoing appendectomy, aged between 15-65 years, and had been treated for at

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least 24 hours before. CITO surgery or perforated appendectomy were 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 [12] 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) [13], 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.

## Results

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.** Characteristics of respondents.

Characteristics	n	(%)
<b>Age (years)</b>		
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
<b>Gender</b>		
Men	7	46.7
Women	8	53.3
<b>Education</b>		
SD	1	6.7
Junior high school	6	40
Senior high school	4	26.7
College	4	26.7
<b>Profession</b>		
Doesn't work	3	20
Self-employed	4	26.7
Civil Servant/Police/Soldier	1	6.7
Private	7	46.7
<b>Live with family</b>		
Yes	15	100
<b>Marital status</b>		
Not married yet	6	40
Married	9	60
<b>Caring at home</b>		
Couple	8	53.3
Others (siblings)	7	46.7
<b>Long suffered appendicitis (months)</b>		
<1-2	2	13.3

03-Apr	1	6.7
05-Jun	4	26.7
>6	8	53.3

## Family support

A 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						Total	
	Light		Currently		Heavy		f	%
	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 of the 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	Correlation Coefficient	1,000
		Sig. (2-tailed)	. 0.904
	N		15
	Anxiety level	Correlation Coefficient	-0.034
Sig. (2-tailed)		0.904	
N		15	

The results of the Spearman rank analysis showed a correlation coefficient (rho) 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.

## 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.

Family support	Anxiety Level						Total	
	Light		Currently		Heavy		f	%
	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 the majority of 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
Spearman's rho	Anxiety level	Correlation Coefficient 1,000	-0.498
		Sig. (2-tailed)	.59
		N	15
Level of social support	Level of social support	Correlation Coefficient -0.498	1,000
		Sig. (2-tailed)	.59
		N	15

The results of the Spearman rank analysis showed a correlation coefficient (rho) 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.

The results of this study found that there was no relationship between family support and the anxiety level of preoperative appendicitis patients. The results of this study are different from research conducted by Jenita [14] with the title "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 the level of 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 fulfill expectations. Anxiety can occur if there is conflict in the family [15,16].

From the results of research that has been done that there is no relationship between family support and anxiety levels. Hence, family support needs to 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 [17-19].

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 [20-23].

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

The results of this study 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 or situation that individuals experience both 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 [24-28].

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 [29-31].

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 the concerns and problems faced, so that anxiety levels can be reduced, and stress can be avoided [32-34].

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 that can provide alternative solutions to a problem that the person concerned responds to. Surely it will be able to reduce the anxiety that arises.

Health workers, as part of society, 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 treatment the patient is undergoing and socializing about patient safety so that the patient is not afraid of undergoing surgery.

## Conclusion

This study's results indicate 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 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.

## References

1. Yang, Yongping, Chengjun Guo, Zhaoxuan Gu, and Junjie Hua, et al. "The Global Burden of Appendicitis in 204 Countries and Territories from 1990 to 2019." *Clin Epidemiol* 14(2022): 1487-1499.
2. Wijaya, Wahyu, Mizar Eranto, and Ringgo Alfarisi. "Perbandingan Jumlah Leukosit Darah Pada Pasien Appendicitis Akut Dengan Appendicitis Perforasi." *J Ilmiah Kesehatan Sandi Husada* 9 (2020): 341-346.
3. Joseph, Stephanie. "2022 Scientific Session of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), Denver, Colorado, 16-19 March 2022: Posters." *Surg Endosc* 332 (2022): 70-218.
4. Gill, Rabia, and Sheldon Goldstein. "Evaluation and Management of Perioperative Hypertension." (2020).
5. Lan, Lihong, Xiaozheng Zhu, Bili Ye, and Huizhen Jiang, et al. "Effects of Individualized Nursing Based on Zero-Defect Theory on Perioperative Patients Undergoing Laparoscopic Cholecystectomy." *Dis Markers* 2022

- (2022): 5086350.
6. Qi, Xiaofei, Daili Chen, Gehui Li, and Jun Cao, et al. "Risk Factors Associated with Intraoperative Shivering During Caesarean Section: A Prospective Nested Case-Control Study." *BMC Anesthesiol* 22 (2022): 56.
  7. Piras, Ilenia, Maria Francesca Piazza, Cristina Piccolo, and Antonio Azara, et al. "Experiences, Emotions, and Health Consequences among COVID-19 Survivors after Intensive Care Unit Hospitalization." *Int J Environ Res Public Health* 19 (2022): 6263.
  8. Rodziewicz, Thomas L, Benjamin Houseman, and John E Hipskind. "Medical Error Reduction and Prevention." (2018).
  9. Hanalis-Miller, Tsipi, Gabriel Nudelman, Shamgar Ben-Eliyahu, and Rebecca Jacoby. "The Effect of Pre-Operative Psychological Interventions on Psychological, Physiological, and Immunological Indices in Oncology Patients: A Scoping Review." *Front Psychol* 13 (2022): 839065.
  10. Salzmann, Stefan, Johannes AC Laferton, Meike C Shedden-Mora, and Nicole Horn, et al. "Pre-Surgery Optimization of Patients' Expectations to Improve Outcome in Heart Surgery: Study Protocol of the Randomized Controlled Multi-Center PSY-HEART-II Trial." *Am Heart J* 254 (2022): 1-11.
  11. Wang, Rulin, Xin Huang, Yuan Wang, and Masod Akbari. "Non-Pharmacologic Approaches in Preoperative Anxiety, a Comprehensive Review." *Front Public Health* 10 (2022): 854673.
  12. Gustiyanto, Andreiko, Joko Murdiyanto, Veber Ali Sabana, and Dwi Ernawati, et al. "Hubungan Dukungan Keluarga Dengan Tingkat Kecemasan Pasien Pre Operasi Di Ruang Instalasi Bedah Sentral: Literatur Review." *UNISA* (2022).
  13. Çetinkaya, Funda, Esin Kavuran, and Kevser Sevgi Ünal Aslan. "Validity and Reliability of the Amsterdam Preoperative Anxiety and Information Scale in the Turkish Population." *Turk J Med Sci* 49 (2019): 178-183.
  14. Jenita, Ruspita Nadeak. "Hubungan Keluarga Dengan Tingkat Kecemasan pasien Pra Oporasi di Ruang RB2 RSUP HAM." (2010).
  15. Dickson, Sophie J, Rebecca-Lee Kuhnert, Cassie H Lavell, and Ronald M Rapee. "Impact of Psychotherapy for Children and Adolescents with Anxiety Disorders on Global and Domain-Specific Functioning: A Systematic Review and Meta-Analysis." *Clin Child Fam Psychol Rev* 25 (2022): 720-736.
  16. Morelli, Nicholas M, Kajung Hong, Jackelyne Garcia, and Xavier Elzie, et al. "Everyday Conflict in Families at Risk for Violence Exposure: Examining Unique, Bidirectional Associations with Children's Anxious-and Withdrawn-Depressed Symptoms." *Reson Child Adolesc Psychopathol* 51 (2023): 317-330.
  17. Brandt, Maja, Lene Johannsen, Laura Inhestern, and Corinna Bergelt. "Parents as Informal Caregivers of Children and Adolescents with Spinal Muscular Atrophy: A Systematic Review of Quantitative and Qualitative Data on the Psychosocial Situation, Caregiver Burden, and Family Needs." *Orphanet J Rare Dis* 17 (2022): 274.
  18. Pestana-Santos, Marcia, Adriana Pestana-Santos, Ivone Evangelista Cabral, and Margarida Reis Santos, et al. "Nurses' Views on How to Best Design a Program to Prevent Adolescents' Anxiety in the Perioperative Period. A Qualitative Study." *J Perianesth Nurs* 37 (2022): 458-466.
  19. Zemp, Martina, Amos-Silvio Friedrich, Lorena Holzmeier, and Simone Seebacher, et al. "Effects of Clown visits on Stress and Mood in Children and Adolescents in Psychiatric Care—Protocol for a Pilot Study." *PLoS One* 17 (2022): e0264012.
  20. Gao, Bicheng, Kuiliang Li, Ju Liu, and Xuan Liu, et al. "Life Events and Depression Among Children and Adolescents in Southwest China: A Two-Stage Moderated Mediation Model of Social Support and Cognitive Styles." *BMC Psychiatry* 22 (2022): 819.
  21. Schwab, Roxana, Kathrin Stewen, Tanja Kottmann, and Katharina Anic, et al. "Mental Health and Social Support Are Key Predictors of Resilience in German Women with Endometriosis during the COVID-19 Pandemic." *J Clin Med* 11 (2022): 3684.
  22. Shi, Wei, Li Zhao, Min Liu, and Binxue Hong, et al. "Resilience and Mental Health: A Longitudinal Cohort Study of Chinese Adolescents before and During COVID-19." *Front Psychiatry* 13 (2022): 948036.
  23. Theberath, Monique, David Bauer, Weizhi Chen, and Manisha Salinas, et al. "Effects of COVID-19 Pandemic on Mental Health of Children and Adolescents: A Systematic Review of Survey Studies." *SAGE Open Med* 10 (2022): 20503121221086712.
  24. Akyirem, Samuel, Yakubu Salifu, Jonathan Bayuo, and Precious Adade Duodu, et al. "An Integrative Review of the use of the Concept of Reassurance in Clinical Practice." *Nurs Open* 9 (2022): 1515-1535.
  25. El-Zoghby, Safaa M, Maha E Ibrahim, Nancy M Zaghloul, and Shaimaa A Shehata, et al. "Impact of Workplace Violence on Anxiety and Sleep Disturbances among Egyptian Medical Residents: A Cross-Sectional Study." *Hum Resour Health* 20 (2022): 84.
  26. Gatti, Matteo, Rocco Palumbo, Alberto Di Domenico, and Nicola Mammarella. "Affective Health and Countermeasures in Long-Duration Space Exploration." *Heliyon* 8(2022): e09414.
  27. Kechine, Temesgen, Tilahun Ali, Teshager Worku, and Lemesa Abdisa, et al. "Anxiety and Associated Factors among Clients On Highly Active Antiretroviral Therapy (HAART) In Public Hospitals of Southern Ethiopia: A Multi-Center Cross-Sectional Study." *Psychol Res Behav Manag* 15 (2022): 3889-3900.
  28. Zachciał, Justyna, Izabella Uchmanowicz, Michał Czaplą, and Magdalena Krajewska, et al. "The Association between Psychosocial and Age-Related Factors with Adherence to Immunosuppressive Therapies after Renal Transplantation." *J Clin Med* 11 (2022): 2386.
  29. Atalay, Mustafa Ozgun, Pinar Aydemir, and Taner Acuner. "The Influence of Emotional Exhaustion on Organizational Cynicism: The Sequential Mediating Effect of Organizational Identification and Trust in Organization." *Sage* 12 (2022): 21582440221093343.
  30. Edú-Valsania, Sergio, Ana Lagüía, and Juan A. Moriano. "Burnout: A Review of the Theory and Measurement." *Int J Environ Res Public Health* 19 (2022): 1780.
  31. Egger, Manuela, and Stephan Gerhard Huber. "Consequences of COVID-19 on Education and Work of Young Adults: An Expert and Peer Interview Study in Germany, Austria, and Switzerland of their Perspectives on the Past, Present and Future." *Youth* 2 (2022): 610-632.
  32. Prasko, Jan, Marie Ociskova, Jakub Vanek, and Julius Burkauskas, et al. "Managing Transference and Countertransference in Cognitive Behavioral Supervision: Theoretical Framework and Clinical Application." *Psychol Res Behav Manag* 15(2022): 2129-2155.
  33. Putwain, David W, Joanna Beaumont, and Diahann Gallard. "Adaptability vs. Buoyancy: Which Offers the Greater Protection Against Test Anxiety and Could Relations be Reciprocal?." *Learn Individ Differ* 101 (2023): 102247.
  34. Spiegel, Brennan. "Gravity and the Gut: A Hypothesis of Irritable Bowel Syndrome." *Am J Gastroenterol* 117 (2022): 1933-1947.

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