

## THE RELATIONSHIP BETWEEN FAMILY SUPPORT SYSTEM AND CHILD ANXIETY LEVELS BEFORE CIRCUMCISION

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### Abstract

*The problem of anxiety in children before circumcision is still found, this anxiety has an impact on the psychological problems of children undergoing circumcision, so the role of the family in accompanying it is needed. One of the roles of the family that is thought to be related to children's anxiety is the family support system. The purpose of this study was to determine the relationship between the family support system and the child's level of anxiety before circumcision. This type of research used descriptive correlation with cross sectional design, the population in this study were all children who were circumcised at the Fathiyah Husada medical center. The sampling technique was accidental sampling, the number of samples was 21 people. The instrument used was a family support system questionnaire sheet and a child anxiety questionnaire. Data analysis was carried out with univariate and bivariate using Spearmen Rho test. The results showed that the Family Support System with good categories were 12 families (57.1%), the majority of children's anxiety levels were mild as many as 9 respondents (42.9%). The results of statistical tests using Spearmen Rho showed the relationship between the family support system and the child's level of anxiety before circumcision was obtained  $p\text{-value} = 0.000$  ( $p < 0.05$ ). Conclusion of the study showed that there was a relationship between the family support system and the child's level of anxiety before circumcision. It is hoped that families can improve the support system for children who will undergo circumcision, so that the anxiety experienced by children can be minimized.*

**Keywords:** Family support system; Anxiety; Circumcision

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### 1. Introduction

Circumcision is an action by removing the foreskin of the penis so that the glans penis becomes open. This action is a minor surgical procedure that is most often performed worldwide, especially for men. Medically circumcision is performed to maintain sexual health and prevent sexually transmitted diseases. The goal is to clean the glans from various disease-causing impurities that may be attached to the glans penis. which still has the prepuce (Hermana, 2017).

The World Health Organization (WHO) recommends circumcision for every man around the world, it is known that one third of them have been circumcised and 70% of them are Muslim. About 25-33% of the total male population in the world is circumcised. In the US, an average of one million newborn boys are circumcised each year. Meanwhile in Indonesia, WHO data shows that 85% of boys perform circumcision (WHO, 2020).

Hermana, (2017) states that circumcision is also called a circular incision, which is identified with the cutting of the prepuce that is circular to the

shaft of the penis. Therefore, anxiety will arise in children and the need for a support system such as family or friends who will listen and provide advice and emotional support will be very useful for someone who is experiencing anxiety or stress (Hermana, 2017).

Anxiety is a visible emotion and individual experience. Anxiety is different from fear. Fear has a specific source or object that the individual can identify and explain. Fear is caused by physical or psychological conditions against threatening situations and fear produces anxiety (Stuart & Laraia, 2016).

Support systems can reduce stress or anxiety reactions by improving physical and mental well-being. Support from the family or the family support system is very necessary because the family is a group of people with ties of marriage, birth and adoption which aims to create, maintain a culture and improve the physical, mental, emotional and social development of each family member. The family support system can be in the form of internal and external support. Families have a variety of

supportive supports such as emotional, informative, rewarding and instrumental support (Handayani, 2010).

The family support system or family support which is part of social support has an influence on health. If we feel supported by the environment then things can become easier during stressful events. This support can be realized in the form of emotional support through empathy, advanced support, countermental support through direct assistance in the form of property or objects and informative support through the provision of advice, suggestions or instructions (Friedman, 2017).

From the results of previous research conducted showed that there was a significant relationship between family support and anxiety levels (Nurwulan, 2017). Other research also states that surgery with the right program in children can reduce anxiety in parents and also on medical staff because it can increase satisfaction with the operation to be carried out (Criss et al., 2018).

Research in Zimbabwe has shown qualitatively that safe, early circumcision of male infants with good and correct equipment increases parents' interest in providing early circumcision to their children (Mavhu et al., 2016). Other studies have also shown that children who underwent surgical circumcision did not develop symptoms of serious Post-Traumatic Stress Disorder. In contrast, children who were exposed to general anesthesia during circumcision showed more serious post-traumatic stress disorder symptoms than children who had local anesthetics (Kozanhan et al., 2018).

Based on the results of observations and interviews conducted in the field, there are several scopes of anxiety that occur in children, namely children experiencing anxiety, not knowing what to think and going through their minds starting from how the circumcision will be to what will happen later, the child's heart is pounding, not calm and always ask the family and the child feels calmer after getting advice, information, and motivation from the family that everything will be fine. The problems faced by these children can make them experience anxiety, namely experiencing fear, tension, and anxiety when circumcision will be carried out. They also have difficulty sleeping and diseases such as headaches, increased blood pressure and so on are caused by mental stress during circumcision. So far there has been no research examining whether there is a relationship between children's anxiety and family support. Only a few studies are suspected to have a relationship, but do not completely discuss how the relationship between the two variables. This is the basis for researchers conducting research on the relationship between the family support system and the child's level of anxiety before circumcision.

## 2. Method

The research design used is non-experimental, namely the design or research design that is correlational, namely research conducted to determine the relationship between two variables. The approach used is cross-sectional, which is a type of research that emphasizes the time of measurement/observation of independent and dependent variable data only once at a time. In this type, the independent and dependent variables are assessed simultaneously at one time, so there is no follow-up. The research sample was 21 people who were taken using accidental sampling technique. The data collection tool used is a questionnaire about the Family Support System and the Zung Self Rating Anxiety Scale (SAS). Analysis of the data used was the Spearman rho Correlation Test at a significance level of 95% ( $p < 0.05$ ).

## 3. Results and Discussion

Based on table 1. above, it is known that the frequency distribution of the Family Support System is mostly "good", with 12 families (57.1%). And the frequency distribution of anxiety in circumcised children, there are 9 (42.9%), mild and moderate categories, although the results from the mild and moderate categories have the same value. The results from this frequency distribution are still said to be "mild".

**Table 1.** Frequency distribution of Family Support System and anxiety in children

Characteristics	Frequency (f)	Percentage (%)
<b>Support System of Family</b>		
Good	12	57.1 %
Moderate	7	33.4 %
Less	2	9.5 %
<b>Child anxiety</b>		
Severe	3	14.2%
Medium	9	42.9%
Mild	9	42.9%

Based on table 2, the majority of respondents have good family support system results, with anxiety in the mild category as many as 9 people (42.9%). The results of the rho sperm rank statistical test showed that the relationship between the family support system and the child's level of anxiety before circumcision with a P value of 0.000 ( $< 0.005$ ), meaning that there was a relationship between the family support system and the child's level of anxiety before circumcision.

Based on the research results obtained from a sample of 21 children, it shows that the majority of respondents have a good family support system as many as 9 people (42.9%), with a mild anxiety level of 9 children (42.9%). The results of statistical tests

showed that there was a relationship between the family support system and the child's level of anxiety before circumcision.

This study is also in line with Parjanto (2009) research, the relationship between the family support system and the child's level of anxiety before circumcision at the Adhia Tunggur Slogohimo

Wonogiri treatment center, which was found with the ui chi squarer showing the p value ( $0.000 < 0.005$ ), so that The decision taken was that there was a relationship between the family support system and the child's level of anxiety before circumcision at the Adhia Tunggur Slogohimo Wonogiri treatment center (Parjanto, 2009).

**Table 2.** The results of the analysis of the relationship between the family support system and the level of anxiety in circumcised children

Support system of Family	Child anxiety						Total		Pvalue
	Severe		Medium		Mild		f	%	
	f	%	f	%	f	%			
Good	0	0.0	0	0.0	9	42.9	9	42.9	.000
Moderate	1	4.9	3	14.2	0	0.0	4	19.1	
Mild	2	9.6	6	28.4	0	0.0	8	38.0	
Total	3	14.5	9	42.6	9	42.9	21	100	

This research is also in line with khasanah research (2014), The results showed that the level of anxiety in the control group as many as 8 children (80%) experienced mild anxiety, and the experimental group as many as 9 children (90%) were not anxious. The significant value of p value 0.000 is smaller (<) than 0.05, so Ho is rejected and Ha is accepted. The conclusion is that providing information has an effect on reducing anxiety in pre-circumcised children at Pondok Khitan R. Isnanta Wonosidi Lor Wates. This study suggests that children who have not been circumcised should be given information about circumcision before the circumcision procedure is carried out by parents or health workers (Khasanah, 2014).

Boys who were anxious before anesthesia showed a significantly greater incidence of problem behavior on emergence after anesthesia, compared with boys who were calm before anesthesia (Aono et al., 1999). Another study comparing smartclamp circumcision and conventional techniques showed no statistically significant differences between the 2 groups in terms of age, bleeding, infection, and discomfort in outcome ( $p > 0.05$ ), but the results showed that conventional methods showed the results of parental anxiety and edema of the penis are lower than the smartclamp method (Karadag et al., 2015).

Other studies have shown that factors that influence anxiety in children undergoing circumcision include the type of surgical technique, the level of education of the mother or father, the presence of preoperative anxiety, and a history of previous surgery (Zavras et al., 2015). Other studies have shown that education given to mothers or parents and children about circumcision with the Multimedia CD technique can increase knowledge and reduce anxiety in parents and children (Chang et al., 2017).

Research conducted on parental anxiety in children with hypospadias who underwent

circumcision, showed that there was no difference in anxiety experienced in circumcision when compared to circumcision in normal children. This shows that the anxiety that occurs in both normal and abnormal circumcision causes anxiety (Erdem et al., 2020).

This is also in line with the opinion of Misgiyanto and Susilawati (2014), that the family support system is assistance that can be given to other family members in the form of goods, services, information and advice that is able to make the recipient of support feel loved, appreciated and at ease. This support is an attitude, action and acceptance of the family towards the sick patient. Family members view that supportive people will always be ready to provide the necessary help and assistance. In addition, according to Misgiyanto and Susilawati (2014), there is a strong relationship between the family and the health status of its members where the role of the family is very important for every aspect of health care for family members, from strategies to the rehabilitation phase. This statement that family support which includes attitudes, actions, and family acceptance of sick sufferers is one of the roles and functions of the family, namely providing an affective function to fulfill the psychosocial needs of family members in giving love (Misgiyanto & Susilawati, 2014).

#### 4. Conclusions and suggestions

From the results of research and discussion of the relationship between the family support system and the child's level of anxiety before circumcision, it can be concluded that there is a relationship between the family support system and the child's anxiety level before circumcision. It is hoped that families who will carry out circumcision in children, can increase the provision of family system support in reducing anxiety that occurs in children.

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## 6. References

- Aono, J., Mamiya, K., & Manabe, M. (1999). *Problematic Behavior on Emergence After Halothane*. 542–544.
- Chang, S. F., Hung, C. H., Hsu, Y. Y., Liu, Y., & Wang, T. N. (2017). The effectiveness of health education on maternal anxiety, circumcision knowledge, and nursing hours: A quasi-experimental study. *Journal of Nursing Research*, 25(4), 296–303. <https://doi.org/10.1097/jnr.0000000000001177>
- Criss, C. N., Brown, J., Gish, J. S., Gadepalli, S. K., & Hirschl, R. B. (2018). Clinic-day surgery for children: a patient and staff perspective. *Pediatric Surgery International*, 34(7), 755–761. <https://doi.org/10.1007/s00383-018-4288-3>
- Erdem, A. O., Doğan, B., Memiş, Ç. Ö., Sevinçok, L., Yazici, M., & Özkisacik, S. (2020). Evaluating the anxiety levels of parents of children underwenting hypospadias surgery. *Duzce Medical Journal*, 22(1), 23–28. <https://doi.org/10.18678/dtfd.651928>
- Friedman, M. (2017). *Buku Ajar Keperawatan keluarga : Riset, Teori, dan Praktek* (5th ed.). EGC.
- Handayani, S. (2010). *Buku Ajar Pelayanan Keluarga Berencana*. Pustaka Rihama.
- Hermana, A. (2017). *Teknik Khitan Panduan Lengkap, Sistematis dan Praktis* (1st ed.). Widya Medika.
- Karadag, M. A., Cecen, K., Demir, A., Kivrak, Y., Bagcioglu, M., Kocaaslan, R., Ari, M., & Altunrende, F. (2015). SmartClamp circumcision versus conventional dissection technique in terms of parental anxiety and outcomes: A prospective clinical study. *Canadian Urological Association Journal*, 9(1–2), E10–E13. <https://doi.org/10.5489/cuaj.2131>
- Khasanah, N. (2014). Pengaruh Pemberian Informasi Terhadaptingkat Kecemasan Pada Anak Sebelum Khitan Dipondok Khitan R. Isnanta Wonosidi Lor Wates. *Jurnal Ilmu Kesehatan STIKES Aisyiyah Yogyakarta.*, 2((2) 2014, 99–106.
- Kozanhan, B., Kocaoğlu, C., Gündüz, M., & Akça, Ö. F. (2018). Posttraumatic stress disorder symptoms in children exposed to circumcision under general or local anesthesia. *Turkish Journal of Pediatrics*, 60(6), 718–725. <https://doi.org/10.24953/turkjped.2018.06.013>
- Mavhu, W., Hatzold, K., Ncube, G., Fernando, S., Mangenah, C., Chatora, K., Mugurungi, O., Ticklay, I., & Cowan, F. M. (2016). Perspectives of parents and health care workers on early infant male circumcision conducted using devices: Qualitative findings from Harare, Zimbabwe. *Global Health Science and Practice*, 4, S55–S67. <https://doi.org/10.9745/GHSP-D-15-00200>
- Misgiyanto, & Susilawati, D. (2014). Hubungan antara Dukungan Keluarga dengan Tingkat Kecemasan Penderita Kanker Serviks Paliatif. *Jurnal Keperawatan*, 5. <https://doi.org/10.22219/jk.v5i1.1855>
- Nurwulan, D. (2017). *Hubungan Dukungan Keluarga Dengan Tingkat Kecemasan Pada Pasien Pre Anestesi Dengan Tindakan Spinal Anestesi Di RSUD Sleman*. Politeknik Kesehatan Kementerian Kesehatan Yogyakarta.
- Parjanto. (2009). *Hubungan Antara Support System Keluarga Dengan Tingkat Kecemasan Anak Sebelum Tindakan Sirkumsisi Di Balai Pengobatan Adhia Tunggur Slogohimo Wonogiri*.
- Stuart, G. W., & Laraia, M. T. (2016). *Principles and Practice of Psychiatric Nursing* (8th ed.). Mosby Book Inc.
- WHO. (2020). *New data on male circumcision and HIV prevention: policy and programme implications*.
- Zavras, N., Tsamoudaki, S., Ntomi, V., Yiannopoulos, I., Christianakis, E., & Pikoulis, E. (2015). Predictive factors of postoperative pain and postoperative anxiety in children undergoing elective circumcision: A prospective cohort study. *Korean Journal of Pain*, 28(4), 244–253. <https://doi.org/10.3344/kjp.2015.28.4.244>