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Knowledge and Attitudes of Parents with Prevalence of Autism in Children in Schools with Special Needs (SABK) Unggul Sakti Jambi City

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ABSTRACT

Oral and dental health is important for anyone, including children with special needs. According to the Ministry of Health of the Republic of Indonesia, the role of parents, especially mothers, is very important in maintaining the cleanliness of their child's teeth and mouth. Especially in autistic children, caries and gingivitis are encountered, and while their behavior will cause dental care to be rather difficult. Dental caries is a dental tissue disease characterized by tissue damage, starting from the surface of the tooth extending towards the pulp. The study was to determine the relationship of knowledge and attitudes of parents with the prevalence of dental caries in autistic children in the School of Children with Special Needs of Jambi City. This study used a cross sectional approach. The sampling technique used was purposive sampling as many as 30 respondents. The measuring instruments used were questionnaires and dental caries observation sheets. Prevalence of dental caries was 77% or 23 children had caries, knowledge of parents of autistic children was 86.7% or 26 people had high criteria while those with moderate criteria were 13.3% or 4 people and attitudes in parents of autistic children were as much as 76.7% or 23 people have good criteria while those that have good criteria are 23.3% or 7 people. There is relationship between the level of knowledge of parents with the prevalence of dental caries in autistic children (p value = 0.031) and OR = 16.5 and there is relationship between attitudes of parents with the prevalence of dental caries (p value = 0.033), and OR = 8.88. There is a significant relationship between the level of knowledge of parents with the prevalence of dental caries in autistic children and there is a significant relationship between attitudes of parents with the prevalence of dental caries.

Keywords: Knowledge; Attitudes; Parents; Autistic Children; Caries Prevalence

Introduction

Autism is a developmental disorder in children that includes communication, interaction and habits. Allegedly in the United States there are 300,000 people with autism. In Indonesia there is no data on the number of people with autism, due to the weak data collection system. Ten years ago only 4-5

people with autism found 10,000 births, this number increased 2 years ago to 15-20. Whereas this year the world prevalence of autism increased to 20-60 per 10,000 births. Seeing the increasing number of people with autism. Most likely this disease will still continue.¹

Mother's knowledge about children's dental health is one of the important things in this era.

Mother's knowledge about children's dental health can be seen from several aspects, namely knowledge of the causes of dental health problems, due to dental health problems, child dental care, food management and time to check the child's teeth to the dentist. Caries severity is a measurement of how severe dental caries is in a child.²

Autistic children have serious oral health problems, caused by their inability to brush their teeth. The main problem dealing with autistic children is to build communication and pay attention to the health of their teeth. Cooperation between parents of autistic children and their dentists is the key to the successful dental care of autistic children aspects of dental and oral health of autistic patients assessed and determined by the knowledge, attitudes and practices of their mothers in maintaining their children's dental health.³

According to 2013 Basic Health Research (Risksdas) data, 25.9% of Indonesia's population has oral and dental health problems and as many as 14 provinces have dental and oral health problems above the national level. Jambi Province has 16.8% dental and oral health problems. Indonesia's DMF-T index is 4.6 with their respective values, namely D-T = 1.6; M-T = 2.9; F-T = 0.08. The Jambi Province DMF-T Index is 5.5 with their respective values, namely D-T = 2.3; M-T = 3.1; F-T = 0.04.⁴

Tulangow (2015), in his research description of dental caries status in children with special needs at YPAC Manado SLB, a DMF-T index of 4.4 included in the medium category.⁵

The role of parents, especially mothers, is very important in maintaining the cleanliness of their child's teeth and mouth. Especially in autistic children, caries and gingivitis are encountered, and while their behavior will cause dental care to be rather difficult. The handling of autistic children is more multidisciplinary because of the many abnormalities that can be obtained.^{1,8,11} Therefore, it was interested to find out the relationship between knowledge and attitudes of parents with caries status in autistic children in Schools with Special Excellence.

The Children of Special Needs School of UnggulSakti (SABK) in Jambi City, which is located in TalangBanjar Village, Jambi City, is one of the schools for children with special needs who

handle various types of children with special needs. SABK Unggul Sakti Jambi City, including autism.

Material and Method

This research design is an analytical survey, to determine the level of knowledge and attitudes of parents about dental caries status. The study was conducted using a cross sectional approach by discussing the relationship between knowledge and knowledge of parents with the prevalence of caries in autistic children in the SABK Unggul Sakti City of Jambi. The population in this study were all autistic children from Unggul Sakti SABK who had autism and their parents numbered 47 people. Samples were taken using Purposive Sampling with a sample size of 30 people. 30 people filtered by inclusion criteria were children with mild and moderate autism, willing to be examined while the exclusion criteria were children with severe autism and were not willing to be examined. The instruments used in this study were questionnaires and objective examinations in collecting data. Univariate analysis in this study is the prevalence of dental caries and knowledge & attitudes of parents of autistic children. Bivariate analysis in this study is by using the chi-square analysis test. The chi-square analysis test was used to determine the relationship of the variables tested. The hypothesis is stated to be accepted if the value of sig <0.05. Overview of the prevalence of dental caries.

Table 1
Distribution of Prevalence of Caries in Autistic Children's Teeth in SABK Unggul Skati in Jambi City

No	Prevalence of Dental Caries	Total	
		N	%
1	Caries free	7	23.3
2	Caries	23	76.7
Total		30	100

Table 2
Distribution of Knowledge for Parents of Autistic Children in SABK Unggul Sakti in Jambi City

No	Parental Knowledge	Total	
		N	%
1	High	26	86.7
2	Modarate	4	13.3

3	Low	0	0
Total		30	100

Table 3
Distribution of Attitudes of Parents of Autistic Children of SABK Unggul Sakti Jambi City

No	Attitudes of Parents	Total	
		N	%
1	Well	7	23,3
2	Pretty good	23	76,7
3	Not good	0	0
Total		30	100

Table 4
Distribution of the Relationship between Knowledge of Parents and the Prevalence of Autistic Childhood Caries in SABK Unggul Sakti in Jambi City

No	Knowledge Criteria	Dental Caries				Total		P-Value	OR
		Caries free		Caries		N	%		
		n	%	N	%				
1	High	4	57,1	22	95,7	26	86,7	0,031	16,5
2	Modarate	3	42,9	1	4,3	4	13,3		
3	Low	0	0	0	0	0	0		
Total		7	100	23	100	30	100		

Based on table 4, it is known that the statistical test results obtained sig = 0.031 (p <0.05), it can be concluded that there is a significant relationship between the level of knowledge of parents and the prevalence of dental

caries in autistic children. From the results of the analysis it was found that OR value = 16.5 means that respondents with knowledge of parents on high criteria have 16 times the chance to experience dental caries in their children.

Table 5
Distribution of the Relationship between the Attitudes of Parents and the Prevalence of Autistic Childhood Caries in SABK Unggul Sakti Jambi City

No	Attitudes Criteria	Karies Gigi				Total		P-Value	OR
		Free Caries		Caries		n	%		
		n	%	N	%				
1	Well	4	57,1	3	13,0	7	23,3	0,033	8,88
2	Pretty good	3	42,9	20	87,0	23	76,7		
3	Not good	0	0	0	0	0	0		
Total		7	100	23	100	30	100		

Based on table 4.6, it is known that the statistical test results obtained sig = 0.033 (p <0.05), it can be concluded that there is a significant relationship between the attitudes of parents with the prevalence of dental caries. From the results of the analysis, it was found that OR =

8.88, meaning that respondents with good enough attitude had 9 times greater chance of experiencing dental caries.

Result And Discussion

The results of dental caries showed that the picture of dental caries in Jambi Sakti Superior SABK students who had more dental caries was 23 children (77%), while not caries as many as 7 students (22.3%). This is in line with Tulangow (2015) conducted a study to determine the description of dental caries status in children with special needs at YPAC Manado SLB. The results showed that dental caries status in children with special needs at YPAC Manado SLB with a DMFT index of 4.4 included in the medium category.⁵

The results of the description of parental knowledge on graph 4.3, that the picture of the knowledge of parents of Superior Sakti SABK students with higher criteria is more than 26 people (86.7%) while the criteria are moderate, 4 people (13.3%). The high level of knowledge of parents of autistic children can be due to the amount of information that has been obtained from the school or dental students who work there. This is in line with the research of Rompis (2016). The results of the study showed that mothers' knowledge about children's dental health in Tahuna City was 93.8% good, while the bad category was 6.1%. Examination of the severity of dental caries received a low severity category of 4.61%, moderate severity category of 26.1%, high severity category of 60%, and very high severity category of 9.23%.⁵ According to Worang (2014) in research conducted on preschool children in Manado, education and parental knowledge do not guarantee children's daily behavior to care for their teeth and mouth health. the participation and attention of parents is what is needed by preschoolers.⁷

The results of the description of parents' attitudes in graph 4.4, that the picture of the attitude of the parents of Superior Sakti SABK students with quite good criteria is 23 people (76.7%) while the good criteria are 7 people (23.3%). This is inversely proportional to knowledge where 86.7% have high criteria, this can be caused even though they already have high knowledge but parents of children still lack attention to their children, such as lack of monitoring what food their children consume or lack of health care the child's teeth by not bringing to dental health services or not watching their children brush their teeth twice a day. Noerdin

The high prevalence of dental caries in SABK UnggulSakti autistic children can be due to a lack of attention from parents of autistic children regarding the importance of maintaining their children's dental health. The number of parents who do not pay attention to their children's dental health is what causes many children's teeth to experience caries. In addition there are also many parents who look to spoil their children by buying fast food.

(2003) states that the role of parents is very important as an effort to prevent caries and periodontal disease, there is a need for cooperation between dentists, nurses and parents of children.¹Bahuguna (2011) in India states that in addition to knowledge, which affects children's dental health, namely the attitudes and awareness of parents.⁸

The results of the relationship between knowledge of parents and the prevalence of autistic children's dental caries in table 4.5, shows that there is a significant relationship between the level of knowledge of parents and the prevalence of dental caries. From the results of the analysis it was found that OR value = 0.61 means that respondents with parental knowledge on the criteria were having the opportunity 1 time to experience the incidence of dental caries in their children.

According to Arisman (2002) cit., Talibo, et al (2016), consuming cariogenic foods with a frequency that more often increases the likelihood of caries compared to consuming in large quantities but with a frequency that is less frequent.⁹ This is in line with the research of Khotimah, et al. (2013) entitled factors related to the incidence of dental caries in children aged 6-12 years in elementary school, respondents who rarely consumed cariogenic foods and did not experience dental caries as many as 15 students (42.9 %).¹⁰ The results of the study showed that rarely consuming cariogenic foods would not cause dental caries even though the habit of brushing teeth was not correct.

Dental and oral health maintenance behavior in autistic children depends on the mother or caregiver while at home while in the school dental hygiene behavior is assisted by the

accompanying teacher. Families look for dental and oral health services to dental / dentist clinics that are well known, trusted and not crowded so that children do not wait too long / wait. (ervon)¹¹

The results of bivariate analysis in table 4.6 show that there is a significant relationship between parents' attitudes and the prevalence of dental caries. From the results of the analysis, the OR value is 8.88, meaning that the respondents with the attitude on the criteria have enough opportunities to have 9 times the incidence of dental caries.

Based on the results of this study, it can be seen that the better the parents' attitudes about their children's dental health, the lower the risk of their children being affected by caries and conversely the lower the attitude of the parents the higher the risk of their children getting caries. It also proves that even though he has high knowledge but if he still has a bad attitude, the child will still be affected by caries. According to Suratni (2014) Parents and children are a unitary union where mothers are members of a good health team to conduct health supervision. Not only the role of the mother, but if the child is in the school environment, the teacher who plays a role as the main key in approaching children in the school environment and is expected to change behavior patterns and habits in maintaining dental and oral health of kindergarten children. In addition, there are external factors as predisposing and inhibiting factors that are indirectly related to the occurrence of dental caries, including age, gender, geographical location, economic level, and knowledge, attitudes and behavior towards maintaining dental health.¹²

Conclusion

Based on the results of research conducted on autistic children and parents of autistic children in UnggulSakti City School of Children with Special Needs (SABK) in 2018 it can be concluded that there is a significant relationship between parents' knowledge and the prevalence of dental caries in Autistic Children in SABK UnggulSaktiTahun 2018 with a value of $p = 0.031$ and $OR = 16.5$ and there is a significant relationship between the attitudes of parents with the prevalence of dental autism in the SABK Superior Sakti Year 2018 with a value of $p = 0.033$ and $OR = 8.88$.

Suggestion

Parents of autistic children are expected to increase their attention to dental health of children, especially for dental caries problems so that prevention is done as early as possible and avoid complications from dental caries in their children by teaching and supervising children to brush their teeth at least 2 times a day. Parents are also expected to increase attention not only knowledge but also attitudes regarding dental health in their children.

References

- [1] Noerdin S. Pemeliharaan Kesehatan Gigi Pada Penderita Autis. *Journal of Dentistry Indonesia*.10(2):564-9.2003
- [2] Rompis C, Pangemanan D, Gunawan P. Hubungan tingkat pengetahuan ibu tentang kesehatan gigi anak dengan tingkat keparahan karies anak TK di Kota Tahuna. *e-GIGI*.4(1).2016
- [3] Anggraini Ld, Handayani S, Rahmadhani R. Evaluasi Keberhasilan Tumpatan Klas I, II, III, Iv Gv Black Dengan Bahan Resin Komposit Dan Semen Ionomer Kaca (Penelitian pada Pasien Anak di RSGM UMY).2017
- [4] KEMENKES R. Riset kesehatan dasar 2013. Badan Penelitian dan Pengembangan Kementerian Kesehatan RI, Jakarta.2013
- [5] Tulangow GJ, Pangemanan DH, Parengkuan Wg. Gambaran Status Karies Pada Anak Berkebutuhan Khusus Di Slb Ypac Manado. *e-GIGI*.3(2).2015
- [6] Ramadhan AG. Serba serbi kesehatan gigi dan mulut. Jakarta: Bukune.186.2010
- [7] Worang TY, Pangemanan DH, Wicaksono DA. Hubungan Tingkat Pengetahuan Orang Tua Dengan Kebersihan Gigi dan Mulut Anak Di TK Tunas Bhakti Manado. *e-GIGI*.2(2).2014
- [8] Bahuguna R, Jain A, Khan SA. Knowledge and Attitudes of Parents regarding child dental care in an Indian Population. *Asian Journal of Oral Health & Allied Sciences*.1(1):9-12.2011
- [9] Arisman M. Gizi dalam daur kehidupan. Jakarta: EGC.76-87.2004

- [10] Damayanthi E, Khotimah K, Mudjajanto ES, Dwiriani CM, Kustiyah L. Pendidikan Gizi Informal Kepada Penjaja Makanan Untuk Peningkatan Keamanan Pangan Jajanan Anak Sekolah Dasar (Informal Nutrition Education to Food Vendors for Improving Safety of Street-foods Selling at Primary School). *Penelitian Gizi dan Makanan (The Journal of Nutrition and Food Research)*.36(1):20-30.2013
- [11] Veriza E, Boy H. Perilaku Pemeliharaan Kesehatan Gigi dan Mulut pada Anak Autisme. *Faletehan Health Journal*.5(2):55-60.2018
- [12] Suratri L, Ayu M, Sintawati F, Andayasari L. Pengetahuan, Sikap, dan Perilaku Orang Tua Tentang Kesehatan Gigi dan Mulut pada Anak Usia Taman Kanak-kanak di Provinsi Daerah Istimewa YOGYAKARTA dan Provinsi Banten Tahun 2014. *Media Penelitian dan Pengembangan Kesehatan*.26(2):119-26.2016