
The Relationship Of Mother's Knowledge With Carries In Students Of TKIT Al-Jannah Banda Aceh

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ABSTRACT

Factors that cause rampant caries in preschool children are the use of formula milk with a high carbohydrate content and the habit of consuming formula milk using a milk bottle. This study aims to determine the relationship between mother's knowledge of formula feeding and rampant caries in students of TKIT Al-Jannah, Banda Aceh City . This type of research is analytic with a cross sectional design which was carried out on 11 to 14 April 2022, the population and sample in this study used a total population technique of 30 TKIT Al-Jannah students and their mothers . as a respondent. The examination was carried out by interviewing the mother and examining the rampant caries on Al-Jannah TKIT students . Univariate data analysis is to determine the frequency distribution of each variable bivariate analysis using chi square statistical test = 0.05. The results showed that mothers who had poor knowledge of the category with children who experienced rampant caries were 15 students (83.3%). the results of the chi-square test have a p value of 0.009 ($p < 0.05$). The results of this study can be concluded that there is a relationship between mother's knowledge in formula feeding with rampant caries occurrence in TKIT Al-Jannah students . It is recommended for mothers to be able to increase knowledge of dental and oral health, especially rampant caries.

INTRODUCTION

Dental and oral health is part of a healthy body that cannot be separated from one another, because dental health and mouth will affect the health of the body. The role of the oral cavity is very of great importance to human health and well-being. In general, someone It is said that healthy is not only a healthy body but also a healthy cavity mouth and teeth (1).

behavior plays an important role in affect the health status of teeth and mouth. Because of the importance behavior in influencing dental health status, behavior can affect the good and bad of dental and oral hygiene including affect caries scores and periodontal disease (Wahyu et al, 2003) in (2).

Dental health knowledge given by mothers to children from an early age is very important to

increase knowledge about risk factors for dental and oral diseases (3).

Knowledge is the result of knowing sensing of an object. Sensing occurs through the five human senses, namely sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and ears. Knowledge is very important for the formation of certain actions (4).

Knowledge or cognitive is a very important domain for the formation of one's actions (overt behavior). Knowledge is obtained as a result of a stimulus that is captured by the senses. If the material or object captured by the senses is about teeth, gums and general dental health, the knowledge gained is about dental health (5).

Parental knowledge is very important in underpinning the formation of behaviors that support or do not support children's dental and oral hygiene, this knowledge can be obtained naturally or in a planned manner, namely through

the educational process. Parents who have low knowledge about dental and oral health are a predisposing factor for education that does not support children's dental and oral health (6).

Parents who have low knowledge about dental and oral health are a predisposing factor of attitudes and behaviors that do not support children's dental and oral health. Because parental knowledge is very important in underlying the formation of attitudes and behavior (7).

Mother's knowledge is the closest person to the child in health care has a significant influence on the attitude and behavior of the child. Kindergarten age children generally do not know and have not been able to maintain the health of their oral cavity, so it is parents including mothers who are responsible for educating them properly. Many cases of caries today are caused by a lack of parental knowledge about choosing the right type of food and dental care for their children, especially school-age children (8).

At the preschool age, many activities will have a major impact on the child's daily schedule, routine personal hygiene should be scheduled. The ideal development of a regular self-cleaning schedule can be rehearsed with a routine or regular schedule during the school period. Parents must continue to play an active role in nurturing, educating, motivating, and supervising dental and oral health care. Parental help is needed to help reduce or remove plaque on the teeth, the selection of the size and fineness of the toothbrush bristles also plays an important role in maintaining the health of children's mouths and teeth (9).

Dental caries is the most common disease in the oral cavity, so it is a dental and oral health problem. This disease occurs due to demineralization of tooth surfAceh tissue by organic acids derived from foods containing sugar. Caries is chronic and in its development takes a long time, so most sufferers have the potential to experience lifelong disorders. However, this disease often does not get the attention of the public and health program planners, because it is rarely life-threatening (10).

Endang explained that the factors that cause dental caries are: in preschool age children is the

use of formula milk containing high carbohydrates and the habit of consuming formula milk with using a milk bottle, let alone a child consuming formula milk at night before bed can cause dental caries. Lactose and sucrose in the remaining milk that stays in the mouth all night will undergo a process of hydrolysis by plaque bacteria into acid. Give at the time

before bed and teach children to brush their teeth before bed or after drink milk and give assistive devices to children to drink milk, namely straws (dropper) so that the rest of the milk does not stick to the surface of the teeth (11).

The main factor causing rampant caries is frequent consumption of sweet foods and drinks. The wrong pattern of maternal behavior certainly has the potential to cause rampant caries, such as consuming bottled milk before going to bed, giving sweet foods such as candy and chocolate, and not being accompanied by gargling with water (12).

WHO data in 2018 illustrates that the incidence of dental caries in children is around 60-90% of cases. Taverud's research showed that the prevalence of dental caries in one-year-old children was 5%, two-year-olds 10%, three-year-olds 40%, four-year-olds 55%, and five-year-olds 75%. Thus , the toddler age group is a group prone to dental caries (13).

Based on Riskesdas (14) the percentage of Indonesian population who have dental and oral health problems in 2013 and 2018 increased from 25.9% to 57.6%. The province of Aceh shows the prevalence of population with dental and oral problems at 56%, and the prevalence of active caries in the Indonesian population in 2018 was 45.3% and in Aceh province was 47%.

From the results of interviews conducted by researchers with 10 female students at TKIT Al-Jannah, Banda Aceh City, 8 mothers said they still gave formula milk to their children using pacifiers at night before going to bed and left it without cleaning it first, which could result in rampant caries, while 5 mothers said their children did not drink bottled formula milk. From the results of the examination conducted by researchers on 10 students of TKIT Al-Jannah that 7 students suffer from rampant caries and 2 other students do not suffer from rampant caries. Therefore, researchers are interested in conducting a study

on " The Relationship of Mother's Knowledge in Formula Feeding with Rampan Caries in Tkit Al-Jannah Students, Banda Aceh City ".

METHOD

This study was conducted with a cross sectional approach, to determine the relationship between mother's knowledge in formula feeding and the prevalence of caries in Tkit Al-Jannah students, Banda Aceh City. The population in this study amounted to 30 students and their mothers, while the sample used a total population technique of 30 students and their mothers as respondents. The research was carried out on April 11-14, 2022. Located in TK IT AL-Jannah, Banda Aceh City.

Research Stage Submit a cover letter to the Department of Dental Health, Poltekkes, Ministry of Health, Aceh, Request permission from the school principal to seek approval for research at TKIT Al-Jannah, Banda Aceh City, Conduct inspections for initial data collection for one to two days. Stages of research implementation: Entering the classroom and explaining what activities will be carried out, Checking rampant caries on students of TKIT Al-Jannah City of Banda Aceh, Giving informed consent to students' mothers as research permits, Conducting interviews using questionnaires to mothers of TKIT Al-Jannah students Banda Aceh City, Documenting the activities carried out during the research

Then the data checking stage: The data that has been collected is checked again for data perfection.

RESULTS

Data collection was carried out from 11 to 14 April 2022 on 30 students of TKIT Al-Jannah Banda Aceh City along with their mothers as respondents, where the results of data collection were obtained based on interviews with mothers and conducting examinations on students. The characteristics of the respondents obtained from the results of this study were the sex of the child, the age of the child and the education of the parents. The results of data processing obtained when conducting research can be seen as follows:

Univariate Analysis

1.General data

a. Gender of TKIT Al-Jannah Students in Banda Aceh City Frequency distribution by gender can be seen in table 1 below:

Table 1. Frequency Distribution of Respondents Based on Gender of TKIT Al-Jannah Students, Banda Aceh City

No	Gendre	F	%
1	Man	14	60%
2	Woman	16	40%
Total		30	100%

Based on the frequency distribution table above, it is known that 16 children are female (40%)

2. Mother's Age of TKIT Al-Jannah Student, Banda Aceh City

Frequency Distribution Based on the age of the students' mothers, it can be seen in table 2 below:

Table 2. Frequency Distribution of Respondents Based on Mother's Age of TKIT Al-Jannah Students, Banda Aceh City Students, Banda Aceh City

No	Mother's Age	F	%
1	24 - 35 years	18	60%
2	36 - 44 years old	12	40%
Total		30	100%

Based on the frequency distribution table above, it is known that the majority of the mothers of TKIT Al-Jannah students in Banda Aceh are aged 24-35 years as many as 18 respondents (60%).

3. Characteristics of Respondents Based on Children's Age

The frequency distribution by age can be seen in table 3 below:

Tabel 3 Student Frequency Distribution by Age in Students TKIT Al-Jannah Banda Aceh City

No	Age (year)	F	%
1	4	10	33,3%
2	5	20	66,7%
Total		30	100%

Based on the frequency distribution table above, it is known that the majority of TKIT Al-Jannah students in Banda Aceh City are 5 years old as many as 20 children (66.7%).

4. Characteristics of Respondents Based on Mother's Occupation

The frequency distribution based on the mother's occupation can be seen in table 4 below:

Tabel 4 Frequency Distribution Based on Mother's Occupation On students TKIT Al-Jannah Banda Aceh City

No	Job_Mother	F	%
1	IRT	21	70%
2	Teacher	3	10%
3	Businessman	6	20%
Total		30	100%

Based on the frequency distribution table above, it is known that the majority of mothers of TKIT Al-Jannah students in Banda Aceh City work as IRT as many as 21 respondents (70%).

b. Special Data

1. Mother's knowledge

Frequency Distribution Based on the knowledge of the mother of the students of TKIT Al-Jannah Banda Aceh City, it can be seen in table 5 below.

Table 5. Frequency Distribution Based on Mother's Knowledge of Al-Jannah TKIT Students, Banda Aceh City

No	Knowledge	F	%
1	Good	12	40%
2	Not good	18	60%
Total		30	100%

Based on the frequency distribution table above, it is known that the majority of the knowledge of the mothers of TKIT Al-Jannah students in Banda Aceh City is in the poor category as many as 18 respondents (60%).

Tabel 6. Frequency Distribution Based on Rampan Caries in students in TKIT Al-Jannah Banda Aceh City

No	Knowledge	F	%
1	There is	19	63,3%
2	there isn't any	11	36,7%
Total		30	100%

Based on the Frequency Distribution table. Based on the above, it is known that the majority of students of TKIT Al-Jannah Banda Aceh City experienced rampant caries as many as 19 children (63.3%).

2. Relationship of Mother's Knowledge in Formula Milking with Rampan Caries

Tabel 7 Distribution of Respondents Based on the Relationship of Mother's Knowledge in Formula Milking with Rampan Caries in Students of TKIT Al-Jannah Banda Aceh City

Knowledge parent	Rampan Caries				Total		Statistic test
	There Is		There Isn't Any		F	%	
	F	%	F	%			
Good	4	33.3	8	66.7	12	100	$P = 0.009$
Not good	15	83.3	3	16.7	18	100	$\chi^2 = > 0.05$ df = 2
Total	19	63.3	11	36.7	30	100	

Based on the table above, from 30 mothers and children respondents it is known that mothers who have good knowledge with children who experience rampant caries in TKIT Al-Jannah students are 4 students (33.3%), mothers who behave well with children who do not experience rampant caries as many as 8 students (66.7%). While mothers who have poor knowledge with children who experience rampant caries as many as 15 students (83.3%), and mothers who have poor knowledge with children who do not experience rampant caries as many as 3 students (16.7%).

CONCLUSION

From the results of research on the relationship between mother's knowledge of formula feeding and rampant caries in students of TKIT Al-Jannah City of Banda Aceh, it can be concluded that there is a significant relationship between mother's knowledge and the occurrence of rampant caries in children of TKIT Al-Jannah City of Banda Aceh with a p value value = 0.009 < 0.05.

REFERENCES

- Zulfa Risqi Amelia, Imam Sarwo Edi SH. Pengetahuan Ibu Tentang Karies Gigi Anak Prasekolah. Pengetahuan Ibu Tentang Karies Gigi Anak Prasekolah (Studi Pada Anak Tk Dharma Wanita Desa Klanderan Kecamatan Plosoklaten Kabupaten Kediri Tahun 2020), 11(2), 90-96. 2020;
- Widayanti N. Faktor Yang Berhubungan Dengan Karies Gigi Pada Anak Usia 4-6 Tahun. Jurnal Berkala Epidemiologi, 2(2), 196-205. 2014;
- Jyoti N. The Relationship between Knowledge Level and Mother's Behavior in Caring for Children's Teeth Against Child Caries

- Incidence in Titi Dharma Kindergarten Denpasar. *Bdj*, 3 (2). 2019;
4. Notoatmodjo S. Pendidikan Dan Perilaku Kesehatan (2nded). Jakarta: Rineka Cipta. 2003;
 5. Budiharto. Pengantar Ilmu Perilaku Kesehatan dan Pendidikan Kesehatan Gigi. Jakarta: EGG. 2010;
 6. Eriska (2005) cit Yolanda W, Triska D. "Hubungan Tingkat Pengetahuan Dengan Kebersihan Gigi dan Mulut Anak di TK Thunas Bakti Manado", *Jurnal e-Gigi (eG, Vol 2, No 2)*. 2014.
 7. Eriska. Penyakit Mulut Pada Anak, Artikel, Gramedia, Jakarta. 2005;
 8. 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). <https://doi.org/10.35790/Eg.4.1.2016.11483>. 2016;
 9. Afianti, R., Adhani, R., Gigi KR: The Relationship of Mother's Behavior Regarding Dental and Oral Health Maintenance Towards Dental Caries Status of Children. Review Based on Knowledge, Education Level, And. *Pjpp.Ulm. Ac.Id*, 1. JK, 2017, Undefined. 2017;
 10. Rosanti, SD, Hadi, S., & Ulfah S. People Knowledge Overview Elderly About Dental Caries (Student Study of Class 1 Sd Negeri Kebonagung 1 Sukodono District, Sidoarjo Regency) Health Polytechnic, Ministry of Health, Surabaya, Department of Dental Nursing Abstract : Dental And Oral Health Is. 2020;
 11. Sari EP. Hubungan Pemberian Susu Formula Dengan Karies Gigi Pada Anak Pra Sekolah Di Tk Dayyinah Kids. *Jurnal E-Gigi (Eg)*, 3(1), 175-181. <http://ejournal.unsrat.ac.id/index.php/egigi/article/view/6630/7966>. 2017;
 12. Youventri, C., Adhani, R., & Sari G. Relationship between Mother's Behavior in Providing Dental and Oral Health Education with Caries Rampan. 2020;
 13. Zahara, E., & Andriani A. Relationship of Breastfeeding Using Bottles with Caries Rampan in Kindergarten Students Hj. Cut Nyak Cloud Village Lambaro District. Want Jaya Kab. Aceh Besar. *Averrous: Journal of Medicine And Malikussaleh Health*, 4(1), 62. <https://doi.org/10.29103/Averr.2018>;
 14. Riskesdas. Hasil Utama Riskesdas 2018. Badan Penelitian dan Pengembangan Kesehatan. Jakarta: Kementerian Kesehatan RI. 2018;