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The Analysis Of Dental Health Knowledge With Dental Care Behavior Of School Age In SDN Rejoso I

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ABSTRACT

Keywords: Dental Health Knowledge, Dental Care, Behavior, Dental health problems are influenced by many factors. One of the causes of oral and dental problems in the community is behavioral factors or attitudes to neglect tooth and mouth cleansing. This study aims to analyze the Effect of Knowledge Level on Health care with Behavioral Dental Care of School-aged Children at SDN Rejoso I. This research method using quantitative method with crossectional research design. The population of this study are students of class IV and V in SDN Rejoso I as many as 60 respondents with stratified random sampling technique with the number of sample class IV 29 respondents and class V 31 Respondents. Independent variables of this research is the level of knowledge of dental health while the dependent variable is dental care behavior. The instrument used is a questionnaire. Stastistic test of this research using Ordinal Regression. The results of this study indicate that from a total of 60 respondents most of the respondents knowing that knowledge as much as the respondents (50%). While behavior of dental care showing enough behavior that is as much as respondent (55%). Based on data analysis using Ordinal Regdition of Health Level of Teeth with Behavior of Dental Care of School Age Children at SDN Rejoso I, obtained sig value: 0,005. Result of this research indicate that level of dental knowledge enough and less impact 8 times from dental treatment behavior so there is influence between Level of Dental Health Knowledge with Child Care Behavior Dental Age children at SDN Rejoso I. Behavior arises according to one's awareness, knowledge, and attitudes. So a person is able to perform an action that is considered good or wrong according to the stimulus they receive.

BACKGROUND

Dental and oral health is one of the supporting aspects of healthy paradigm and is a national development strategy to realize Healthy Indonesia 2020 (Ministry of Health RI, 2014).

Un-maintained oral hygiene will cause problems such as bad breath, tartar, dental caries, and dental plaques. Dental and oral health is part of the body's health that can not be separated from one another because it will affect the overall health of the body. About 80% of Indonesia's population has damaged teeth for various reasons, but the most common is caries or cavities. Dental and oral health in Indonesia is still a matter of serious concern, the high prevalence of dental and oral diseases suffered by the people of Indonesia is including children (Wahyu, et al, 2009).



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Oral and dental health services in schoolchildren in addition to the main dental and oral health activities at the puskesmas are also conducted in an integrated manner with the main activities of UKS in the form of School Dental Health (UKGS) programs.

Dental and mouth health is still not a major concern. As a result, cavities or caries become a common problem faced by some communities. Caries is a term better known as cavities. In dentistry, dental caries is a demineralization process caused by an interaction between (products) of microorganisms, saliva, parts of food and email (Houwink, 1994).

Sundoro (2005) mentioned that dental caries is the cumulative result between enamel solubility at low pH and mineral precipitation back at high pH. For it can be concluded that dental caries is a disturbance of balance around the email caused by is a disturbance of balance around the email caused by various factors and resulted in the tooth becomes hollow. Factors that cause dental disease include dental structures, oral microorganisms, the substrate environment (food), and the length of time the food sticks in the mouth (Schuurs, 2008). Other factors are age, sex, economic level, education level, environment, awareness and behavior related to dental health (Suwelo, 1997).

Based on Basic Health Research in 2013 (Indonesia Basic Health Index) of 25.9 percent of Indonesia's population with problems with teeth and mouth, and in East Java of 28.9 percent problematic teeth and mouth. DMF-T describes the severity of tooth decay. The DMF-T index is the sum of the D-T, M-T, and F-T indexes. This DMF-T index increases with age. One's awareness of the importance of dental health is the knowledge he has. Fankari (2004 in Kawuryan (2008) explains that one of the causes of dental and oral health problems in the community is the behavioral factor or attitude of neglecting tooth and mouth hygiene based on the lack of knowledge about the importance of dental and oral care. When someone is at the level higher knowledge, then the concern for dental health is higher.

Brushing the wrong teeth can leave the remnants of food and even the buildup of food scraps that can form microbial acid so that over time will lead to component destruction Brushing the wrong teeth can leave the remains of food and even the buildup of food scraps that can form microbial acid so that over time will lead to destruction the organic component of the tooth and resulting cavities (Schuurs, 2008). Various means of information have been given about dental health and how to care. However, the prevalence rate of tooth decay in children in Indonesia is still high.

Based on preliminary study conducted by researchers in October 2017 at SDN Rejoso I found the dental health condition of 70 students as many as 47 students suffering from cavities from the above data shows that 67.2% of children suffering from cavities, the analysis results obtained level of knowledge of students are. This shows the attitude and behavior of school-age children are still lacking in performing dental care. This study aims to determine the effect of the level of knowledge about dental health with the behavior of dental care of school age children in SDN Rejoso I.

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MATERIALS AND METHODS

This research method using quantitative method with crossectional research design. The population of this study are students of class IV and V in SDN Rejoso I as many as 60 respondents with stratified random sampling technique with the number of sample class IV 29 respondents and class V 31 Respondents. Independent variables of this research is the level of knowledge of dental health while the dependent variable is dental care behavior. The instrument used is a questionnaire.

RESULT Characteristics of the Subject

Table 1. Characteristics of respondents in this study include class, gender, age, knowledge and behavior of dental care.

No	Characteristics	ΣΝ	Σ%
1	Class		
	4th grade	29	48,3
	5th grade	31	51,7
2	Gender		
	Man	34	57
	Female	26	43
3	Age (years)		
	10	10	16,7
	11	48	81,7
	12	2	1,6
4	Knowledge		
	Less	16	26,7
	Middle	30	50
	Good	14	23,3
5	Dental care behaviour	31 34 26 10 48 2 16 30	
	Good	10	16,7
	Middle	33	55
	Less	17	28,3
	Total	60	100

Based on the table 1 above, it is known that from the total of 60 respondents in class V amounted to 31 respondents (51.7%), male gender was 34 respondents (57%), 11 years old was 49 respondents (81,7%), Knowledge level is quite as much as 50% of respondents and behave adequately in dental care that is as much as 55%.

STATISTICAL TESTS

Table 2. Statistical test of dental health knowledge analysis with behavior of dental care of school age children at SDN Rejoso I on March 6, 2018

VARIABEL	SIG	R-Square	Wald
Pengetahuan	0,005	0,148	8,009

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The result of analysis using Ordinal Regression Test with value $\alpha = 0,005$, at knowledge

variable got value sig = 0.005 and behavior variable value sig = 0.000 hence null hypothesis stated that location parameter (coefficient of slope) is same in all category response. Based on table 2 can be seen from the results of statistical tests with ordinal regression test obtained sig value 0.005 so that there is influence between the level of knowledge of dental health with dental behavior of school-aged children in SDN Rejoso I.

DISCUSSION

Level of School Dental Health Knowledge of SDN Rejoso I School

Based on research data of Dental Health Knowledge Level, it can be seen that in total of 60 respondents, most of dental health knowledge respondents are enough with 30 respondents (50%).

Knowledge of dental hygiene is less than only a few respondents correctly answer about 29 (48,3%) of the time to brush their teeth and how to choose toothbrush as much as 27 (45%) respondents. While the level of knowledge of the students about the dental part of the respondents categorized good as much as 58 (96,6%), and the cause of dental disease respondents good category as much as 56 (93,3%) and dietary factors that affect the majority of dental health respondents categorized as good as 49 (81,6%) of respondents.

Knowledge is the basis for the formation of a behavior. A person is said to lack knowledge if in a condition he is unable to recognize, explain, and analyze a situation. The result of quantitative descriptive analysis showed that the level of knowledge about dental health of fourth grade students and V SDN Rejoso I mostly in medium category with 50% percentage. This is because there are still students who do not know about the importance of oral and dental health. Knowledge of dental health is assessed from five assessment components including knowledge of the definition of healthy tooth parts, the cause of dental health problems, dental health problems, the type of dental health problems, and the correct way of dental care.

The importance of dental health, healthy lifestyle in maintaining healthy teeth can be done well, so that students have healthy teeth and bad breath, even avoid a variety of dental problems or dental disease by always reminding the child to brush your teeth regularly and regularly at least 2 times a day. Mainly after eating and before bed. Knowledge of how to brush your teeth, how to choose a toothbrush, toothbrush needs to be changed regularly because a toothbrush that has been damaged will affect in peroses brushing. Dental examination should be done every 6 months. The results of this study showed the child's knowledge about dental health is still sufficient.

Dental Care Behavior in School-Age Children at SDN Rejoso I

The results of data analysis showed that more respondents had sufficient dental care behavior (55%) compared with respondents who had good dental care behavior (16.7%). Based on cross-tabulation result between class and sex, from three component of dental behavior behavior that is brushing teeth, examination to dentist and arrange eating pattern there are two compenent of dental care which still less behavior that responden still not understand how to brush teeth correctly and time right in brushing teeth, respondents still lack understanding of how to regulate the diet (choosing good foods to strengthen teeth and foods that cause dental problems).

Almost all of the children in this study consumed sweet foods such as chocolate, candy, and ice cream. However, the majority of respondents have not applied tooth brushing behavior after eating sweet foods such as chocolate, candy, and ice cream as many as 26 students (43.3%) answered the question wrongly after eating candy, chocolate,

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bread, ice cream I do not brush my teeth shows the behavior of dental care students SDN Rejoso I included in the category enough. So that glucose contained in the food is attached to the enamel and the risk of dental caries. The dissolution of mineral enamel as a result of disruption of the ease between enamel and its surroundings caused by the formation of cavities (Schuurs 1992).

Tooth brushing behavior affects the occurrence of caries, it is related to the remaining food that is long left in the mouth and not immediately cleaned will cause caries (Budisuari, Oktarina & Mikrajab, 2010). This is in accordance with what is said by Nio (1992), high consumption of kerbohydrate food is the energy for the germs that lead to plaque risk of caries. Research conducted by Mc Donald (1994) by instructing brushing teeth after meals resulted in a significant reduction of dental caries. Dental care is very important to prevent children from dental disease. Dental care is a safeguard to prevent tooth decay and gum disease (Schruurs, 1992).

The form of treatment that needs to be done is to brush your teeth (the correct way to brush your teeth is to brush your teeth properly should be able to clean all the leftovers and correct selection of toothbrushes, as well as the correct brushing frequency of teeth at least 2 times a day ie brushing your teeth after eating and before sleeping). Organize which foods are good for which teeth to avoid and how to treat them. Most respondents have sufficient knowledge in regulating diet but are still lacking in the behavior of choosing which foods are good for dental health and how to choose good foods to strengthen teeth and avoid foods that cause dental problems to be applied in everyday life. Some respondents do dental checks to the dentist on a regular basis but there are still those who have not done regular dental checks only if the tooth pain alone perform dental examination.

Effect of Dental Health Knowledge Level With Dental Behavior Behavior In School-Age Children at SDN Rejoso I

Based on the result of cross-tabulation of dental health knowledge level with dental treatment behavior. The results of this study indicate that the influence analysis of knowledge level with the behavior of dental care obtained that the respondents who have enough knowledge as much as 50% about dental health while the respondents who have good knowledge about dental health is only 23.3%. Based on behavioral analysis of dental care most have enough behavior as much as 55% while few have good behavior (16,7%). From the results of statistical tests with ordinal regression test obtained sig value 0.005 so that there is an influence between the Level of Dental Health Knowledge with the behavior of dental care of school age children at SDN Rejoso I.

This shows that Behavior will appear in accordance with the awareness, knowledge, and attitude that someone has. So he is able to perform an action that is considered good or wrong according to the stimulus he received. The last stage in shaping behavior is adoption. Adoption is the last stage after passing the previous stages. Then the child passes through the evaluation stage that is thinking about the good bad stimulus he received after the attraction. If the stimulus is considered bad or less memorable, then he will be silent or indifferent. Conversely, if the stimulus that he received is considered good, he will make someone do an action (Notoatmodjo, 2010).

The level of knowledge about dental health greatly influences in shaping positive behavior on dental health. A positive attitude will affect the intention to participate in activities related to it and a person's attitude is closely related to the knowledge it receives, especially dental health. Knowledge is the basis of the formation of a behavior. Someone said to be less knowledge if in condition not able to know and explain and analyze a ISSN: 2528-066X (Print) ISSN: 2599-2880 (Online)

situation. If the level of knowledge is higher, dental health attention will be high and vice versa, if the lack of attention to dental care is also low. Based on research Eka. (2010).

From the results of the study the majority of respondents have not understood the importance of dental examination to the dentist, brushing your teeth after eating sweet foods and make regular tooth brush changes. It can be proved that few respondents do so. This shows that Behavior will appear in accordance with one's awareness, knowledge, and attitudes. So a person is able to perform an action that is considered good or wrong according to the stimulus they receive. From the results of the study stated that there are still many children who have not done dental treatment because there is still a lack of knowledge about the correct way of dental care such as brushing teeth after meals, in this case the respondents have done dental care with yet to apply in everyday life.

CONCLUSIONS AND RECOMMENDATIONS Conclusion

Level of knowledge of dental health of grade IV and class V in SDN Rejoso I known that from a total of 60 respondents most knowledgeable enough, the behavior of dental care in grade IV and class V students in SDN Rejoso I found that out of a total of 60 respondents, most of them behaved adequately. There is an influence between the Level of Knowledge About Dental Health With Dental Care Behavior in school-aged children in SDN Rejoso I.

Suggestion

It is expected to perform proper dental care and be applied in everyday life and reduce eating sweet or sticky foods to improve dental health. For SDN Rejoso I, the teachers have a role as a health information provider for students. It is expected that teachers can work together with health centers or parents about the importance of dental health in children, so as to improve the health status of children's teeth. It is expected that health workers can improve dental health programs in primary school-aged children about how to properly care for teeth and provide and train the right way of brushing teeth. For further researchers, It is hoped that the results of this study can be used as a reference for subsequent research to find out the role factors of Parents and Health Officers on dental health knowledge and dental treatment behavior.

BIBLIOGRAPHY

Dirjen Pelayanan Medik Direktorat Kesehatan Gigi. (1994). Profil kesehatan gigi dan mulut di indonesia pada pelita v. Jakarta: Depkes RI.

Notoatmodjo. 2003. Ilmu Perilaku Manusia. Jakarta: Rineka Cipta.

- Houwink, B. (1993). Ilmu kedokteran gigi pencegahan, hlm.125. (Sutatmi Suryo, Penerjemah). Yogyakarta: Gadjah Mada University Press
- Kawuryan, U. (2008). Hubungan pengetahuan tentang kebersihan gigi dan mulut dengan kejadian karies anak SDN Kleco II kelas V danVI Laweyan Surakarta
- Lubis, P., & Nugrahaeni, M. (2009, September). Sudahkah anda menyikat gigi dengan benar. Oktober 4, 2011. http://kosmo.vivanews.com/news/read/90266 sudahkah-anda-menyikat-gigi-dengan-benar

ISSN: 2528-066X (Print)

ISSN: 2599-2880 (Online)

- Lukihardianti, A. (2011, September). Sekitar 85 persen anak usia sekolah menderita karies gigi. Oktober 4, 2011. http://www.republika.co.id/berita/gaya hidup/infosehat/11/09/12/lrevhf-sekitar-85-persen-anak-usia-sekolah-menderita-karies-gigi
- Mikail, B., & Candra, A. (2011, September). 90 persen anak SD di Bangka sakit gigi. Oktober 4, 2011. http://health.kompas.com/read/2011/09/20/09005592/90.Persen.Anak.SD.di.Bang ka.Sakit.Gigi
- Minata, H. (2011, November). Penyebab utama karies gigi.Desember 1, 2011. http://kesehatan.kompasiana.com/medis/2011/11/16/penyebab-utama-karies-gigi
- Notoatmodjo. 2003. Ilmu Perilaku Manusia. Jakarta: Rineka Cipta. http://drsuparyanto.blogspot.co.id/2010/07/konsep-perilaku.html
- Notoatmodio, S. (2007). Promosi kesehatan dan ilmu perilaku. Jakarta: Rineka Cipta.
- Nursalam. 2003. Konsep Dan Penerapan Metodologi Penelitian Ilmu Keperawatan Pedoman Skripsi, Tesis, Dan Instrumen. Edisi 1. Jakarta: Salemba Medika
- Nursalam. 2008. Konsep Dan Penerapan Metodologi Penelitian Ilmu Keperawatan. Edisi 2. Jakarta : Salemba Medika
- Saryono. 2010. Metodologi Penelitian Kesehatan. Jogjakarta: Mitra Cendekia
- Schuurs, A. H. B. (1992). Patologi gigi-geligi: kelainan-kelainan jaringan keras gigi, hlm.135. (Sutatmi Suryo, Penerjemah). Yogyakarta: Gadjah Mada.
- Sundoro, E. H. (2005). Serba-serbi ilmu konservasi gigi. Jakarta: Universitas Indonesia Press.
- Suwelo, I. S. (1992). Karies gigi pada anak dengan pelbagai faktor etiologi. Jakarta: