

THE ASSOCIATION MOTHER'S EDUCATION AND THE AMOUNT OF FIRST MOLAR CARIES TEETH IN 6-7 YEARS OLD OF SD BAPTIS MEDAN DENAI 2014

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ABSTRACT

Education is one of the factor that influences of healthy status for someone. The participation of parents mostly a mother is very important in guidance, give understanding, improving and to preparing facility for their children that can to keep their oral hygiene. The first molar replace the first position that easy affected by caries because there is niches and fissure with the of teeth eruption at the child in 6-7 years old, so that the prevention to caries especially the teeth are many niches and fissure on the surface is very important. The kind of research is using analitic survey with *cross sectional* desain. The population of this research are the all of children in 6-7 years old SD (elementary school) Baptis with numerals 40 children where as the sample is the total of population are 40 children. This research aims to knows that the relation of mother's education with the total of the first caries molar of children in 6-7 years old. the result of this research it shows for 40 respondences, 32 children have caries (80%) on the first molar, while are not caries only 8 children (20%). The level of mother's education is elementary school, all of the children have caries on the first molar. Based on chi square experimen have done, got the result there was any relation between mother's education and amount of the total of first molar caries ($p < 0,05$), the children in 6-7 years old SD Baptis have to keep their oral hygiene. Be excepted of the participation of parents in how to guide their children to maintain oral hygiene and defend growth and development of the children's first molar so that it can oppose earlier caries.

Keywords : Mother's education, first molar caries teeth

INTRODUCTION

Healthy is the most important for every human to can do any activities as physically, psychology, and social prosperity completely and it is not only just do not have disease or weakness (WHO). On of health efforts is to support the self sufficiency of society for health live (Depkes RI 2010).

According to Health Act no. 36 (2009) article 93 paragraph 1 and 2 that dental and oral health care aims to maintain and increase the society health level by prevention of dental caries, and to care the dental health by local government and also by individual dental health care, school and society. Based on result of research of basic health (2013), the national prevalence of dental and moral health is 25.9%, in which 14 provinces have a higher prevalence of dental and oral health over than national level.

The national prevalence of teeth brushing in each day is 94.2% in which 15 provinces has the lower prevalence than national level.

The education of dental health is designed and directed efforts to build a situation in which individual or society group change the old behavior with disadvantages for the dental health. The society has a motivation to improve the dental health care through dental health education. The dental health education has not yet realized effectively. This is indicates by the result of dental health survey of Depkes RI in 1990 in which the rate of dental tissue and niche is higher (Budiharto, 2008).

Koentjoroningat (1997) said that education is a majoring in absorbed the educational knowledge of anyone related to the behavior to the absorbed knowledge. The higher educational level, the easier to absorbed the knowledge. Education is a personal characteristic element that always related to the individual/society health level. The higher individual educational level, the easier to absorbed the information of health issue. The easiness of anyone to get more information will influence the forming of health new behavior, such as the information about the

oral and dental care. In this sense, the formal education in Indonesia is consist of elementary school (SD), junior high school (SLTP), Senior High School (SLTA) and higher educational academic level (PT). the educational level determines the logical reasoning of anyone that enable him to absorbed any information and has a rational thinking into respond the information of the problems (Cumming, et.al., Azwar, 2007).

Dental caries is found in the entire world, to any age, nation or economic condition. According to researcher in Europe nations and Asia as well as Indonesia, that 80 – 95% of child who age less than 18 years old have dental caries. The percentage of dental caries is increase for the development of human culture and only 5% of population who have immune to the dental caries (Tarigan, R. 2012). Generally, the people assume that child dental must not be cared because their teeth will changed by the old ones. (Suwelo, I.S. 1991). There are any parents who did not aware that adult's teeth had growth on the age of 6 years. The growth of adult dental is assumed as milk teeth because the milk teeth has not yet be replaced. Therefore, more of the first molar has caries as one of dental and jaw development of the child that must be cared. (Susanto, GW 2011). The first molar is in the first position with caries because there is niche and fissure in addition to the dental eruption on the age of 6 – 7 years old. The prevention of dental caries with niche and fissure on its surface is very important (Sariningsih, E, 2014).

Based on the preliminary survey of researcher, it indicates that of twenty child (in age of 6 – 7 years old) only three child without dental caries. Based on the aforementioned background, the writer interest to do a research on a correlation of mother's education and the number of first molar caries of the child whose age 6 – 7 years old at SD Babtis of Medan Denai.

Purpose of Research

In order to study a association between mother's education and the amount of dental caries in first molar teeth in 6 – 7 years old of SD Baptis of Medan Denai.

Benefit of Research

1. As input to the parents especially for mothers who have child on age 6 – 7

years old at SD Baptis about the first molar caries.

2. As input to the child on age 6 – 7 years old at SD Baptis about the first molar caries.
3. As consideration for the next researchers about the first molar caries of the child whose age 6 – 7 years old.

Hypothesis

There is a correlation of mother's education to the number of first molar caries of the child on age 6 – 7 years old at SD Baptis sub-district of Medan Denai.

Method

This research is analytic study with observation method and cross sectional design to study a correlation of mother's education and the number of first molar caries of the child whose age 6 – 7 years old at SD Baptis of Medan Denai.

Population and Sample of research

Population is all of research object or studied object (Notoatmodjo, S 2010). The population in this research is all of the child whose age 6 – 7 years old at SD Baptis sub-district of Medan Denai for 40 students.

Sample is object will be studied and assumed represent all of population or a part of the studied objects./ (Notoatmodjo, S, 2010). In this research, the sample is child whose age 6 – 7 years old at SD Baptis sub-district of Medan Denai. In the sampling, the researcher takes a part of population. If the number of population is greater (> 100) the sample is 10 – 15% or 20 – 25% or more. But if the number of population is less than 100, the population to be sample. In this research, the sample is all of child in age of 6 – 7 years old at SD Baptis sub-district of Medan Denai for 40 students (Total population).

The primary data for educational level of mother is collected from the interview to the student and teacher. And the first molar were assessed and recorded on the assessment form.

On this research, the number of dental caries is categorized to be four, i.e. : good = 0, medium = 1, poor 2 and 3, severe poor = 4. While the educational level was categorized in three : lower = elementary school, medium = SMP and SMA and higher = higher education.

The collected data were processed by any steps, i.e. editing, coding, data entry, cleaning data and the data was analyzed by statistical test using computer software. The univariate data was analyzed to study a depiction and characteristic of each variable. The bivariate data was analyzed to study a correlation between the mother's education and the number of first molar caries was analyzed by statistical test using chi – square test with confidential level 95%,

Results and Discussion

Results of research

Table 1.1. Frequency distribution of respondent based on educational level of mothers of the child on age 6 – 7 years old at SD Baptis sub-district of Medan Denai of 2014.

No	Mother's education	Number (n)	Percentage (%)
1	Elementary school (SD)	6	15
2	Junior high school (SMP)	7	17.5
3	Senior High school (SMA)	14	35
4	Higher education	13	32.5
	Total	40	100

Based on Table 1.1 it indicates that percentage of education level of mother of the child on age 6 – 7 years old at SD Baptis is elementary school (SD) for 6 person (15%), junior high school for 7 person (17.5%), senior high school for 14 person (35%) and higher education level for 13 person (32.5%). More of respondent is graduate of senior high school (SMA) (35%) and the few of respondent is graduate of elementary school (SD) (15%).

Table 2.2. Frequency distribution of respondent based on the number of first molar caries of the child on age 6 – 7 years old at SD Baptis of sub-district of Medan Denai in 2014

First molar caries	Number (n)	Percentage (%)
With caries	32	80
Without caries	8	20
Total	40	100

Based on table 1.2, it indicates that the number of percentage of first molar of the child on age 6 =- 7 years old at SD Baptis with caries is 32 child (80%) while percentage without caries is 8 child (20%).

Table 1.3. A correlation of the education of mother and the number of first molar caries of the child on age 6 – 7 years old at SD Baptis sub-district of Medan Denai of 2014

Category of caries	Educational level of mother			Number	P (95%)
	SD	SMP and SMA	University		
Good	0	4	3	7	0.007
Medium	0	3	8	11	
Poor	1	5	1	7	
Very poor	5	9	1	15	
Total	6	21	13	40	

Based on Table 1.3 it indicates that the mother who graduate from junior and senior high school (SMA and SMA) has a higher rate of caries (4 of first molar) of the child for 9 child (22.5%).

Based on results of chi-square test indicates that there is a significant correlation between the educational level of mother and the number of first molar caries ($p < 0.05$).

Discussion

Dental caries is dental tissue disease that indicated by the damage of dental tissue from the teeth surface (niche, fissure and interproximal area) to the pulp. Dental caries can found to each people and found on one of teeth surface or more and expand to the depth part of the teeth for example from enamel up to dentine and pulp. This caries is caused by carbohydrate, microorganism and salivary and the dental form and surface (Tarigan R, 2012).

One of causal factor of dental caries is the less of awareness in care the dental and oral health such as to brush the teeth rightly and effectively in addition to the diet factor. Diet also influences the dental and oral health, because diet produces energy. For example carbohydrate protein, fat and minerals in addition to the influence of pre-eruption, post eruption of teeth. Diet also clean the teeth and will damage the dental caries. The food that clean the teeth is apple, guava, yam, etc. in contrary to the soft diet and patch to the teeth such as candy, biscuit, etc. (Tarigan R, 2013).

Based on Table 1.2, it indicates that of 40 respondents, 32 of them has caries (80%) on the first molar, while without caries found to 8 respondent (20%). All of the child of the mother who graduate of elementary school has first molar caries. And the child from the mother who graduate of junior and senior high school of 21 child, 4 of the child have not caries.

According to dictionary of Education (1984), education is a process where anyone develop any capabilities, attitudes and behavior in the society environment. Based on definition, it means that education is a tool to change the human behavior. Education is a process or activity for the personality development and individual or social capability. It means that education is a forming of mentality, i.e. attitude with capability in the form of intelligence, knowledge and skill. Education is all of efforts to build personality and human capability physically and spiritually in a long of live, either in or out of school for the development of unity of Indonesia and society (Hasibuan, 2005).

Based on chi-square test there is a significant correlation between education level of mother and the number of first molar caries ($p < 0.05$). Education is one of factors influence individual health status. The role of parents especially mother is required to guide, and provide the child with understanding, facilities of dental and oral care. First molar tooth has a first position that attacked by caries because there is niche or fissure and the eruption time of the teeth for the child on age 6 – 7 years old. The prevention of caries for the teeth with niche and fissure on the surface is very necessary.

Conclusion and Suggestion

A. Conclusion

Based on the result of research, the writer interest to withdraw a conclusion that the educational level of mother in junior and senior high school (SMP and SMA) has a higher rate of dental caries (4 first molar) for 9 child (22.5%) while the educational level of mother who graduate in elementary school all of the child have first molar caries.

Based on chi-square test it indicates that there is a significant association between the educational level of mother and the number of first molar caries ($p < 0.05$). It means that more

higher a mother education the amount of first molar caries teeth be lower.

B. Suggestion

1. The school must build a mutual cooperation with society health center (Puskesmas) in dental health care activities in school (UKGS) in order to provide the child on age 6 – 7 years old with oral and dental health care especially to the first molar.
2. The child on age 6 – 7 years old at SD Baptis must maintain the dental and oral health by brush the teeth effectively and rightly.
3. The parents must play an important role in guide the child and maintain the oral and dental health of the child and maintain the growth and development of first molar of the child to prevent the dental caries early.

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