

The Relationship between Dental and Oral Hygiene to DMF-T Rate in Year I and II Students of Senior High School in Bukittinggi

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ABSTRACT

In generally, many people complain today are dental and oral diseases of dental caries and gum disease. It is estimated that 90% of Indonesia's population suffers from dental and oral diseases, this is not a negligible number since it has been proven that dental and oral diseases can affect the productivity of a society. The purpose of this research is to know the relationship between dental oral hygiene to DMF-T Rate number in year I and II Students of Senior High School in Bukittinggi.

The method in this research is analytic with cross sectional conducted at Senior High School in Bukittinggi in year I and II with sampling technique used Systematic Random Sampling whereas technique of collecting data used by making observations directly on the subject of research. The data obtained is processed by editing, coding, tabulating, and processing then the data is analyzed by Product Moment correlation from Pearsons.

The results of this study indicate that dental and oral hygiene of students in year I and II is dominated ugly and DMF-T numbers are also ugly. The conclusion of this research, there is the relationship between dental and oral hygiene and mouth to DMF-T number in students in year I and II. And it is expected that in the future the number of dental and oral hygiene and mouth and the number of DMF-T student can be better.

Keywords: Dental, Oral Hygiene, DMF-T, Rate DMF-T.

INTRODUCTION

Health Development Goals towards a healthy Indonesia 2020 is to increase awareness of willingness and ability to live healthy for every person to realize the optimal health status of society through the creation of society, nation and state of Indonesia is characterized by the people who live by behaving and in a healthy environment, has the ability to reach quality health services fairly and equitably.¹

In order to achieve "Healthy Indonesia 2020", one of its missions is to maintain and improve the health of individuals, families and communities and their environment with a healthy paradigm strategy, and promotive-preventive efforts take precedence over curative and rehabilitative efforts.²

Dental and oral hygiene is closely related to what consumption, in general diseases that attack the teeth begins with the leftover food left behind while eating left on the teeth, the remaining food left in the teeth settled in the

layer of teeth which then integrate with bacteria that there are many in the mouth. That's why brushing your teeth after a meal is the most important thing to avoid stockpiling the remaining food in your teeth.

In generally, dental diseases that people complain of are dental caries and gum disease. The results of the 2011 SKRT study, states that 52.3% of the population aged 10 years and over have untreated dental caries⁴. The prevalence of caries over the age of 10 years is 71.2%, with the note that caries prevalence is higher at higher ages, in lower education, and in lower economic status. People aged 10 years and over, 46% have gum disease, the higher the prevalence at a higher age.

As an indicator of dental and oral health levels the DMF-T index, which has been determined by WHO as an important indicator between countries. DMF-T Index is the sum of D values for Decay or caries/ perforated teeth, M for Missing the revoked tooth, and F for Filling depicting the patched tooth⁵. The results of

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SKRT 2011 show that the DMF-T index, in the population aged 10 years and over by 5.3%, which means that the number of average tooth decay per person is 5 teeth. While the value of F (teeth in the patch) is very low in all age groups. The increase in the DMF-T index is more dominated by the D value (caries teeth) and the value of M (tooth removed).

MATERIAL AND METHOD

The type of research is analytical with cross sectional, that is every research only observed once and measurement is done to character status or variable subject at the time of research. The population of this study is all students Senior High School in Bukittinggi, amount 283 students. The sample of this research is students in year I and II Senior High School in Bukittinggi, with sampling technique used Systematic Random Sampling that is sample determination technique based on sequence from member of population which have given serial number, and willing to be a respondent. The data collecting technique used observation directly to the subject is measuring dental hygiene and mouth and DMF-T number students by using dental and oral hygiene index and DMF-T index and the results obtained are recorded on the examination format. Analysis of observation result made in tabulation form and calculated by using statistical analysis technique with "r" product moment correlation.

RESULT AND DISCUSSION

Table1. Frequency Distribution of Dental and Oral Hygiene

Dental Oral Hygiene	Frequency	Percentage
Good	12	12,1 %
Medium	42	42,4 %
Poor	45	45,5 %
Total	99	100 %

From Table. 1 Shows that 45,5% respodent with the poor of dental and oral hygiene.

Tabel2. Frequency Distribution of DMF-T

DMF-T	Frekuensi	Percentage
Good	48	48,5 %
Poor	51	51,5 %
Total	99	100 %

Table.2 shows the number of DMF-T from the subjects of the study: students with DMF-T with good criteria were 48 students (48.5%) and poor criteria were 51 students (51.5%).

Table3. The Relationship between Dental and Oral Hygiene

Korelasi	OHI-S	DMF-T
Pearson Correlation	1	0,504
Sig (p)	0	0,000

From Table. 3 it can be seen that the results of correlation test with the formula "r" Product Moment of Pearson on the relationship of oral hygiene to the DMF-T number in students in year I and II Senior High School in Bukittinggi then obtained the result "r" = 0.504 on the level of confidence 99%. This number indicates that there is a substantial relationship between the two variables.

Table4. Cross Tabulation Dental and Oral Hygiene and DMF-T

Variabel	DMF-T					
	Good		Poor		Amou nt	Perce ntage
Dental and Oral Hygiene						
Good	10	10,1 %	2	2,0 %	12	12,1 %
Medium	29	29,3 %	13	13,1 %	42	42,4 %
Poor	9	36,5 %	36	36,5 %	45	45,5 %
Amount	48	48,4 %	51	51,6 %	99	100 %

The result of bivariate correlation test from Pearson showed a correlation between dental hygiene and mouth to DMF-T number in year I and II Senior High School in Bukittinggi with correlation number 0,504. this is consistent with Young's theory that the correlation size (relationship) of 0.40 - <0.70 indicates a substantial relation between the two variables.

From the results of research conducted on students at 99% confidence level, this means there is a relationship between oral hygiene to the DMF-T number in students. The results of this correlation also shows that the better the level of dental hygiene and a person's mouth will be the lower or better the number of DMF-T someone and the higher awareness and care of someone in maintaining healthy teeth and mouth so that it can be free from dental and mouth disease. According to Tarigan³ the occurrence of dental caries closely related to plaque is a thin layer that contains many bacteria and attached to the tooth surface. The bacteria contained in the plaque will process the carbohydrates to produce energy for themselves, these carbohydrates will produce acids that can brittle the tooth enamel so that there is a tooth hole.

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This is also supported by Kessel's theory that the occurrence of dental caries can be caused by food and plaque, this plaque will facilitate the attachment of bacteria and is supported by poor dental and oral hygiene resulting in higher caries percentage.

CONCLUSION

The number of dental and oral hygiene in year I and II students Senior High School in Bukittinggi which amounted to 99 students with good criteria as many as 12 people (12.1%), medium criteria as many as 42 students (42.4%), and poor criteria of 45 students (45.5%). DMF-T number of students in year I and II Senior High School in Bukittinggi which amounted to 99 students with good criteria as many as 48 students (48.5%) and poor criteria as many as 51 students (51.5%). The correlation test from pearson hence got result 0,504 at level of trust of 99% and this shows the existence of relation between dental and oral hygiene to DMF-T number, at student in year I and II Senior High School of Bukittinggi, that the better level of tooth hygiene and mouth the lower or better a person's DMF-T number.

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