

The Relationship Of Maternal Knowledge With Dental And Oral Health To Caries Prevention In Pollung Village, Pollung District, Humbang Hasundutan Regency In 2023

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Article Info	ABSTRACT
<p>Keywords: Knowledge, Prevention of caries</p>	<p>Caries or called cavities is one of the dental and oral health problems in most of Indonesia's population. Dental caries in children, if left untreated, will result in toothache, pulp disease, abscesses, and fistulas so that it can have an impact on the general condition of children. The national prevalence of dental and oral health is 60% while for North Sumatra province for dental and oral health the prevalence is 60%. The correct way to brush teeth for the province of North Sumatra is 1.8%. People brush their teeth every day but with the time of brushing their teeth is not correct. The purpose of this study is to determine the relationship between maternal knowledge and dental and oral health to the incidence of caries in Pollung Village, Pollung District, Humbang Hasundutan Regency. This type of research is a quantitative analytical research with a crosssectional design. This research was carried out in May-June 2023, in Humbang Hasundutan Regency. The population was 41 respondents and sampling was done using the total sampling method with a sample of 41 respondents. Data collection uses a questionnaire, then processed by chi-square test $\alpha = 0.05$. The results of the study showed that based on mothers' knowledge about dental and oral health using p-values (0.001) and ($\alpha = 0.05$). Based on the results of the study, it can be concluded that knowledge related to dental and oral health is related to the occurrence of caries. From the results of the study, it is hoped that respondents will further increase their knowledge in learning and seeing information about Aries Prevention, to maintain dental health so as to minimize the incidence of dental caries.</p>
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INTRODUCTION

Based on the World Health Organization in 2020, the prevalence of dental caries in school children around 90% worldwide has suffered from dental caries. The highest prevalence of dental caries is found in Asia and Latin America (Nugraha et al., 2021). According to Basic Health Research (RISKESDAS, 2018), the national prevalence of dental and oral health is 60%, while for North Sumatra province for dental and oral health, the prevalence is 60%.

Dental health issues are an important issue in health development efforts, especially because children are vulnerable to dental health problems. Dental and oral health is vital because it can affect the overall health of the body, considering that the mouth is the main entry point for microorganisms. Therefore, the behavior of maintaining dental and oral hygiene needs to be instilled from an early age. Dental and oral health can be seen from a person's ability to eat, talk, and socialize without experiencing annoying complaints, discomfort, or embarrassment (RISKESDAS, 2020)

The awareness level to brush teeth correctly in North Sumatra Province is only 1.8%. Dental health issues are an important issue in health development, especially because children are vulnerable to dental health problems. Dental and oral health can be assessed by a person's ability to eat, speak, and socialize without any annoying complaints, discomfort, or embarrassment (Negeri and Dokter, 2020).

Dental health problems, especially dental caries, are often a complaint in both children and adults. Dental caries should not be left to severe as it can affect quality of life, such as pain, discomfort, acute and chronic infections, as well as eating and sleep disturbances. The occurrence of dental caries in a person is largely influenced by their knowledge of dental and oral hygiene. If a healthy lifestyle in maintaining dental health is formed through good behavior in maintaining dental and oral hygiene, then the risk of dental caries can be minimized. Poor behavior in maintaining poor dental and oral health can increase the risk of dental caries (Norfai, 2018).

METHODS

This type of research is a Quantitative Descriptive research with a crosssectional design looking at the description between independent variables (Knowledge) and dependent variables (Carry Prevention) on the relationship between maternal knowledge and dental and oral health to the incidence of caries in Pollung Village, Pollung District, Humbang Hasundutan Regency. The research was conducted in Pollung Village, Humbang Hasundutan Regency from February to June 2024. The study population is all mothers in Pollung Village in Humbang Hasundutan district in 2023. The sample in the study was 41 people, using the *Incidental Sampling technique*. The inclusive criteria in the study are mothers who have children in Pollung Village and mothers who can read and write. Data were collected using a research questionnaire. The study used univariate and bivariate analysis using *the Chi-Square test*.

RESULTS AND DISCUSSION

Univariate Analysis

Characteristics of Respondents

Tabel 1 Distribution of Respondent Characteristics

1. Education		
Education	Frequency	Percentage
SD	3	7,3

SMP	5	12,2
SMA	24	58,5
PT	9	22,0
Total	41	100,0

2. Employment

Work	Frequency	Percentage
Self employed	6	14,6
Civil servants	9	22,0
Farmer	26	63,4
Total	41	100,0

Based on table 4.1, it is known that the distribution of respondent characteristics based on elementary education is 3 people (7.3%) and junior high school education as many as 5 people (12.2%), high school education as many as 24 people (58.5%), and college education as many as 9 people (22.2%). The distribution of respondents based on occupation was 26 farmers (63.4%), traders or self-employed workers as many as 6 people (14.6%) and civil servants as many as 9 people (22.2%).

Tabel 2. Distribution of Frequency of Maternal Respondents Based on Knowledge, Information Sources, and Incidence of Caries in Children in Humbang Hasundutan Regency in 2023.

Knowledge		
Categories Knowledge	Frequency	Percentage
Good	10	24,4
Enough	29	70,7
Less	2	4,9
Total	41	100,0
Caries Incidence		
Caries Incidence	Frequency	Percentage
Caries	24	58,5
No Caries	17	41,5
Total	41	100,0

Based on the table, it is known that the distribution of respondents based on good knowledge is 10 people (24.4%) and 29 people (70.7%) who have sufficient knowledge and 2 people who have less knowledge (4.9%). The distribution of respondents based on the incidence of caries was 24 children of respondents who suffered from caries and 17 children (41.5%) of respondents who did not suffer from caries disease.

Bivariate Analysis

The Relationship of Mothers' Knowledge About Dental and Oral Health to Caries Prevention in Pollung Village, Pollung District, Humbang Hasundutan Regency in 2023 Based on Knowledge

Tabel 3 Distribution of Frequency of Mother's Knowledge about Dental and Oral Health Based on Knowledge

Knowledge	Caries Occurrence				Total		<i>p -value</i>
	Caries		No Caries		N	%	
	n	%	n	%			
Good	1	10	9	52,9	10	24,4	0,001
Enough	21	87,5	8	47,1	29	70,7	
Less	2	8,3	0	0,0	2	4,9	
Total	24	100	17	100	41	100	

Based on table 4.2, it is known that of the 41 respondents who did not experience caries with good knowledge as many as 1 person (10%), and those who experienced caries as many as 9 people (52.9%) had sufficient knowledge, there were 21 people (87.5) who did not experience caries and 29 people who experienced caries (70.7%), and less knowledgeable people who experienced caries there were 2 people (8.3%). And those who do not experience caries do not exist.

The results of bivariate analysis with the chi-square test using $df = 2$ obtained a p -value ($0.001 < \alpha (0.05)$), then H_a was accepted, H_o was rejected means that there was an influence of knowledge on maternal knowledge on the prevention of dental caries in Pollung Village, Humbang Hasundutan Regency.

The results of this study are in line with previous research which said that there is a relationship between the role of parents in dental and oral hygiene and the incidence of dental caries in preschool children. The results of the research that have been conducted found that there is a relationship between knowledge and Covid-19 prevention in pregnant women (p value = 0.037), there is a relationship between attitude and Covid-19 prevention in pregnant women (p value = 0.022), there is a relationship between education and Covid-19 prevention in pregnant women (p value = 0.000), there is a relationship between work and Covid-19 prevention in pregnant women (p value = 0.029), there is a relationship between information sources and Covid-19 prevention in pregnant women (p value = 0.005) (Nurkamiden et al, 2022).

CONCLUSION

Based on the results of the study, it can be concluded that there is a relationship between maternal knowledge about dental and oral health to the prevention of caries in Pollung, Pollung District, Humbang Hasundutan Regency in 2023.

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Kino Siboro et.al

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