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Relationship of Mom Behavior in Maintaining Dental and Mouth Health Towards The Prevention of Dental Caries in Preschool Children Aged 4-6 Years at Tunas Bangsa Tk, Tulungagung Village, Bojonegoro District 2021

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### **ABSTRACT**

Dental care is needed by all individuals, both children and adults. In Indonesia, dental and oral diseases, especially caries and periodontal disease, are still suffered by both children and adults. The main problems of dental health, namely cavities (dental caries), malocclusion and periodontal disease, trauma and tooth loss cause parents to misperceive dental problems regarding dental caries. From the results of a preliminary study conducted by researchers, it was found that there were 5 children who had dental caries. This type of research is quantitative using a cross sectional approach. The sample in this study were all mothers who have children aged 4-6 years in Tunas Bangsa Kindergarten, Tulungagung Village, Baureno District, Bojonegoro Regency with a sample of 37 respondents and using purposive sampling technique. Data were processed using univariate, bivariate and chisquare methods. The results of the Chi Square test analysis of maternal behavior in maintaining oral and dental health on efforts to prevent dental caries in preschool children obtained a p value = 0.044 with a value = 0.05. The behavior of mothers who did not prevent and did not prevent as many as 16 people (76.2%), the behavior of mothers who did not prevent as many as 5 people (23.8%), and the behavior of mothers who were good and did not prevent as many as 7 people (43.8%), and good mother behavior and prevent as many as 9 people (56.3%). This shows that there is a relationship between maternal behavior in maintaining dental and oral health and efforts to prevent dental caries. The advice that can be given is that mothers should pay more attention to their children's dental and oral health, especially preschoolers, monitor the food consumed by children,

Keywords: Behavior; dental caries; prevention of dental caries

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# INTRODUCTION

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Dental care is needed by all individuals, both children and adults. This is due to daily contact with food and always requires teeth to chew. If it is not properly cared for, it is possible for food to become a potential place for both pathogenic and non-pathogenic microorganisms<sup>1</sup>.

In Indonesia, dental and oral diseases, especially caries and periodontal disease, are still suffered by many, both children and adults. Most dental and oral health problems can actually be prevented. Oral health is not entirely dependent on a person's behavior. There are many ways to reduce and prevent dental and oral disease with various approaches that include prevention that starts in the community, self-care and professional care<sup>2</sup>

Foods that are not good cause a lot of dental disease and diseases in other parts of the mouth as well. Food debris stuck in the teeth can cause bacterial growth and this causes a local acid reaction which then attacks the tooth surface. Minor cracks or defects in the enamel, or the hard exterior of the tooth, also cause this process. Once the enamel has worn away, the tooth is more easily damaged<sup>3</sup>

Dental caries is still a health problem for children. Around 90% of Indonesian toddlers experience tooth decay. The number of toddlers reaches 15% of the more than 250 million population of Indonesia, so that there are more than 75 million children who experience tooth decay. This number is very likely to continue to grow, because in the national household health survey (SKRT) in 1990 it was only 70% but in the 2000s it had reached 90%. According to data from Basic Health Research (RISKESDAS) in 2013, the national prevalence of dental and oral problems was 25.9%, the prevalence of dental and oral problems in the East Java region was still above the national figure of 27.2%<sup>4</sup>

The results of a preliminary study conducted at Tunas Bangsa Kindergarten, Tulungagung Village, Baureno District, Madiun Regency in April 2021, out of 10 students there were 5 children who experienced dental caries because they thought that dental caries was a natural thing experienced by young children and tended to be ignored because it was considered not life threatening.

In this case it is necessary to supervise as early as possible, especially for children who are young, they have not experienced further damage and are still in the learning stage so that they are more accepting and experience changes to develop. Dental health education is a method to motivate a person to clean their mouth effectively. This approach should not be considered as a doctor's instruction but rather an encouragement or invitation to make someone aware of the importance of oral hygiene. In teaching children to brush their teeth, the goal should be to instruct and encourage them to remove all debris and plaque from all accessible tooth surfaces<sup>5</sup>

Clean and healthy living behavior is an effort to provide learning experiences or create conditions for individuals, families, groups, and communities by opening lines of communication, providing information and educating <sup>1</sup>.

# **METHODS**

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The research design is a correlation study with the type of research is analytical research. using a cross sectional approach.). The sample in this study were mothers who had children aged 4-6 years at Tunas Bangsa Kindergarten, Tulungagung Village, Baureno District, Bojonegoro Regency, which amounted to 37 respondents in April. 2020, Sampling technique using *Purposive Sampling* with of children whose inclusion criteria were mothers, Data analysis using Chi Square statistical test p value <0.05.

# **RESULT**

# 1) Characteristics by Age

Table 1 Distribution of Respondents by Age

No	Age	Amount	Percentage (%)
1	>19	2	5.4
2	20-34	30	81.1
3	>35	5	13.5
	Total	37	100.0

Source: Primary Data, 2021

Based on the table above, it can be seen that most of the respondents aged 20-34 years were 30 people (81.1%).

# 2) Characteristics Based on Education Level

Table 2 Distribution of Respondents by Education Level

No	Level of education	Amount	Percentage (%)	
1	SD	16	43.2	
2	junior high school	13	35.1	
3	senior High School	7	18.9	
4	College	1	2.7	
	Total	37	100	

Source: Primary Data, 2021

Based on the table above, it is found that most of the respondents have an elementary education level of 16 people (43.2%).

# 3) Characteristics by Type of Work

Table 3 Distribution of Respondents by type of work

No	<b>Employment Rate</b>	Amount	Percentage (%)
1	Farmer	22	59.5
2	entrepreneur	5	13.5
3	ĪRT	10	27.0
	Total	37	100.0

Source: Primary Data, 2021

Based on the table above, it can be seen that most of the respondents work as farmers as many as 22 people (59.5%).

# 4) Characteristics based on Mother's Behavior in maintaining dental and oral health

Table 4: Distribution of respondents based on mother's behavior in maintaining dental and oral health

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No	Behavior	Amount	Percentage (%)	
1	Not enough	21	56.8	
2	Good	16	43.2	
	Total	37	100.0	

Source: Primary Data, 2021

Based on the table above, it can be seen that most of the respondents have poor behavior as many as 21 people (56.8%).

5) Characteristics based on efforts to prevent dental caries in preschool children aged 4-6 years.
Table 5 Distribution of respondents based on efforts to prevent dental caries in preschool children aged 4-6 years

No	Prevention	Amount	Percentage (%)
1	Not Prevent	23	62.2
2	Prevent	14	37.8
	Total	37	100.0

Source: Primary Data, 2021

Based on table 5.5 above, it can be seen that the respondents who did not prevent were 23 people (62.2%), and the respondents who did prevention were 14 people (37.8%).

6) Cross tabulation Maternal behavior and efforts to prevent dental caries

Mother's Behavior	Prevention			Total		
Mother's Denavior	No	%	Yes	%	Σ	%
Less	16	76,2	5	23,8	21	56,8
Fine	7	43,8	9	56,3	16	43,2
Total	23	100	14	100	37	100

The table above shows the behavior of mothers who are less and do not prevent as many as 16 people (76.2%), the behavior of mothers who prevent as many as 5 people (23.8%), and good and non-preventive behavior of mothers as many as 7 people (43.8%), and good behavior of mothers and prevent as many as 9 people (56.3%).

The results of the analysis of the relationship between behavior and prevention efforts above show that based on the chi-square test analysis, the results of the statistical test show that the value of = 0.044 < = 0.05 Thus Ho is rejected, which means that there is a relationship between maternal behavior and prevention of dental caries in preschool children at Tunas Bangsa Kindergarten, Tulungagung Village, Baureno District, Bojonegoro Regency.

# **DISCUSSION**

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# 1. Mother's behavior in maintaining dental and oral health in preschool children aged 4-6 years.

Based on the results of research conducted on 37 respondents, it was found that most of the poor behavior of mothers were 21 people (56.8%), while a small portion of good mothers' behavior was 16 (43.2%). This shows that the mother's lack of behavior in maintaining the health of the child's teeth and mouth.

According to Notoatmodjo, the behavior of a person or society regarding health is determined by the knowledge, attitudes, beliefs, traditions, and so on of the person or society concerned. In addition, the availability of facilities, attitudes, and behavior of health workers towards health will also support and strengthen the formation of behavior<sup>6</sup>.

Based on the results of the research above, it can be concluded that the poor behavior of mothers in maintaining dental and oral health in preschool children is influenced by the lack of information, insight and experience of mothers about how to maintain dental and oral health.

Based on the characteristics of the respondents, most of the respondents' education was elementary school and most of the respondents' occupations were farmers. This can affect the behavior of respondents because good behavior is balanced with good knowledge, so that low knowledge leads to less than optimal information reception and the work of respondents, who are mostly farmers who work from morning to evening, causes mothers to pay less attention to their children's dental and oral health<sup>7</sup>.

# 2. Efforts to prevent dental caries in preschool children aged 4-6 years.

Based on the results of research conducted on 37 respondents, it was found that the majority of mothers who did not prevent were 23 people (62.2%), while a small proportion were 14 people (37.8%). This shows that there is a lack of maternal efforts in preventing dental caries in preschool children aged 4-6 years.

According to Putri, who was written in the book Science of Preventing Diseases of Hard Tissues and Dental Supporting Tissues in 2012 stated that Prevention can be defined as preventing the onset or development of a disease or restoring body functions that have been lost or reduced due to disease. Prevention aims to prevent the occurrence of disease or prevent its severity in order to protect oral health, which is focused on keeping humans health<sup>8</sup>.

Based on the results of the research above, it can be concluded that the mother's prevention efforts are influenced by the mother's education which is mostly elementary school and the work of the mother who is mostly farmers. Poor prevention efforts cause the mother's efforts to be less than optimal. Therefore, knowledge, encouragement and motivation are needed both from the family environment, education and supportive health workers to prevent dental caries in children<sup>9</sup>.

# 3. The relationship between mother's behavior in maintaining oral and dental health on efforts to prevent dental caries in preschool children aged 4-6 years at Tunas Bangsa Kindergarten, Tulungagung Village, Baureno District, Bojonegoro Regency.

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Based on the research, it was found that based on the cross tabulation between the mother's behavior in maintaining dental and oral health towards the prevention of dental caries above, it showed that the good behavior of the mother was 16 people (43.2%) by doing prevention as many as 9 people (56.8%) and who did not do prevention as many as 7 people (43.8%). There were 21 respondents (56.8%) who behaved less than 5 people (23.8%) and 16 people (76.2%) who did not do prevention.

Based on the analysis of the chi-square test, the results of the statistical test obtained the value of = 0.044 < = 0.05 Thus Ho is rejected, which means that there is a relationship between maternal behavior in maintaining oral and dental health on efforts to prevent dental caries in preschool children aged 4-6 years in Tunas Bangsa Kindergarten, Tulungagung Village, Baureno District, Bojonegoro Regency.

Behavior is the result of all kinds of human experiences and interactions with their environment. Human behavior tends to be holistic (holistic), and basically consists of psychological, physiological, and social points of view. However, these three points of view are difficult to distinguish between their influence and role on the formation of human behavior. Human behavior is a reflection of various psychological elements that include desires, attitudes, reactions, fear or anxiety, and so on <sup>10</sup>.

Therefore, human behavior is influenced or shaped from factors that exist in humans or their psychological elements. However, environmental factors are factors that participate in developing human behavior<sup>11</sup>.

Prevention can be defined as preventing the onset or development of a disease or restoring body functions that have been lost or reduced due to disease. Prevention aims to prevent the occurrence of disease or prevent its severity in order to protect oral health, which is focused on keeping humans healthy <sup>2</sup>

According to the researcher's assumptions, the respondent's behavior is not good in maintaining the health of children's teeth and mouth from an early age, causing children to find it difficult to brush their teeth twice a day and excessive consumption of sweet foods and drinks causes children to be susceptible to dental caries. It is necessary to increase health promotion and effective health services to prevent dental caries in preschool children, especially in the Tulungagung Village, Baureno District, Bojonegoro Regency.

# CONCLUSION

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There is a relationship between mother's behavior in maintaining oral and dental health on efforts to prevent dental caries in preschool children aged 4-6 years at Tunas Bangsa Kindergarten, Tulungagung Village, Baureno District, Bojonegoro Regency.

### REFERENCES

- 1. Priyoto. 2015. *Perubahan dalam Perilaku Kesehatan Konsep dan Aplikasi*. Yogyakarta: Graha Ilmu.
- 2. Putri, Megananda Hiranya, Herijulianti, Eliza, dan Nurjannah, Neneng. 2012. *Ilmu Pencegahan Penyakit Jaringan Keras dan Jaringan Pendukung Gigi*. Jakarta: Penerbit Buku Kedokteran EGC.
- 3. Iswandani, Winda. 2015. Gambaran Pengetahuan Anak Usia 7 Sampai Dengan 12 Tahun Tentang Oral Hygiene berdasarkan Karakteristik Di SDN Jalan Anyar Kota Bandung.
- 4. Kemenkes RI. *Hasil Riset Kesehatan Dasar Tahun 2018*. Kementrian Kesehat RI. 2018;53(9):1689–99.
- 5. Dewi, dkk. 2015. Teori dan Konsep Tumbuh Kembang. Yogyakarta: Nuha Medika.
- 6. Notoatmodjo, Soekidjo. 2010. Ilmu Perilaku Kesehatan. Jakarta: Rineka Cipta
- 7. Alhamda S. 2011. Status Kebersihan Gigi dan Mulut dengan Status Karies Gigi (Kajian pada Murid Kelompok Umur 12 Tahun di Sekolah Dasar Negeri Kota Bukittinggi).
- 8. Amelia ZR. 2020. *Pengetahuan Ibu Tentang Karies Gigi Aanak Prasekolah* (Studi Pada Anak TK Dharma Wan Desa Klanderan Kec Plosoklaten Kabupaten Kediri.
- 9. Ernawati D. 2019. Perilaku Ibu Dalam Upaya Pencegahan Karies Gigi Pada Anak Prasekolah (Early Childhood Caries) Usia 4 5 Tahun Di Desa Mirit Kecamatan Mirit Kabupaten Kebume. Jurnal Undip.
- 10. Pamunarsih.2008. Perilaku Ibu dalam Menjaga Kesehatan Gigi dan Mulut Anak Usia Prasekolah di Wilayah Puskesmas Kedung Mundu Kota Semarang. J Undip.
- 11. Budiharto. 2010. *Pengantar Ilmu Perilaku Kesehatan dan Pendidikan Kesehatan Gigi*. Jakarta: Kedokteran EGC.