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The Influence Of Parental Knowledge On Oral Habits In Children Aged 7-12 Years In Public Elementary Schools In Cimahi City

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ABSTRACT
Bad habits are repetitive actions that typically cease on their own in children under six years old. However, if these habits persist beyond the age of six, they can lead to abnormalities in the dentofacial structure such as malocclusion, facial deformities, and palatal shape irregularities. Knowledge about children's bad habits is crucial for parents as it directly impacts the development and growth of their child's healthy teeth. Insufficient parental knowledge about these habits, if repeated, can result in oral cavity abnormalities in children, which can affect dentofacial functions including speech, tooth occlusion, chewing, swallowing, and aesthetics. Good parental knowledge about the negative impacts of bad habits is essential for parents to take necessary preventive measures. This study aimed to determine the influence of parental knowledge on bad habits in the oral cavity of children aged 712 years in public elementary schools in Cimahi City. The research design used was analytical observational with a cross-sectional approach. The study involved 317 parents of children aged 7-12 years attending public elementary schools in Cimahi City. Data collection was conducted through a 39-item questionnaire distributed via Google Forms. The research findings showed that the correlation coefficient with a significance value (p sig) of 0.000 < 0.05, indicating that there is a correlation between parental knowledge (X) and bad habits in the oral cavity of children (Y). There is an influence of parental knowledge on bad habits in the oral cavity of children aged 7-12 years in Cimahi City.

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INTRODUCTION

Knowledge is the result of the process of gathering, processing, and understanding information through the sensory perception of specific objects using human senses. Knowledge about children's bad habits is very important for parents because it has a direct impact on the development and growth of their children's healthy teeth. The attitudes and actions displayed by parents have a significant influence on the behavior of children. The knowledge and understanding that parents have about children's bad habits are crucial because these habits have significant effects on overall health and quality of life. It is

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important to provide intensive dental care for children aged 7-12 years because they are going through the mixed dentition phase. Therefore, it is important to provide dental care from an early age so that children have well-functioning permanent teeth in the future.[1,2] The knowledge of parents regarding bad habits plays a crucial role in preventing such habits in children. Parents serve as the primary educators in their children's lives, and their ignorance can be a triggering factor for such problems. Unbeknownst to them, the behavior and knowledge of parents can influence whether these bad habits persist or not, as well as the oral health of their children.

The importance of parents' knowledge and attitudes towards bad habits can determine whether these habits continue to occur repeatedly or not. Therefore, a proper understanding of the negative impacts of bad habits is essential so that parents can take necessary preventive measures.[3] Habit is a repetitive action and a normal activity that occurs naturally; habits that can affect the dentofacial region are termed as bad habits. The normal development of the dentofacial region depends on the proper function of muscles around the mouth, including a balance between the muscles of the lips, cheeks, and the intrinsic tongue muscles. Bad habits serve to reduce emotional pressure or anxiety in children and play a significant role in the physical and emotional development of individuals. If bad habits persist for a prolonged period, they can affect both physical and social development.4,5

Bad habits in children include several types, such as thumb sucking, bruxism, tongue thrusting, lip habits, mouth breathing, and nail biting.6 According to the World Health Organization (WHO) in 2022, based on global data, approximately 60-90% of school-aged children experience dental decay. Research findings in Indonesia and abroad indicate a high prevalence of bad habits among preschool-aged children. Based on the Basic Health Research (RISKESDAS) in 2018, 57.6% of the Indonesian population has dental and oral health problems, with 93% of children affected. A study by Dhull K.S et al in India involving 500 children found that 12.8% had thumb sucking habits, 11% mouth breathing habits, 13.4% lip habits, and 12.8% bruxism. Another study by Varas in Spain revealed that the prevalence of bad habits among preschool-aged children was 90.7%, indicating a very high rate. Research conducted by Rajchanovska in Macedonia showed that 35.59% of preschool children had bad habits. Additionally, a study by Miotto et al in Brazil involving 150 children found that 57.3% had bad habits. Another study by Rahmawati et al in Yogyakarta involving 107 children found that 28.9% engaged in nail biting, 23.3% lip biting, 20.5% thumb sucking, 13% bruxism, and 8.4% mouth breathing. From the findings of previous studies, it can be observed that the frequency of bad habits occurring in the oral cavity of preschool-aged children is very high, which may be due to emotional factors and habits acquired during preschool age.6-10

Bad habits in children that persist beyond the age of six can lead to abnormalities in the dentofacial structure such as malocclusion, facial deformities, and palate shape abnormalities. Malocclusion is a condition where the relationship between the teeth and jaws deviates from the normal state. The prevalence of malocclusion in Indonesia is around 80% of the population. Malocclusion angle is classified into three classes based on the relationship between the upper and lower first molar occlusion: class I, class II, and class III. Malocclusion

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angle can be prevented and treated with orthodontic care. Skeletal malocclusion is classified into three classes based on the relationship between the upper and lower jaws: class I, class II, and class III. Treatment options for skeletal malocclusion include growth modification, camouflage treatment, and orthognathic surgery.[11-12]

Based on Drupadi's research, the prevalence of malocclusion in Cimahi city is very high, reaching 91.26%, and malocclusion ranks third among oral health problems. Parental knowledge is crucial for preventing malocclusion in children from an early age. A study conducted in India indicates that parental knowledge of bad habits in children's oral cavity is at a moderate level, and parents are unaware of the negative consequences of these bad habits. Bad habits in children should be a concern for parents as early as possible because if repeated, they can lead to malocclusion.[13-15]

Parents' understanding and attention play a crucial role in preventing bad habits in children. Parents can demonstrate care through their attitudes towards maintaining their children's dental health. It is important for parents to pay attention to their children's dental health during school age, as this is a critical period in the growth and development of their teeth. Parental knowledge significantly influences whether children develop behaviors that support or hinder dental growth. Parents can help avoid bad habits that can negatively impact dental growth by providing understanding and assisting children in developing behaviors that support healthy dental growth. Therefore, parental knowledge plays a vital role in shaping children's behaviors regarding dental growth through proper education, supervision, and ensuring children have habits that support dental health and growth.[3,16,17] This research was conducted on children aged 7-12 years because this is the period of primary tooth shedding and permanent tooth eruption, known as the mixed dentition phase. Parental understanding and attention play a crucial role in preventing bad habits in children, so if parents are aware of any bad habits in their children, they can immediately take steps to avoid them to prevent further issues. Based on this background, it forms the basis of why the author was interested in conducting a study on the influence of parental knowledge on oral habits in children aged 7-12 years at the State Elementary Schools in Cimahi City.[18]

METHODS

This study is an observational analytical study with a cross-sectional design, where samples meeting the inclusion and exclusion criteria were taken as research subjects. In a cross-sectional study, researchers observe subjects at a single point in time, meaning each subject is observed only once. The aim of this study is to determine the influence of parental knowledge on the oral habits of children aged 7-12 years in State Elementary Schools in Cimahi City. The sampling technique used is probability sampling with simple random sampling, which involves selecting samples from a population where each member of the population has an equal chance of being chosen.

The population in this study consists of parents (either fathers or mothers) who have children aged 7-12 years attending State Elementary Schools in Cimahi City.

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The sample size for the study is 317 parents who have children aged 7-12 years and are enrolled in State Elementary Schools in Cimahi City, comprising 106 parents from South Cimahi, 106 parents from North Cimahi, and 105 parents from Central Cimahi.

The research was conducted with the administration of a questionnaire in the form of a Google Form to 317 parents. The procedure involved in this study includes preparing the research respondents, who are parents with children aged 712 years attending State Elementary Schools in Cimahi City. The respondents were provided with information sheets and informed consent forms. Respondents willing to participate in the study were asked to fill out the consent form and complete the Google Form containing statements regarding parental knowledge of oral habits in children aged 7-12 years.

RESULTS

Distribution of Subject Characteristics Based on Overall

Here is an overview of the general characteristics of the study subjects based on age, gender, highest education level, and occupation overall

Table 4. 1 Age

Age	Frequency	Percent%
21-33	62	19.6
34-45	199	62.7
46-57	56	17.7
Total	317	100.0

The data analysis results in Table 4.1 indicate that based on age, the majority of respondents are aged 34-45 years, totaling 199 individuals (62.7%).

Table 4. 2 Gender of Responden

Gender of Responden	Frequency	Percent%
Male	74	23.3
Female	243	76.7
Total	317	100.0

The data analysis results in Table 4.2 indicate that based on gender, the majority of respondents are female (mothers), totaling 243 individuals (76.7%).

Table 4. 3 Last Education

Last Education	Frequency	Percent%
Elementary School	16	5.0
Junior High School	45	14.2
Senior High School	104	32.8
Vocational School	67	21.2
Higher Education	85	26.8
Total	317	100.0

The results of the data analysis in Table 4.3 indicate that based on the last education, the majority of respondents had completed high school education, totaling 104 individuals (32.8%).

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Table 4. 3 Occupation

Occupation	Frequency	Percent%
Employed	134	42.3
Unemployed	183	57.7
Total	317	100.0

The results of the data analysis in Table 4.4 indicate that based on occupation, the majority of respondents do not work, totaling 183 individuals (57.7%).

Distribution of Parental Knowledge Overview Overall

Here is an overview of parental knowledge based on the overall distribution.

Tabel 4. 6 Distribution of Parental Knowledge Overview Overall

Pengetahuan Orang Tua	Frequency	Percent%
Good	192	60,6
Fair	116	36,6
Poor	9	2,8
Total	317	100.0

The results of the data analysis in Table 4.17 indicate that the overall picture of parental knowledge mostly falls into the good category, comprising 192 individuals (60.6%).

Distribution of the overview of bad habits in children's oral cavities based on the entirety is as follows

Here is the general overview of bad habits in children's oral cavities based on the entirety.

Tabel 4. 7 Distribution Of The Overview Of Bad Habits Overall

Thumb Sucking	**Frequency**	**Percent%**
Strongly Disagree	132	41.6
Disagree	145	45.8
Neutral	19	6.0
Agree	8	2.5
Strongly Agree	13	4.1
Total	317	100.0

	Frequency	**Percent%**
Bruxism		
Strongly Disagree	127	40.1
Disagree	143	45.1
Neutral	40	12.6
Agree	2	.6
Strongly Agree	5	1.6
Total	317	100.0

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	Frequency	Percent%
Tongue Thrusting		
Strongly Disagree	119	37.5
Disagree	141	44.5
Neutral	43	13.6
Agree	6	1.9
Strongly Agree	8	2.5
Total	317	100.0

	Frequency	Percent%
Lip Habits		
Strongly Disagree	106	33.4
Disagree	161	50.8
Neutral	33	10.4
Agree	7	2.2
Strongly Agree	10	3.2
Total	317	100.0

Mouth Breathing	Frequency	Percent%
Strongly Disagree	126	39.8
Disagree	142	44.8
Neutral	39	12.3
Agree	3	.9
Strongly Agree	7	2.2
Total	317	100.0

Nail Biting	Frequency	Percent%
Strongly Disagree	129	40.7
Disagree	139	43.8
Neutral	18	5.7
Agree	10	3.2
Strongly Agree	21	6.6
Total	317	100.0

The results of the data analysis in Table 4.21 indicate that the overall overview of bad habits in children's oral cavities shows that more children engage in the habit of nail-biting, with a total of 31 individuals (9.8%), while the number of children with other bad habits is lower overall, specifically, bruxism, with a total of 7 individuals (2.2%).

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Preliminary Analysis Testing

Tabel 4. 8 Correlations

Correlations

		Pengetahuan Orang Tua	Kebiasaan Buruk Pada Rongga Mulut Anak
Pengetahuan Orang Tua	Pearson Correlation	1	.378**
	Sig. (2-tailed)		.000
	N	317	317
Kebiasaan Buruk Pada Rongga Mulut Anak	Pearson Correlation	.378**	1
	Sig. (2-tailed)	.000	317
	N	317	

The results of the data analysis in Table 4.28 indicate that the significance value for parental knowledge is 0.000 and the significance value for children's oral cavity bad habits is 0.000, both of which are less than 0.05. This suggests that the two variables are correlated or have a relationship. The correlation coefficient between parental knowledge and children's bad habits in the oral cavity is 0.378, indicating a low correlation between them.

Discussion

Based on the research findings, the overall picture of parental knowledge indicates that the knowledge of parents regarding bad habits in the oral cavity of children aged 7-12 years in SDN Kota Cimahi, consisting of 3 districts, mostly falls into the category of good, with a total of 192 individuals (60.6%).

Regarding the regional distribution of parental knowledge, Cimahi Selatan district has the highest proportion of good knowledge, with 78 individuals (73.6%), compared to Cimahi Tengah and Cimahi Utara districts. According to information obtained from the Cimahi City Health Office data in 2019, Cimahi Selatan district has more community health centers compared to Cimahi Utara and Cimahi Tengah districts, indicating the potential for effective health promotion activities, especially regarding parental knowledge of bad habits in children's oral cavities, which positively impacts the improvement of parental knowledge concerning bad habits in children's oral cavities.[19]

The overall picture of bad habits indicates that biting nails is the most prevalent bad habit in the oral cavities of children aged 7-12 years in SDN Kota Cimahi, with 31 individuals (9.8%). This finding is consistent with Lydianna's study (2021), which showed that nail biting/chewing foreign objects is quite common among children aged 7-13 years, with a prevalence of 11.5%. This statement is supported by Amin (2022), who explains that nail biting can develop as an oral habit, which is a modification of thumb sucking in childhood triggered by boredom and lack of activity.[20]

The research results indicate that parental knowledge influences habits in children's oral cavities. This is evidenced by the coefficient correlation analysis with a p-value of 0.000 <

0.05, indicating a correlation between parental knowledge (X) and bad habits in children's oral cavities (Y). These results are consistent with Ranggang et al.'s study, which stated a significant relationship between parental knowledge regarding bad habits in children's oral cavities at an elementary school in Makassar, as good parental knowledge about bad habits in children's oral cavities functions to prevent the occurrence of bad habits in children.[15]

This research indicates that there is an influence of parental knowledge on bad habits in children's oral cavities, with the level of influence falling into the low category. The magnitude of the contribution of parental knowledge to bad habits in children's oral cavities is 0.143. This indicates that the influence of the parental knowledge variable on bad habits in children's oral cavities is 14%. Meanwhile, 86% is influenced by other variables not included in this research model, such as genetic factors, psychological factors, and systemic factors.

CONSLUSION

Based on the research conducted by the author using the method employed regarding the influence of parental knowledge on oral cavity bad habits among 712-year-old children in the Cimahi City Elementary Schools, the study can be concluded as follows: Based on the research findings, the overall picture of parental knowledge concerning bad habits in the oral cavity of 7-12-year-old children in Cimahi City's elementary schools, comprising three districts, mostly falls into the "good" category, with 192 individuals (60.6%). The research results indicate that the overall picture of bad habits in the oral cavity among children in Cimahi City, spanning three districts, predominantly involves nail-biting habits, with 31 individuals (9.8%). The research findings demonstrate the influence of parental knowledge on bad habits in the oral cavity of 7-12-year-old children in SDN Kota Cimahi. The significance test of the correlation coefficient with a p-value of 0.000 < 0.05 indicates a correlation between parental knowledge (X) and bad habits in the oral cavity of children (Y), thus rejecting the null hypothesis. Therefore, there is an influence of parental knowledge on bad habits in the oral cavity of children, falling into the "low" category. The contribution of parental knowledge to bad habits in the oral cavity of children is 0.143. This indicates that the influence of the parental knowledge variable on bad habits in the oral cavity of children is 14%. Meanwhile, 86% is influenced by other variables not included in this research model.

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