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# The Relationship of the Role of Parents in Dental and Oral Hygiene in Class IV-VI Students of SDN Nogosari 2 in Jember Agroindustry Area

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ABSTRACT ARTICLE DETAILS

Children's dental and oral hygiene is the concern and concern of parents, besides that parental knowledge affects their attitudes and actions in maintaining children's dental and oral hygiene. Schoolage children tend to experience dental health problems because at that age children prefer to snack on cariogenic foods and drinks. Purpose: The purpose of this study was to determine the relationship between the role of parents in dental and oral hygiene in grade IV-VI students of SDN Nogosari 2 in the Jember Agroindustry area. Methods: This type of research is analytic observational with a cross sectional approach. Results: There is a significant relationship between the role of parents on the dental and oral hygiene of grade IV-VI children at SDN Nogosari 2, Rambipuji District, Jember Regency. Coclusion: The results of the study found that there was a relationship between the role of parents in class VI, the majority of whom worked as farm laborers at SDN Nogosari 02, on dental and oral hygiene. The role of good parents does not determine good dental and oral hygiene, while the role of adequate parents can form good dental and oral hygiene of children.

**KEYWORDS:** Dental and oral hygiene, Role of parents, Agroindustry Jember

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### INTRODUCTION

Dental and oral hygiene is a state in which a person's oral cavity is free of impurities such as debris, plaque, and tartar. Plaque will always form on the teeth and spread to the entire surface of the teeth if dental and oral hygiene are neglected.

Parents are responsible for keeping their children's teeth and mouths clean. The knowledge of parents influences their attitudes and actions regarding the cleanliness of their children's teeth and mouth. Parents must teach their children how to brush their teeth properly and correctly, when it is appropriate to brush their teeth, and take their children to the dentist on a regular basis to check their dental health status.

Socioeconomic factors such as employment, education, income, and family size can all have an impact on dental and oral hygiene.

According to the Indonesian Ministry of Health's 2018 Regional Health Research, the proportion of dental and oral health problems in Indonesia is still quite high at 57.6%,

the proportion of services from dental medical personnel is only 10.2%, and the proportion of proper tooth brushing behavior in the aged population >3 years is only 2.8%. <sup>1</sup>.

Children aged 6 to 12 years often have dental problems because they prefer to snack on cariogenic foods and drinks. Children in grades IV-VI are more cooperative than those in grades I-III. A child's cognitive development at the concrete operational stage occurs during this age range. At this stage, thinking becomes more logical and coherent, making it easier to understand the orders given <sup>2,3</sup>

Dental and oral hygiene measurement is an attempt to determine a person's dental and oral hygiene condition. The PHP-M (Personal Hygiene Performance-Modified) method is used to assess dental and oral hygiene. This index was initially designed to evaluate individuals or groups involved in plaque cleaning after being given instructions to brush their teeth.<sup>4</sup>

Jember Regency is a coastal district in East Java's southern

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region, with 2.5 million residents spread across 31 subdistricts. The majority of Jember Regency residents are farmers and agricultural industrial workers, Rambipuji is a sub-district in Jember Regency where the majority of the population works in agriculture <sup>5</sup>. The results of the survey, information obtained that the dental and oral health service program from the local Puskesmas, particularly UKGS (School Dental Health Business), was last carried out five years ago, coincided with the global Covid-19 outbreak. This can jeopardize public health efforts to maintain and improve the oral and dental health of all students in the target schools.

Based on the foregoing, it is necessary to conduct research on the relationship between the role of parents in dental and oral hygiene in class IV-VI students at SDN Nogosari 2 in the agro-industrial area of Jember in order to find solutions to improve the overall quality of health, particularly dental and oral health.

#### RESEARCH METHOD

This is an analytic observational study with cross-sectional data collection techniques. The study was conducted at SDN Nogosari 2, Rambipuji District, Jember Regency, from August to November 2021.

This study's population consists of children in grades IV-VI at SDN Nogosari 2. The total sampling technique was used in this study, with a total of 40 subjects. Mothers/fathers/relatives who could read and write to fill out the questionnaire, children who were active students in grades

IV-VI at SDN Nogosari 2, children aged 10-13 years at the time of the study, and respondents with a body temperature of 37oC at the time of examination were the criteria for the subject of this study. The role of parents of students in grades IV-VI at SDN Nogosari 2 Jember was the independent variable in this study, while dental and oral hygiene for students in grades IV-VI at SDN Nogosari 2 Jember was the dependent variable.

The assessment of parents' knowledge is carried out by the student's guardian filling out a questionnaire sheet and examining the teeth and oral hygiene in children using the PHP-M index; after the examination, it can be concluded that the child is in the good, medium, or bad category.

Stainless steel trays, petridishes, thermoguns, tampons, dappen glass, tweezers, stationery, disposable kits, head lamps, white cloth or mats for tools, and cameras for documentation are among the tools and materials used to aid research. Informed consent, questionnaire, cotton roll, cotton pellet, 70% alcohol, aquadest, tissue, hand sanitizer, hand washing soap, and disinfectant, PPE Level 2 (cover, head, faceshield, gown, mask, handscoon),

#### RESULT AND DISCUSSION

The total number of subjects obtained in this study was 40 from 102 students in grades IV-VI. There were 35 students who refused to provide informed consent and 27 students who had symptoms of fever, cough, and runny nose

Table 1. Distribution of Research Subjects Based on Class, Age, and Gender

CLAS	AGE				SEX		%
	10	11	12	13	Pr	Lk	
IV	8	2	1	-	6	4	10(25%)
V	2	8	10	-	10	1	11(27%)
VI	1	7	-	1	8	11	40(100%)

According to table 1, the subjects in this study were elementary school students in grades IV-VI, ranging in age from 10 to 13, with an average age of 10.75 years. According to the table, class VI students had the highest percentage of subjects in this study (48%), while class IV students had the

lowest percentage (25%). The participants in this study were elementary school students aged 10 to 13. According to the table, students aged 11 years had the highest percentage of subjects in this study (42%), while students aged 13 years had the lowest percentage (3%).

Table 2. Oral hygiene distribution base on occupation of responden's parents

	Category PHP-M					
Class	Farm workers	Enterprenur	Private	Traders		
IV	6(67%)	2(22%)	0(0%)	1(11%)		
V	2(17%)	3(25%)	6(50%)	1(8%)		
VI	9(47)	0(0%)	8(42%)	2(11%)		
Total	17(42%)	5(13%)	14(35%)	4(10%)		

Table 3. The Relationship between the Role of Parents and Children's Dental and Oral Hygiene

Class	Corelation of Spearman		
IV	0,097	0,553	
V	0,489	0,234	
VI	0,013	0,145	

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The significance values for the Spearman test on the role of parents on dental and oral hygiene grades IV and V were 0.097 and 0.489 (p>0.05), indicating that there was no significant relationship between the role of parents and children's dental and oral hygiene. A significance value of 0.013 (p 0.05) indicates that there is a significant relationship between the role of parents and the cleanliness of the child's teeth and mouth in Class VI. The overall correlation coefficient figure is positive, indicating that the relationship between the two variables is unidirectional, which means that the better the role of parents, the better the level of dental and oral hygiene of children.

According to the research findings in table 1, the respondents in this study totaled 40 students, with 16 men and 24 women. This data is similar to the results of the 2020 population census in Jember Regency, particularly in the Rambipuji District, where the male population is 40% and the female population is 60% <sup>5</sup>. This condition demonstrates the unequal distribution of males and females at SDN Nogosari 2 class IV-VI.

According to the research findings in table 2, the majority of the respondents' parents work as farm laborers. Parents' socioeconomic status has an impact on their children's dental and oral hygiene. This cannot be used as a reference because other influencing factors such as parental education, parental role, and so on exist.

The class VI had the highest number of respondents with 19 people. The majority of the parent of class VI students work as farm laborers. A good dental and oral hygiene assessment yielded 18 people, with 1 being moderate. Based on the questionnaire data, it was discovered that the level of knowledge of grade VI parents better understood the importance of their child's dental and oral hygiene, which improved the child's dental and oral hygiene status. When given an understanding of maintaining good and correct dental and oral hygiene, Class VI children can act cooperatively and understand <sup>6</sup>.

According to the study's findings, the majority of the children's dental and oral hygiene were in the good category, with 25 respondents having a good parental role. While dental and oral hygiene are moderate, there are 7 respondents who have a good parental role. There are 5 people in the moderate category, 5 people in the child's dental and oral hygiene category, and 3 people in the moderate category. This means that the role of good parents does not determine good dental and oral hygiene; good parents can form dental hygiene and a good child's mouth. As a result, parental cooperation is required in motivating children so that children can apply what their parents communicate.

Motivation is required as a driving force to perform proper dental and oral hygiene. Parents should teach their children to brush their teeth after breakfast and before bedtime. This practice has not become widespread; most people only brush their teeth after bathing. This will serve as an example for children, who will only know that they must brush their teeth after bathing. As a result, getting used to changing dental and oral hygiene behavior requires strong motivation from parents, who must set a good example by teaching and supervising daily routine behavior. Parents can advise their children to limit their intake of sweet foods that easily stick to their teeth and to become accustomed to gargling after eating sweet foods. Parents must prepare calcium-rich foods (fish and milk), fluorine-rich foods (tea, beef, and green vegetables), phosphorus-rich foods, and vitamins A (carrots), C (fruit), D (milk), and E. (sprouts), These minerals and vitamins are required for the growth of children's teeth and can help children maintain proper oral hygiene <sup>7</sup>.

According to the findings of this study, parents at SDN Nogosari 2 Jember Regency took an active role in keeping their children's teeth and mouth clean. It is critical for parents to play an active role in providing guidance, direction, and facilities for dental care.

Because parents are the closest people to their children, their dental health will be determined by their role. The more active parents are in guiding their children to good habits like brushing their teeth, the lower the number of dental caries in children. Parents must guide their children when it comes to dental care. Parents are regarded as a significant influencer in maintaining oral hygiene Parental involvement is critical in guiding, understanding, reminding, and providing facilities to children so that they can maintain oral and dental hygiene. Parents must play an important role in preventing plaque buildup and caries in their children. Students in Classes IV-VI who have been taught how to brush their teeth properly and correctly will be able to maintain personal hygiene.

#### CONCLUSION

Based on the study's findings, it is possible to conclude that there is a link between the role of parents and oral hygiene in class IV-VI students at SDN Nogosari 2 Jember.

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