

THE INFLUENCE OF MATERNAL ASSISTANCE ON THE BEHAVIOR AND DENTAL HYGIENE STATUS OF CHILDREN AT SDN 2 LAMCOT, ACEH BESAR REGENCY

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ARTICLE INFO

eISSN: 2830-7186

DOI Prefix: 10.30867

Published online Desember 2023

Received: November 16, 2023

Accepted: November 23, 2023

Published: December 15, 2023

Keywords:

Keywords 1; Parent Assistance
keywords 2; Dental Hygiene
Status

ABSTRACT

Parents has an important role as a companion in child health care , because there are still many parents who think that baby teeth are only temporary and will be replaced by permanent teeth so they don't pay attention to the cleanliness of baby teeth . Study This aim For know influence accompaniment Mother to hygiene behavior and status tooth child in SDN 2 Lambcot Aceh Besar . This type of research is Quasi Experimental Design with an equivalent research design control group design with pre test and post test . The subjects in this study were all Class V students at SDN 2 Lamcot , Aceh Besar District totaling 60 children, then divided into two groups, the intervention group consisting of 30 children were given interventions (dental health education counseling and teaching students how to brush their teeth by accompanied by their parents) whereas in the control group consisted of 30 children who were given interventions (dental health education counseling and teaching students how to brush their teeth). The sampling technique in this study is the total population. The measuring instrument used is questionnaires and tools diagnosis . Analysis of the results of quantitative data in this study using Paired Sample T- Test and Independent Sample T- test . Data analysis used the Statistics Program for Social Science (SPSS), with hypothesis testing based on a significant level of $p < 0.05$. The research results show that no _ there are differences in the level of knowledge, attitudes, actions and hygiene status teeth and mouth students before and after intervention statistically significant ($p > 0.05$) p exist group control . There are differences in the level of knowledge, attitudes, actions and hygiene status teeth and mouth students before and after intervention statistically significant ($p < 0.05$) p exist group treatment . There are differences in the values of knowledge, attitudes, actions, and hygiene status pupil teeth in both groups between groups treatment with control group p This shown statistically $p < 0.05$. Director recommends n to Mother For given education and information to parents and children regarding the importance of maintaining oral hygiene.

INTRODUCTION

Children's dental and oral health is an important aspect of overall health. Problems such as dental caries, gum disease and other dental disorders can affect a child's quality of life, interfering with eating , speaking and learning functions. This problem can generally be

prevented with good dental and oral hygiene habits ¹.

Menurut Global Burdenn of diseases (GBD) study 2016, dental and oral diseases are estimated to affect at least 3.85 billion people worldwide. ² . The World Health Organization (WHO) in 2016 stated that the incidence of caries in children was still at 60-90% ³ . Based on the results of the 2018

Basic Health Research (Rikesdas) survey, it was stated that the proportion of residents with dental health problems in the last 12 months in the Aceh region was 55% and those who received services from dental medical personnel was 15%, while the proportion brushed their teeth every day in people aged > 3 years by 95% and the proportion of brushing teeth properly in the population aged > 3 years by 2.8%. This is one of the proofs that public awareness is still lacking to maintain dental and oral health⁴. According to the Darul Health Center report Imarah at UKGS activities shows that 60 % of children suffer from caries⁵.

Worang's research (2014), the level of parental knowledge can affect children's dental and oral hygiene. The role of parents is very important to improve children's dental and oral hygiene. dental and oral hygiene children Oral health. Parental education and knowledge do not guarantee children's daily behavior to maintain oral hygiene. Children need the participation and attention of parents in terms of maintaining oral hygiene.⁶

The results of Sinaga et al's research , (2020) show that the role of parents has a significant relationship with the occurrence of dental caries in pre- school children at Kindergarten Nurul Kamka, East Binjai District. There are still many children who experience dental caries due to the lack of parental involvement, so parents are required to take care of their children's health, especially dental health.⁸

Plaque as it is known that one of the components in the formation of caries. The incidence of caries can be reduced by mechanically removing plaque from the tooth surface, but many people do this ineffectively. *Oral hygiene can be improved by using interdental cleaning tools in combination with regular dental check-ups.* This routine dental examination can help detect and monitor dental problems that have the potential to become caries⁹.

Several preventive steps can be taken to reduce the occurrence of plaque formation and improve the degree of child's dental health, namely encouraging children to brush their teeth regularly . routine at least twice a day, morning and night before going to bed¹⁰ . Make sure they use toothpaste with an age-appropriate fluoride content. Also, guide children in proper tooth brushing techniques, including cleaning all surfaces of the teeth, tongue and gums. Teach

children to floss every day. Dental floss helps clean areas that are hard to reach with a toothbrush, such as between the teeth. Give children healthy foods that are low in sugar, especially foods that contain complex carbohydrates, fiber and protein. Avoid sugary or klebrigen foods and drinks which can increase the risk of plaque formation. Limiting acidic foods and drinks can damage tooth enamel. Limit consumption of foods and drinks such as soft drinks, sour juices, and other acidic foods. Check with your dentist regularly for regular dental check-ups, at least once every six months.¹¹ Dentists can perform professional dental cleanings, evaluate dental and oral health, and provide appropriate advice. Make sure your child gets enough fluoride , either through an age-appropriate fluoride toothpaste or fluoridated drinking water . Fluoride helps prevent plaque formation and strengthens tooth enamel.¹² Guide children to avoid bad habits such as biting their nails , biting or sucking on unhealthy objects, such as pencils or pens. This habit can damage teeth and interfere with children's dental health. Proper education to children about the importance of maintaining healthy teeth and mouth. Explain the importance of brushing your teeth, eating healthy food, and avoiding bad habits. Provide support and guidance to children in adopting good dental hygiene practices. Consistent prevention and good assistance by parents or guardians is very important in improving the degree of child's dental health and preventing plaque formation¹³.

Lack of Attention to Dental and Oral Hygiene At SDN 2 Lamcot , Aceh Besar District, there may be a lack of attention to children's dental and oral hygiene. Factors such as lack of knowledge, awareness, and access to dental health services can be the cause. Therefore, it is necessary to conduct research to explore the effect of maternal assistance on children's dental and oral hygiene in this region.

parents _ has an important role as a companion in child health care. They have a great influence in shaping the behavior and daily habits of children . because there are still many parents who think that baby teeth are only temporary and will be replaced by permanent teeth so they don't pay attention to the cleanliness of baby teeth¹⁴.

With good assistance, mothers can provide knowledge, skills, and motivation to their children to maintain good dental and oral hygiene. The effectiveness of mother's assistance is very

important to assess the effectiveness of mother's assistance in improving children's dental and oral hygiene. Previous research has shown that maternal assistance can have a positive impact on children's dental and oral hygiene practices. However, this research needs to be conducted in a local context such as SDN 2 Lamcot , Aceh Besar District to gain a deeper understanding of the impact.

Thus, this research is expected to provide new insights about the effect of mother's assistance on the dental and oral hygiene status of children at SDN 2 Lamcot , Aceh Besar District. The results of this study can be used to develop effective mentoring strategies, increase awareness and knowledge of mothers, and encourage good dental and oral hygiene practices among children in the area.

METHODS

This type of research is *Quasi Experimental Design* with an *equivalent research design control group design with pre test and post test* . The 10 subjects in this study were all Class V students at SDN 2 Lamcot , Aceh Besar District totaling 60 children, then divided into two groups, the intervention group consisting of 30 children were given interventions (dental health education counseling and teaching students how to brush their teeth by accompanied by their parents) whereas in the control group consisted of 30 children who were given interventions (dental health education counseling and teaching students how to brush their teeth). The sampling technique in this study is the total population. The intervention variables in this study were dental health education counseling and teaching parents how to brush their teeth . The independent variables (influence) are knowledge , attitudes , actions and hygiene status students' teeth and mouth before the intervention, while the dependent variable (influenced) namely knowledge , attitudes , actions and hygiene status teeth and mouth of students after the intervention. Measuring tool used is questionnaires and tools diagnosis . Analysis of the results of quantitative data in this study using *Paired Sample T- Test* is to find out the differences in changes in knowledge , attitudes , actions of students and their parents and hygiene status students' teeth and mouth before and after the intervention (dental health education counseling and teaching students and

their parents how to brush their teeth) . 2) *Independent Sample T- test* namely to find out the differences in changes in knowledge , attitudes , actions of students and their parents and hygiene status teeth and mouth pupils in pupils between the intervention group and the *pre control group test , and post test* . Data analysis used *the Statistics Program for Social Science (SPSS)*, with hypothesis testing based on a significant level of p.

RESULTS AND DISCUSSION

Research Result

The results of research and data processing can be presented in the form of tables and narratives as follows:

1. Paired **Test Results** Sample T- Test

- a. Differences in scores of knowledge, attitudes, actions on students

To find out the difference in the average value of students' knowledge, attitudes, and actions before and after being given an intervention to parents in both groups.

Table 1. Results of the Dependent Test Scores of Knowledge, Attitudes and Student Actions in the Treatment and Control Groups

Variable	Klp . Treatment		Klp . Control	
	Mean±SD	p- value	Mean±SD	p- value
Prior knowledge	47,48±17,13	0,007 ^a	50,42±15,47	0,647 ^a
Knowledge after	60,71±13,40		50,84±14,25	
Attitude before	63,39 ± 12,73	< 0,001 ^a	60,09±10,86	0,671 ^b
Attitude after	67,11± 11,49		62,87±9,67	
Action before	56,55±29,51	0,001 ^b	58,93±21,98	0,523 ^a
After action	74,99±13,22		59,52±15,33	

Based on the table above , in the treatment group the significance value is smaller than the value (p <0.05) , then there are differences in the level of knowledge, attitudes, actions of students before and after the intervention . Whereas in the control group the average value of students' knowledge, attitudes, and actions before and after being given the intervention, the significance value of knowledge, attitudes, and student actions is greater than the value (p> 0.05), so there is no difference in the value of knowledge , attitudes , and student actions before and after intervention.

b. Differences in OHIS scores in students

To find out the difference in the average *OHIS scores* of students before and after being given parental assistance in the treatment and control groups

Table 2. Paired Test Results Sample T- Test OHIS Score in Students Before and After Parent Assistance Intervention

Variable	Klp . Treatment		Klp . Control	
	Mean±SD	ρ- value	Mean±SD	ρ- value
OHIS before	1.93±0.93	0,036 ^b	3.26±1,33	<0,072 ^b
OHIS after	1,40±0,77		1,90±0,79	

Based on the table on the *OHIS* significance value of students in the treatment group before and after parental assistance was less than $p < 0.05$, so there was a difference in student *OHIS scores* before and after the intervention. Whereas in the control group the significance value of the students' *OHIS* before and after the significance value was greater than the p value > 0.05 , it was not there is a difference in student *OHIS scores* before and after the control group.

2. Independent T-Test (Difference in the two groups)

Tabel 3. Delta Value Test Results Knowledge, Attitudes, Actions, OHIS Students in the Treatment Group and the Control Group

Variable	Group		ρ- value
	Treatment Average	Average Control	
Difference in Knowledge	1 2 ,23	0.42	<0.001
Difference in Attitude	3, 64	-0.22	0.00 4
Different actions	1 7 ,45	0.59	0.00 1
OHS difference	2.86	-1.26	<0.001

Based on the table above, it can be seen that the differences in the values of knowledge, attitudes, actions and cleanliness status the students' teeth and mouth mean value is greater in the treatment group than in the control group with a significance value smaller than the alpha value ($p < 0.05$), then H_0 is rejected meaning that there are

differences in the values of students' knowledge, attitudes, actions, and *OHIS* in both groups .

Discussions

1. The Effect of Parental Assistance on Changes in Student Knowledge, Attitudes and Actions.

Based on the results of the Paired Test analysis Sample T- Test , parental assistance influences changes in children's behavior. This can be seen from the results of different tests on the knowledge, attitudes and actions of students before and after parental assistance in the treatment group using the Paired test. Samples test the significant value is smaller than the ρ - value ($p < 0.05$) . Meanwhile in the group control the average value of students' knowledge, attitudes, and actions before and after being given the intervention, the significance value of students' knowledge, attitudes, and actions is greater than the value ($p > 0.05$), so there is no difference in the value of students' knowledge , attitudes , and actions before and after intervention . This is because in the treatment group the parents provide assistance to the child by explaining and guiding knowledge about dental health in children while the child is at home while in the control group not so that in the treatment group the child's behavior changes for the better.

results of the analysis of the Independent T- Test Test show that the difference in the values of students ' knowledge, attitudes, actions, the mean value is greater in the treatment group than in the control group with a significance value smaller than the alpha value ($p < 0.05$), this means that there are differences in the values of students' knowledge, attitudes, actions, and *OHIS* in both groups. this _ Because Parental assistance plays an important role in changing children's behavior . Parents have a strong influence over their children. Children tend to regard parents as a source of knowledge and authority. Assistance provided by parents by providing directions, explanations, and directions will help shape children's understanding and confidence in the desired behavior. Parents who are actively involved in mentoring provide clear and consistent messages to children regarding the importance of healthy behavior .

This research is supported by Research Cushing et al. (2017) revealed that parental assistance that focuses on children's dental and

oral health behavior can significantly increase children's dental and oral health knowledge and practices. 15 . Study this is also supported by research conducted by Jackson et al. (2018) found that parental assistance in implementing tooth brushing and hand washing habits in early childhood can result in significant improvements in children's dental hygiene and hand hygiene. 16 .

Parental role very supportive of child development. Parents have a constant role in a child's life. Accompaniment good parents and teachers can improve educational outcomes and overall child well-being.

2. Effect of Parental Assistance on Dental Hygiene Status and Student Mouth

Based on the results of the Paired Test analysis Sample T- Test , parental assistance has an effect on change the OHIS significance value of students in the treatment group before and after parental assistance was less than $p < 0.05$, so there was a difference in student OHIS scores before and after the intervention. Whereas in the control group the significance value of the students' OHIS before and after the significance value was greater than the p value > 0.05 , it was not there is a difference in student OHIS scores before and after the control group. this _ caused by a lack of parental assistance in maintaining children's dental health and accompanying them, guiding them to brush their teeth regularly, and controlling sweet and sticky food snacks. The results of the study illustrate that parental behavior in maintaining student dental health is not optimal due to lack of parental participation . Parents act as the first educators for children in terms of maintaining dental and oral hygiene. They provide information, education, and examples of proper dental hygiene practices, such as regular brushing, flossing, and avoiding foods or drinks that have the potential to damage teeth.

The results of the analysis of the Independent T- Test show that the difference in the value of cleanliness status the mean value of the teeth and mouth of the students was higher in the treatment group than in the control group with a significance value smaller than the alpha value ($p < 0.05$), meaning that there were differences in the values of students' knowledge, attitudes, actions, and OHIS in both groups. this _ because of assistance Parents provide opportunities for continuous education and learning. Parents can

use time with their children to teach them the knowledge and skills needed to change their children's behavior. By giving proper explanations and giving real examples, parents can help children understand the reasons and benefits of expected behavior. This will provide a strong foundation for changing children's behavior. Parental assistance provides positive reinforcement and encouragement to children to carry out the desired behavior. By giving appropriate praise, rewards or prizes when the child succeeds in changing behavior, parents increase the child's motivation and desire to continue the behavior. Consistent reinforcement and encouragement from parents is an important factor in shaping and maintaining changes in children's behavior. Assistance provided by parents helps in forming good habits in children. Through repetition and consistency, parents can help children internalize expected behavior so that it becomes a natural habit for them. In continuous assistance, parents can guide children in carrying out these behaviors routinely and consistently, so that they become part of the child's daily life . Parental assistance involves creating an environment that supports changes in children's behavior. Parents can manage the physical environment, such as providing the equipment and resources needed to carry out the desired behavior. In addition, parents can also create a positive social environment, by involving family and friends in supporting and encouraging changes in children's behavior.

This research is supported by Research by Nobile et al. (2015) found that children who receive parental assistance in dental care practices, including brushing and flossing, have a lower risk of dental caries and periodontal disease. 17 . Study this is also supported by research by DeBate et al. (2014) revealed that assisting parents in maintaining the cleanliness of their children's teeth and mouth on a regular basis is associated with an increase in behavior and habits of maintaining dental hygiene in children. 18 .

Role Parents are very important in maintaining the cleanliness of the teeth and mouth of children. With it accompaniment parents can provide consistent information, education, and support to encourage good dental hygiene practices in children

CONCLUSIONS

From the results research and discussion concluded that :

1. No there are differences in the level of knowledge, attitudes, actions and hygiene status teeth and mouth students before and after intervention statistically significant ($p > 0.05$) p exist group control .
2. There are differences in the level of knowledge, attitudes, actions and hygiene status teeth and mouth students before and after intervention statistically significant ($p < 0.05$) p exist group treatment .
3. There are differences in the values of knowledge, attitudes, actions, and hygiene status pupil teeth in both groups between groups treatment with control group p This shown statistically $p < 0.05$).

Based on the results of research, discussion and conclusions, it can be suggested as follows:

1. Provide education and information to parents and children about the importance of maintaining oral hygiene.
2. Establish a daily routine for brushing your teeth and keeping your teeth clean after eating. Make sure your child brushes their teeth at least twice a day for two minutes, using a suitable toothbrush and toothpaste that contains fluoride .
3. Observe and monitor your child's dental hygiene practices. Make sure they brush their teeth properly, use dental floss, and maintain thorough dental and oral hygiene. Help children brush their teeth until they can do it properly on their own.
4. Make sure your child gets regular dental care from the dentist. Schedule regular visits at least twice a year for dental check-ups, cleanings, and other necessary precautions.
5. Give rewards and praise to children when they maintain good dental hygiene. This can provide motivation and strengthen positive behavior in maintaining oral hygiene.

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