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Knowledge of Dental and Oral Health in Deaf Students at SLB Negeri Purworejo

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ABSTRACT: Knowledge of dental and oral health is a very important in supporting behavior to maintain dental and oral hygiene and health. Deaf children have problems in the hearing process. Hearing limitations in deaf children result in a lack of information obtained, including information on dental and oral health. The results of the preliminary study stated that 70% of the dead students did not know about the knowledge of oral health. The purpose of this study was to describe knowledge of dental and oral health in deaf students at SLB Negeri Purworejo.

Method: This type of research is descriptive with cross sectional
methods. The sampling method uses a saturated sampling technique. The number of samples used were 40 respondents to deaf students at SLB Negeri Purworejo according to the inclusion and exclusion criteria. The research instrument used a questionnaire on dental and oral health knowledge on deaf students. The results of the questionnaire were processed using cross tabulation to determine the results of descriptive analysis.

Results: The level of knowledge of deaf students (71.4%) is in the good category at the age of 16-19 years. The level of dental and oral health knowledge of male students is better than the gender of female students with hearing impairment (64.7%). The level of knowledge based on the last education of parents of deaf students was mostly in the good category at the last high school education (61.1%).

Conclusion: The level of knowledge about dental and oral health in deaf students is mostly in good category, namely at the age of 16-19 years, gender in male
students, the last education of parents of deaf students is high school.

KEYWORDS: Knowledge, Dental and Oral Health, Deaf.

I. INTRODUCTION

Good oral hygiene can be realized through good and correct knowledge and behavior towards the maintenance of dental and oral health. Knowledge is a factor that shapes a person's behavior. Lack of knowledge will form wrong behavior and attitudes towards dental and oral health maintenance. Knowledge that has been combined with understanding and potential to act on a person's behavior, generally has predictive ability to something as a result of recognizing a pattern. This happens because knowledge alone is not enough to support a person to change well, because it must be balanced with positive attitudes and actions [1–4].

Knowledge of dental and oral health is very important in supporting behavior to maintain oral hygiene and health. Behavior that is based on knowledge will last longer than behavior that is not based on knowledge. That a person's level of knowledge can affect a child's dental and oral hygiene status. Dental and oral health is a part of the body as a whole, namely as a gateway for germs and bacteria to enter which can interfere with the health of other body organs. Dental and oral health is closely related to dental and oral hygiene, because dental and oral hygiene is a basic factor for the creation of dental and oral health. Dental and oral hygiene can determine a person's level of dental and oral health [5–9].

The behavior of maintaining dental and oral health that is not good must be changed, such as: Clean your teeth regularly, namely by brushing your teeth; Avoid consumption of sweet and sticky foods and drinks; Expand the consumption of vegetables and fruits that are fibrous and watery which is good for the health of the body and teeth; Regular dental check-ups, regular dental check-ups by visiting the dentist need to be done at least once every six months, so that existing dental and oral health problems can be addressed as early as possible [10–12].

Deafness is a condition where a person's hearing function is impaired, which can be temporary or permanent. Deaf people will of course need a special form of communication so that the purpose of the conversation can be conveyed properly. Hearing

limitations in deaf children result in a lack of information obtained, including information on dental and oral health. Lack of information on how to maintain dental and oral health in deaf children will form a wrong behavior that can affect dental and oral health [13–15].

Difficulty speaking is an obstacle that occurs in deaf children. Sign language is a way of communicating by deaf children. One of the difficulties that occur by communicating with sign language is how deaf children communicate, socialize, make friends and talk in daily interactions with fellow deaf children. In developing language and speaking skills, deaf children require special services to minimize the impact caused by the deafness he experienced. Social adjustment for deaf people is solely to adjust themselves to the surrounding environment so that they can interact well in their social environment [16–18].

II. METHOD AND MATERIAL

The type of research used in this research is descriptive, which is an assessment carried out to describe or phenomena that occur in society. With cross sectional method [19]. This research was conducted at SLB Negeri Purworejo, Cangkrep Lor, Cangkrep, Purworejo, Central Java. The research sample was 40 students from 5th grade elementary school to 12th grade high school students. Sampling technique with saturated sampling technique.

Knowledge of dental and oral health in deaf students is measured using a questionnaire that includes good and correct brushing, good and bad food for dental health, knowledge of dental caries and its causes, and good and bad habits for teeth. This assessment is measured by 20 statements with alternative answers, namely true and false, a score of 1 for correct answers and 0 for incorrect answers. The scale used is the ordinal scale. The criteria for dental and oral health knowledge on the deaf have a value in the good category, moderate category, and poor category. The stages of carrying out the research start from licensing, preparation of research tools and materials.

III. RESULT AND DISCUSION

Table 1. Frequency distribution of respondent characteristics

Respondent characteristics	n	%
Gender		
Male	17	42.0
Female	23	58.0
Total	40	100
Age		
13-15 year	14	35.0
16-19 year	7	17.0
20-22 year	19	48.0
Total	40	100
Parental Education		
Primary school	13	32.0
Junior high school	9	23.0
Senior high school	18	45.0
Total	40	100

Table 1 shows that the frequency distribution based on the age group of deaf students from all respondents was dominated by the age of 20-22 years, namely 19 respondents (48%), female sex 23 respondents (53%) and parental education, namely high school 19 respondents (45%).

Table 2. Frequency distribution of dental and oral health knowledge based on respondent age

Age	Dental and oral health knowledge							
	Good		Moderate		Poor		Total	%
	n	%	n	%	n	%		
13-15 year	5	35.7	2	14.3	7	50.0	14	100

16-19 year	5	71.4	0	0.0	2	28.6	7	100
20-22 year	11	57.9	2	10.5	6	31.6	19	100
Total	21	52.5	4	10.0	15	37.5	40	100

Table 3 shows that the criteria for dental health knowledge in deaf students at SLB Negeri Purworejo with 40 respondents are known to be at the age of 16-19 years, namely the criteria for good knowledge with a result of 71.4%. Age School children have the role of cadres of dental health workers or doctor cadres elementary school small teeth play a very important role in changing dental health behavior in equal elementary school groups, by being given encouragement and motivation in maintaining good dental health. The information obtained by deaf children with increasing age, the comprehension power and mindset will develop and the knowledge gained will be better. Knowledge is influenced by education level, the amount of information obtained, environmental conditions, experience, age and economic status of a person. Deaf students who have good reading comprehension will affect the results of good knowledge. People's interpretation of what they read will vary according to their level of experience. Errors in understanding reading material can cause communication to not work properly [20–22].

Table 3. Frequency distribution of dental and oral health knowledge based on respondent gender

Gender	Dental and oral health knowledge							
	Good		Moderate		Poor		Total	%
	n	%	n	%	n	%		
Male	11	64.7	3	17.6	3	17.6	17	100
Female	10	43.5	1	4.3	12	52.2	23	100
Total	21	52.5	4	10.0	15	37.5	40	100

Table 2. Shows that the results of the cross tabulation between the level of knowledge of dental and oral health in deaf students by gender showed that the majority were male with a good knowledge level with a result of 64.7%. Deaf male ask more questions and are active when they don't understand the questions. Deaf adolescent girls lack a sense of security shown by not being free from fear and tend to be less free from doubt. Deaf adolescent girls are also selfless and quite tolerant because they realize it is difficult to communicate and society rarely involves deaf young girls in conversation so that deaf young girls tend to be silent. This results in male deaf students having better knowledge than female deaf students because they have a sense of hesitation and fear because it is difficult to communicate.

Table 4. Frequency distribution of dental and oral health knowledge based on respondent parental education

Parental education	Dental and oral health knowledge							
	Good		Moderate		Poor		Total	%
	n	%	n	%	n	%		
Primary school	6	46.2	2	15.4	5	38.5	13	100
Junior high school	4	44.4	0	0.0	5	55.6	9	
Senior high school	11	61.1	2	11.1	5	27.8	18	100
Total	21	52.5	4	10.0	15	37.5	40	100

Table 4 shows that the results of cross tabulation between the level of knowledge of dental and oral health in deaf students with the last education of parents showed that the most recent education of parents was high school with a good level of knowledge with a result of 61.1%. Parental education greatly affects children's knowledge, the higher the education of parents, the child's behavior will be directed and knowledge will be good. The level of education of good parents will affect the size of student learning outcomes. With a good level of parental education, learning outcomes will also be good. Parents are the closest people to children. Parental education will shape and influence the mindset of the child's personality and lifestyle. Parents who teach children from

childhood to adulthood will create a certain mindset in the child. The patterns of thought and patterns of life that exist are both good and bad. The importance of the educational background of parents in educating children will increasingly be able to help the learning process and success of children, besides that highly educated parents will also be different in directing and guiding their children. The higher the level of education of a person, the higher the possibility of having knowledge, including knowledge of dental and oral hygiene [23–25].

VI. CONCLUSIONS

Based on the results of the study, it can be concluded that the level of knowledge based on the age of 16-19 years with good criteria is 71.4%, has good knowledge on good and correct brushing knowledge. Knowledge level based on male gender with criteria good at 64.7%, have good knowledge of good and correct brushing knowledge. The level of knowledge based on the last education of high school parents with good criteria is 52.5%, has good knowledge of dental caries knowledge and its causes.

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CONFLICT OF INTEREST

The author declared that don't have conflict of interest

ETHICAL CLEARANCE

This research has received a certificate of ethical approval from the ethics commission of the Yogyakarta Health Polytechnic with No. e-KEPK/POLKESYO/0041/I/2022.

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