

DIFFERENCES IN OHI-S IN CHILDREN WITH MENTAL DISABILITIES AT SLBN 2 JAMBI CITY WITH CHILDREN WITH MENTAL DISABILITIES AT SLBN SUNGAI PENUH

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ABSTRACT

Background: Children with Special Needs (ABK) are at high risk who have chronic physical, developmental, behavioral or emotional conditions that require assistance in maintaining dental and oral hygiene. Indicators of the degree of maintaining dental and oral hygiene with an average Oral Hygiene Index Simplified (OHI-S) <1.2 which is obtained by adding the debris index and calculus index numbers. The purpose of this study was to determine the difference in OHI-S in mentally retarded children at SLB N 2 Jambi City and mentally retarded children at SLB N Sungai Penuh in 2024.

Method: This study design used a cross-sectional method. Data were obtained from 32 mentally retarded students at SLB N 2 Jambi City and 30 mentally retarded students at SLB N Sungai Penuh. Univariate data were analyzed descriptively and bivariate with the Man Withney test.

Result: The results of the study obtained data that the OHI-S description of mentally retarded children at SLB N 2 Jambi City was mostly good criteria (68.8%), moderate criteria (28.1%) and poor criteria (3.1%), while at SLB N Sungai Penuh the most were moderate criteria (73.3%), poor criteria (16.7%) and good criteria (10.0%). There was a significant difference between the OHI-S of mentally retarded children at SLB N 2 Jambi City and mentally retarded children at SLB N Sungai Penuh in 2024.

Conclusion: There is a significant difference between the OHI-S of mentally retarded children at SLB N 2 Jambi City and mentally retarded children at SLB N Sungai Penuh in 2024.

Keywords: OHI-S, SLB, Mentally Disabled

INTRODUCTION

National health development aims to improve the health of the community and is also determined by various factors such as population, environment, community behavior and health services. One part of national development is development in the field of dental health. Development in the field of dental health is an integral part of national health development. To get the best results in dental health efforts, it is necessary to know the problems related to tooth decay (Suwelo, 1992).

Oral hygiene in dental and oral health is very important. Some problems that occur in the teeth and mouth occur due to lack of maintaining dental and oral hygiene.

Brushing your teeth properly and brushing your teeth regularly, as well as choosing the right toothpaste is one of the effective ways to maintain oral hygiene (Ekoningtyas, 2021).

Dental and oral health is an important part of overall body health. Children with special needs (ABK) are at high risk who have chronic conditions physically, developmentally, behaviorally or emotionally so they need help in maintaining dental and oral hygiene. Degree indicator in maintaining dental and oral hygiene with an average Oral Hygiene Index Smplicated (OHI-S) <1.2 which is obtained by adding the debris index and calculus index numbers (Motto, et al., 2017). The mouth is an ideal place for bacterial growth, because of the temperature, humidity and sufficient food available there. These

bacteria greatly affect dental and oral health. Dental and oral hygiene is determined by food debris, plaque, calculus alba material, and stains on the tooth surface (Gopdianto, et al., 2014).

Children with special needs are children who have mental, physical and emotional limitations that are different from normal children. Children with special needs experience developmental disorders, both physically and mentally, and require specific services. Unlike children in general, they experience permanent or temporary obstacles in learning and development caused by environmental factors, factors within the child themselves, or a combination of both (Indahwati, 2015).

Children with Mental Disabilities are part of children with special needs. Children with Mental Disabilities experience limitations in adaptive behavior such as interacting with others and are manifested during their development period. The term adaptive behavior is defined as a person's ability to bear social responsibility according to certain social norms and is in accordance with their stage of development. Children with Mental Disabilities have difficulty understanding and interpreting environmental norms (Switri, 2022).

To achieve success in overseeing the development of children with special needs, the role of parents is very significant. Parents have the task of facilitating and supporting during the process of growth and development of the body and mindset of their children. This is because parents are the closest people to the child and the people who are always with the child. So it is said that parental involvement is very important to realize optimal learning during childhood. Parental participation is one of the important factors that determine the development of children with special needs (Ekoningtyas, 2021).

The education received at SLB is made so that children with special needs can carry out

their daily activities well even though they are limited by their shortcomings, for example in terms of maintaining dental and oral hygiene. Children with special needs are given education so that they can carry out activities that maintain their physical health (Indahwati, 2015).

Maintaining dental and oral hygiene is very important for dental and oral health, because poor dental and oral hygiene can cause various diseases, both local and systemic. The index of debris and calculus attached to the teeth can be used as an indicator of dental and oral hygiene (Ekoningtyas, 2021).

The results of the study showed that the oral hygiene index (OHI-S) at SLB-B GMIM Damai Tomohon with good criteria was 22 people (36.1%), moderate criteria was 39 people (63.9%), and poor criteria was 0 people (0.0%). While the oral hygiene index (OHI-S) at SLB-C Catholic Santa Anna Tomohon with good criteria was 6 people (15%), moderate criteria was 21 people (52.5%), and poor criteria was 13 people (32.5%).

There was a significant difference between the oral hygiene status of children with special needs at SLB-B GMIM Damai Tomohon and SLB-C Catholic Santa Anna Tomohon, and oral hygiene in children with special needs at SLB-B GMIM Damai Tomohon was classified as moderate and SLB-C Catholic Santa Anna Tomohon was classified as poor (Indahwati, 2015).

Based on the background above, the author wants to conduct a study that aims to determine whether there is a difference in OHI-S in mentally retarded children at SLB N 2 Jambi City with mentally retarded children at SLB N Sungai Penuh City in 2024.

METHODS

The research design used in this study is quantitative, with a cross-sectional study design, namely research to study risk factors

by means of an approach or data collection at once in a particular place only, which aims to see the difference in OHI-S in children with intellectual disabilities at SLB N 2 Jambi City with children with intellectual disabilities at SLB N Sungai Penuh in 2024.

The population in this study were children with intellectual disabilities at SLB N 02 Jambi City totaling 37 populations, and children with intellectual disabilities at SLB N Sungai Penuh totaling 47 populations. The sample used in this study were children with intellectual disabilities at SLB N 2 Jambi City and SLB N Sungai Penuh in 2024. The sample collection technique for this study was carried out using the Total Sampling technique. Total Sampling is a sampling technique involving all population numbers (Sugiyono, 2018).

This study was conducted using total sampling by taking all populations with consideration of several criteria. The inclusion criteria in this study are as follows: Children with Mental Disability who are willing to participate / become research samples, Children who are given permission from the school and parents to undergo examination, Children with mild and moderate Mental Disability and Children with Mental Disability aged 8-12 years. Children who meet the inclusion criteria above are 32 samples of children with Mental Disability at SLB N 2 Jambi City and 30 samples of children with Mental Disability at SLB N Sungai Penuh.

The research instrument is the OHIS form with the following implementation stages:

- The first and second days on Tuesday and Wednesday, March 19 and 20, the researcher conducted an OHI-S examination on mentally retarded children at SLB N Sungai Penuh.
- The second day on Thursday, April 25, the researcher conducted an OHI-S examination on mentally retarded children at SLB N 2 Kota Jambi.
- Inform the school that the research has been completed and express gratitude.

Data processing techniques consist of editing, coding, data entry, cleaning, scoring and tabulating stages with data analysis techniques consisting of univariate analysis to determine the average OHI-S score and bivariate analysis through the Mann-Whitney test.

RESULTS AND DISCUSSION

Mean Score OHIS Chlidrem

Table 1. Average OHIS of Children with Mental Disabilities at SLB N 2 Jambi City and SLB N Sungai Penuh in 2024

SLBN	Mean	Std. Dev	Min	Max
SLB N 2 Jambi City	1,3	0,8	0,5	4,0
SLB N Sungai Penuh	2,2	0,9	0,4	4,9

Based on table 1 above, it can be seen that respondents at SLB N 2 Jambi City have an average OHIS of 1.3 with a standard deviation of 0.8, a minimum score of 0.8 and a maximum of 4.0. Respondents at SLB N Sungai Penuh have an average OHIS of 2.2 with a standard deviation of 0.9, a minimum score of 0.4 and a maximum of 4.9.

This bivariate analysis uses the Man Withney test to determine the difference in OHI-S of mentally retarded children at SLB N 2 Jambi City and SLB N Sungai Penuh in 2024. The results of the analysis that have been carried out are as follows:

Shapiro Wilk normality test was conducted, it turned out that the OHI-S values in the two SLBs were not normally distributed where the p-value <0.05. To find out the difference, the Man Withney test was conducted if the p-value <0.05 stated that the 2 groups were significantly different.

Table 2. Results of Mann Whitney Test on OHI-S Values of Mentally Disabled Children at SLB N 2 Jambi City and SLB N Sungai Penuh in 2024

SLBN	Mean	SD	Min	Max	p
SLB N 2 Jambi City	1,3	0,8	0,5	4,0	0,000
SLB N Sungai Penuh	2,2	0,9	0,5	4,9	

Based on table 2 above, it can be seen that the results of the Man Withney test with

a p-value <0.05, it is stated that H₀ is rejected and it is concluded that there is a significant difference between the OHI-S of mentally retarded children at SLB N 2 Jambi City and mentally retarded children at SLB N Sungai Penuh in 2024.

In this study, it was measured through direct examination including OHI-S examination. After the examination, the data obtained showed that the average OHI-S value in mentally retarded children at SLB N 2 Jambi City was 1.297 with a minimum OHI-S value of 0.5 and a maximum OHI-S value of 4.0. This could be due to a lack of knowledge about dental and oral hygiene such as the right time and technique for brushing teeth, this is also influenced by the limitations of having mentally retarded children. Lack of knowledge can cause dental and oral health problems. Conversely, lack of knowledge can cause dental and oral health problems (Pontonuwu, J. 2013).

Based on the results of research conducted at SLB N Sungai Penuh in 2024, the respondents in this study were 30 mentally retarded children aged 8-12 years. The majority of respondents were male (73.3%) while female (26.7%).

In this study, it was measured through direct examination including the OHI-S examination. After the examination, the data obtained showed that the average OHI-S value in mentally retarded children at SLB N Sungai Penuh was 2.233 with a minimum OHI-S value of 0.5 and a maximum OHI-S value of 4.9.

The large number of poor dental and oral hygiene statuses is due to inappropriate brushing time and suboptimal brushing techniques, low oral hygiene is due to inappropriate dental and oral hygiene behavior (Imran, H. 2020).

This is in line with Blum's theory in Notoadmojo explaining that there are several factors that influence the health status and oral hygiene of teeth and mouth, namely

hereditary factors, environment, behavior and health services (Notoadmojo, 2007).

Therefore, behavioral factors or habits taught by parents or teachers have a more dominant influence on the OHI-S status of children with intellectual disabilities due to the limitations of the individual himself.

CONCLUSION

There is a significant difference between the OHI-S of mentally retarded children at SLB N 2 Jambi City and mentally retarded children at SLB N Sungai Penuh in 2024.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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