

Difference of Dental Care Status in Children Special Needs in Class Therapy and Inclusion Class in Unggul Sakti Sabk, Jambi City in 2018

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ABSTRACT

Background: Dental and oral health are important for anyone, including children with special needs. According to the Ministry of Health of the Republic of Indonesia (Kemenkes RI) in 2010, children with special needs or children with special needs are children who experience physical and / or mental barriers that interfere with their growth and development naturally. Children with special needs are guided in schools for children with special needs for therapy classes and inclusion classes.

The Aim of the Study: to determine the differences in dental caries status in children with special needs in therapy classes and inclusion classes in the SABK UnggulSakti Jambi City in 2018.

Research Design: using a cross sectional approach with intra-oral examination method. The sampling technique used was purposive sampling, as many as 30 samples for the therapeutic class and 30 samples for the inclusion class. The measuring instrument used was the prevalence of dental caries and the DMF-T index.

Results: The prevalence of dental caries was relatively higher in children with special needs for therapy class (76.7%) compared to children with special needs for inclusion class (73.3%). The DMF-T index is relatively higher in children with special needs for the inclusion class (2.04) compared to children with special needs for the therapy class (1.77).

Conclusion: The statistical test results on the variable prevalence of dental caries have no significant difference with the p value = 0.559 and in the DMF-T index variable there is no significant difference with the p value = 0.934. It is recommended to improve preventive efforts in the form of more intensive tooth brushing guidance in order to reduce the incidence of dental caries in children with special needs at the SABK UnggulSakti Jambi City.

Keywords: Dental Caries, Children with Special Needs, Therapy, Inclusion

INTRODUCTION

Children with special needs have low ability and lack of motor skills so often have difficulty cleaning their oral cavity.¹ This causes lower oral and dental health in children with special needs compared to normal children.² Lack of knowledge, attention, and preventive measures against dental and oral problems also contribute to low oral and dental health in children with special needs.³ Emmenuelle Clarisa Simanjuntak (2017) conducted a comparative study of caries status and salivary conditions in down syndrome children and normal children aged 6-18 years in SLB-C Medan Helvetia District and East Medan. There were no significant differences in the def-t experience of Down Syndrome children and normal children

and there were significant differences in the DMF-T experience of Down Syndrome children and normal children.⁴ Tulangow, et al. (2015) conducted a study to determine the description of dental caries status in children with special needs at YPAC Manado SLB. The results showed that dental caries status in children with special needs at YPAC Manado SLB with a DMF-T index of 4.4 included in the medium category.⁵

The results of observations conducted at the UnggulSakti SABK in Jambi City showed that every child with special needs must enter the therapy class before entering the inclusion class. After children with special needs in the therapy class are assessed as having developed abilities and are ready to enter the inclusive class, the

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children with special needs will be transferred to inclusion classes. Children with special needs for therapy classes and inclusion classes have different daily activities, due to differences in development between children with special needs in therapy classes and inclusion classes both physically and mentally. Each teacher on average educates and guides one to three children with special needs in one class, and every child with special needs has one teacher in charge. Every day the child is encouraged to bring food from home and is not recommended to buy food in the school canteen because children are required to diet on certain types of food, including a cariogenic diet.

Efforts to maintain dental and oral health at the SABK UnggulSakti Jambi City were carried out through various activities, but between therapeutic classes and inclusion classes had different activities. For example through self-development learning to children with special needs therapy classes conducted by the teacher. Brushing your teeth every morning is one of the topics of the subject matter of self-development learning. In addition, every year counseling activities are conducted on dental health and mass toothbrushes for children with special needs inclusion classes by students of the Dental Nursing Department. Other activities that are also carried out annually by students of the Dental Nursing Department are Field Work Practices in which there are activities to guide children with special needs and counseling on the maintenance of oral and dental health to teachers and parents of children with special needs therapy classes and inclusion classes. Each student has children with special needs for therapy classes that are fostered in terms of maintaining dental and oral health. Based on the results of intra-oral examination of 12 children with special needs for the therapy class that was

developed, 10 out of 12 children had caries and 2 of 12 children were caries free.

The difference in activities between children with special needs for therapy classes and inclusion classes in the effort to maintain dental and oral health is due to differences in abilities between children with special needs in therapy classes and inclusion classes. The description above allows for differences in dental and oral health problems in children with special needs in the therapeutic class and inclusion class in the SABK UnggulSakti City of Jambi, specifically dental caries status. However, further dental health research has not been done so far it is not yet known how the differences in dental caries status in children with special needs therapy classes and inclusion classes at the SABK UnggulSakti in Jambi City. Because research needs to be done to determine the differences in dental caries status in children with special needs therapy classes and inclusion classes in SABK UnggulSakti Jambi City in 2018.

METHODS

This study was conducted to determine the differences in dental caries status in children with special needs with a total population of 35 classes of therapy and inclusion classes of 45 people in the SABK UnggulSakti Kota Jambi in 2018. Determination of samples was done by purposive sampling, as many as 30 samples for the therapy class and 30 samples for the inclusion class through a cross sectional approach with an intra-oral examination method. The variable of this study was dental caries status which was measured using a dental and oral health status card and analyzed.

RESULT

Overview of Characteristics of Research Samples

Table1. Distribution of Respondents by Gender in Children with Special Needs Therapy Class and Inclusion Class in Jambi City SABK UnggulSakti in 2018

Gender	Therapy Class		Inclusion Class		Total	
	N	%	N	%	N	%
1. Male	19	63	23	77	42	70
2. Female	11	37	7	23	18	30
Total	30	100	30	100	60	100

Overview of the Prevalence of Dental Caries

Table2. Distribution of Prevalence of Dental Caries in Children with Special Needs for Therapy Classes and Inclusion Classes in Jambi City SABK UnggulSakti in 2018

Caries prevalence	Therapy Class		Inclusion Class	
	N	%	N	%
1. Caries free	7	23,3	8	26,7
2. Caries	23	76,7	22	73,3
Total	30	100	30	100

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Overview of the DMF-T Index

Table3. Distribution of DMF-T Index in Children with Special Needs for Therapy Class and Inclusion Class in Jambi City SABK UnggulSakti in 2018

Index DMF-T	Therapy Class		Inclusion Class		Total	
	N	Average	N	Average	n	Average
D-T	42	1,40	45	1,50	87	1,45
M-T	10	0,34	8	0,27	18	0,3
F-T	1	0,03	8	0,27	9	0,15
DMF-T	53	1,77	61	2,04	114	1,9

Difference in Prevalence of Dental Caries

Table4. Distribution of Differences in the Prevalence of Dental Caries in Children with Special Needs for Therapy Classes and Inclusion Classes in Jambi City SABK Superior Sakti in 2018

Dental Caries prevalence	Mean	StandarDev	P Value
1. Therapy Class	1,77	0,430	0,559
2. Inclusion Class	1,73	0,450	

Based on table 4, it is known that the p value = 0.559, which means there is no significant difference between the prevalence of dental caries in children with special needs therapy

class and inclusion class in SABK UnggulSakti Jambi City in 2018 so the hypothesis is rejected (p value > 0.05).

Difference in DMF-T Index

Table5. Distribution of Differences in DMF-T Index in Children with Special Needs for Therapy Classes and Inclusion Classes in Jambi City SABK Superior Sakti in 2018

Index DMF-T	Mean	StandarDev	P Value
1. Therapy Class	1,77	1,547	0,934
2. Inclusion Class	2,04	1,671	

Based on table 5, it is known that the p value = 0.934, which means there is no significant difference between the DMF-T index in children with special needs therapy classes and inclusion classes in SABK UnggulSakti Jambi City in 2018 so the hypothesis is rejected (p value > 0.05).

children with severe disabilities and as many as 67% in children with mild disability special needs.⁶

There was no significant difference between the prevalence of dental caries in children with special needs for therapy classes and inclusion classes probably due to lack of guidance in brushing teeth with parents of children with special needs therapy classes and inclusion classes at home. According to Ghofur (2012) in Suciari (2015), parents are expected to play a role in monitoring their children's dental health by teaching them how to brush their teeth properly so that dental caries can be avoided.⁷ The high prevalence of dental caries in children with special needs for therapy classes and inclusion classes is also due to not carrying out a cariogenic diet. Compared with data from the Basic Health Research (Riskesdas) in 2007, the prevalence of dental caries in the population of Indonesia aged 12 years and over was 72.1%.⁸ This proves that dental caries status in children with special needs is not much different from normal children. Although the results of the data analysis have no significant differences, the prevalence of dental caries in children with special need for therapy is relatively higher compared to children with special needs for

DISCUSSION

Research Limitations Other factors that affect caries status such as age, gender, class level, and types of special needs were not carried out by the study because of limitations in energy, time and costs. **Difference in Prevalence of Dental Caries.** The prevalence of dental caries in children with special needs in the SABK UnggulSakti Kota Jambi class of therapy is more than 23 people (76.7%) while there are fewer in the inclusion class, 22 people (73.3%). The statistical test results obtained p value = 0.559, which means there is no significant difference between the prevalence of dental caries in children with special needs therapy class and inclusion class in the SABK Superior Sakti City of Jambi in 2018 (p value > 0.05). In line with the research conducted by Antonio (2016), it was shown that there was no significant difference between the prevalence of dental caries in children with severe disabilities and mild disabilities in Brazil, namely 84% in

inclusion classes. Possible causes are limited ability and developmental disorders in children with special needs in terms of physical, mental, sensory and motoric therapy classes so that they have difficulty maintaining the health of their teeth and mouth. The ability of children with special needs that are low and impaired in sensory and motor development causes them often have difficulty maintaining the health of their teeth and mouth. Difference in DMF-T Index Based on table 4.5, the results of the analysis show that the average DMF-T index in children with special needs for the therapy class is lower, which is 1.77 with their respective values, namely D-T = 1.40; M-T = 0.34; F-T = 0.03 while in the inclusion class is higher which is 2.04 with their respective values namely D-T = 1.50; M-T = 0.27; F-T = 0.27. The statistical test results obtained p value = 0.934 which means there is no significant difference between the DMF-T index for children with special needs therapy class and inclusion class in Jambi Sakti Superior SABK in 2018 (p value > 0.05). Antonio's research (2016) shows that there is no significant difference between the average DMF-T index for children with severe disabilities and mild disabilities in Brazil, namely 2.75 for children with severe disabilities and as much as 1.48 for children with mild disabilities.

The DMF-T index is an index that is used to assess tooth decay in a person in the form of cavities, revoked and filled with caries. Although the results of the data analysis did not have a significant difference, the average DMF-T index for children with special needs for the therapy class was relatively lower than the inclusion class. Decay value in children with special needs for therapy class is relatively lower, namely D-T = 1.40 compared to inclusion class, namely D-T = 1.50. Possible causes are because self-development learning is carried out in children with special needs for therapy classes.⁹ According to Thompson (2010) in Diahwati (2016), children with special needs need to help and self-guidance in accordance with the obstacles because they have not been able to do something independently, so that dental and oral health problems can be detected early.¹⁰ According to Darby and Walsh (2003) in Kencana (2014), dental health checks on children with special needs who are still on therapy should be done as early as possible so that they can overcome the problems

of dental and oral health of children effectively and efficiently.¹¹

Missing value in children with special needs for therapy class is relatively higher, namely, M-T = 0.34 compared to inclusion class, namely M-T = 0.27. Possible causes are due to feelings of shame from parents of children with special need for therapy to bring their children to the health care center so that dental caries that should still be treated become worse. According to Satiadarma (2001) in Rizki (2013), most parents feel disappointed and ashamed of having a child with special needs so parents try to avoid their children's interactions with the general environment. Filling value in children with special needs for therapy class is relatively lower, namely F-T = 0.03 compared to inclusion class, F-T = 0.27.¹² Possible causes are due to better understanding and communication skills in children with special needs for inclusion classes. They understand the health condition of their teeth and mouth so that if there is dental caries immediately delivered to parents to be treated. According to Schmidt (2008) in Pratiwi (2015), children with special needs for inclusion classes have good communication skills.¹³ According to Satiadarma (2001) in Rizki (2013), parents of children with special needs inclusion classes felt their children were able to interact with the general environment including health care centers.¹² The participation of the closest people as well as cooperation between Special Advisory Teachers (GPK) in a schools, parents and dentists or dental nurses is needed to be able to improve the degree of dental and oral health in children with special needs.¹⁴ The collaboration is aimed at increasing preventive efforts in the form of more intensive tooth brushing guidance in order to reduce the incidence of dental caries in children with special needs at the SABK UnggulSakti Jambi City. In accordance with the Khotimah (2013) study in Karangayu 03 Semarang Elementary School, the results showed that respondents who brushed their teeth <2 times / day were more likely to experience dental caries than respondents who brushed their teeth > 2 times/day, thus proving guidance more intensive brushing can reduce the incidence of dental caries.¹⁵

CONCLUSION

Based on the results of research conducted on children with special needs therapy classes and inclusion classes in the Jambi Sakti Superior

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SABK in 2018, conclusions were obtained that there was no significant difference between the prevalence of dental caries and DMF-T index in children with special needs for therapy classes and inclusion classes in SABK UnggulSakti Kota Jambi in 2018, the results of statistical tests obtained p value = 0.559 (p value > 0.05) and p value = 0.934 (p value > 0.05).

SUGGESTION

A program of dental and oral health services in these schools is needed in the form of promotive and preventive activities for children with special needs and parents pay more attention to their children at home, especially in terms of guidance on brushing teeth to prevent dental and oral health problems in children with special needs.

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