

PARENTS' PERCEPTION OF HABITS AND KNOWLEDGE LEVEL OF ORAL HEALTH IN CHILDREN WITH SPECIAL NEEDS
(PRESEPSI ORANGTUA TENTANG KEBIASAAN DAN TINGKAT PENGETAHUAN KESEHATAN GIGI PADA ANAK DENGAN KEBUTUHAN KHUSUS)

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Doi: 10.54052/jhds.

Article History
Received: 14/09/23
Accepted: 11/12/23

ABSTRACT

Children with special needs are defined as physical, mental, social, and emotional limitations that significantly influence growth and development. The restrictions affect oral health, so the parents' role is significant in improving oral health. This study aims to determine the perception of habits and the level of parents' knowledge regarding dental and oral health maintenance in children with special needs. The research used was a cross-sectional method using a questionnaire. The research sample consisted of parents of students from (Sekolah Luar Biasa (SLB) Citereup Cimahi, with a total sample of up to 91 children aged 6 - 18 years. Characteristics of students include mentally retarded, physically disabled, visual impairment, hearing impairment, autism and types with other disorders. The results showed that parents' perceptions of maintaining oral health are poor because some parents are still ignorant

of the discipline of maintaining dental hygiene; on the contrary, more than 55 % of the level of knowledge was exemplary. The research results concluded that parents have good knowledge about oral health, but many parents still neglect to maintain oral health.

Keywords: habit factors; knowledge level; oral health; special need

ABSTRAK

Anak berkebutuhan khusus diartikan sebagai anak yang memiliki keterbatasan baik fisik, mental, sosial dan emosional yang sangat mempengaruhi proses tumbuh kembang. Keterbatasan tersebut akan sangat mempengaruhi kondisi kesehatan gigi dan mulut sehingga peran orang tua sangat penting untuk meningkatkan kesehatan gigi dan mulut. Penelitian ini bertujuan untuk mengetahui persepsi kebiasaan dan tingkat pengetahuan orang tua mengenai pemeliharaan kesehatan gigi dan mulut pada anak berkebutuhan khusus. Penelitian yang digunakan adalah metode cross-sectional dengan menggunakan kuesioner. Sampel penelitian terdiri dari orang tua siswa SLB Citereup Cimahi dengan jumlah sampel sebanyak 91 orang dengan anak usia 6 -18 tahun. Karakteristik siswa meliputi anak tunagrahita, tuna daksa, tunanetra, tunarungu, autisme dan keterbatasan lain. Hasil penelitian menunjukkan bahwa persepsi orang tua terkait kebiasaan menjaga kesehatan gigi dan mulut masih buruk karena sebagian orang tua masih kurang dalam disiplin menjaga kebersihan gigi, sebaliknya lebih dari 55% tingkat pengetahuannya baik. Hasil penelitian menyimpulkan bahwa orang tua mempunyai tingkat pengetahuan yang baik tentang kesehatan gigi dan mulut, namun masih banyak orang tua yang mengabaikan untuk menjaga kesehatan gigi dan mulut.

Kata kunci: anak berkebutuhan khusus; faktor kebiasaan; kesehatan gigi dan mulut, tingkat pengetahuan

INTRODUCTION

Oral health must be an essential concern for parents, especially children with special needs. Children with special needs have many limitations, including maintaining oral health.^{1,2} In this regard, the role of parents is needed in efforts to improve health. The oral cavity is the initial gate for entering food sources; hence, hard tissue and other supporting tissues must have health conditions. If there are problems or pathological conditions, this will have a harmful impact, causing disturbances in other body systems and interfering with the growth development and activities of children.²

Children with special needs are a group that is vulnerable to disease because of their physical, mental and emotional limitations.³ Besides that, parents' lack of information and knowledge about dental health will further exacerbate the condition of children's dental health. Good habits in maintaining dental health must be instilled from an early age. Therefore, it is necessary to assist in maintaining oral health.^{1,2,4,5}

The causes of dental and oral health problems are closely related to discipline in performing dental home care.⁶ Dental home care maintains healthy teeth at

home for good oral hygiene. Dental home care is related to activities carried out by parents in maintaining healthy teeth, such as discipline in brushing teeth, timing and technique of brushing teeth correctly, dietary factors or preventing consumption of food cariogenic, and using fluoride toothpaste and dental floss.^{7,8}

Oral dental health education for parents is critical because it is a preventive way to improve oral health.^{5,8,9} Parental discipline is required in implementing dental home care, especially for children with special needs. Parents are people who have crucial things in maintaining the oral health of children with special needs. The higher the knowledge of parents regarding habits and knowledge, the better oral health will be. Knowledge and oral health habits are essential as preventive methods to improve oral health. Factors of good habits and Knowledge about dental health are important things that must be known and applied for children to avoid disease.^{10,11} In addition, the level of knowledge is related to the information obtained regarding basic knowledge of maintaining dental health to prevent dental and oral diseases.¹² There are many factors related to oral condition; some parents get information from experience,

school information, magazine, books, and social media to enrich parents' knowledge.

Based on the results of previous studies, The level of oral health in children with special needs is inferior; the high rates of caries periodontal disease and the high need for dental treatment need indicate this.¹³ This study aims to determine the pattern of habits and parents' level of knowledge about dental and oral health in children with special needs.

METHOD

The type of research carried out is descriptive method. Descriptive research is a method with the aim of creating an objective or description of a situation. The research design is a cross sectional method with a questionnaire. The research was carried out on parents of students at SLB Citereup Cimahi. The research used authorization from the Health Research Ethics Commission, Faculty of Medicine, Jenderal Achmad Yani University, with the number: 034/M/KEPK/2022.

The number of samples used in this study was 91 people with criteria including parents who had children aged 6 - 18 years with special needs. The types of disabilities in this study were visual impairment, hearing impairment, physically disabled, mentally retarded, autism and other growth disorders.

Research procedure begins by collecting parents who include with criteria inclusion. At initial, parents were given information about the research that would be carried out regarding their child's dental health. Parents who are willing will fill out informed consent and answer questions or questionnaires that have been provided via Google Form.

Parents will fill in data which includes several items, namely:

1. Parent demographic data consisting of 5 questions
2. Parents' perceptions of habits in maintaining the dental health of children with special needs consist of 9 questions
3. Parents' perceptions of the level of dental health knowledge of children with special needs consists of 9 questions.

RESULT

The research was conducted by giving questionnaires to 91 parents at SLB Citereup Cimahi, then calculating and analyzing parents' perceptions of habits and level of knowledge of oral health in children with special needs.

Table 1 shows that the occupation of most children's parents is not working, around 54 people (59.3%). As many as 23 people (25.3%) work in other fields, 8,8 % of parents work as private employees, and around 6,6 % work as civil servants. It

indicates that most of the parents who are respondents are housewives. When viewed from the gender perspective, the majority were women, around 71 people (78.0%), and only 22.0% were male. The last education level of the parents of the children was mostly high school graduation, with a percentage of 51.6%. However, it should be noted that there are still several parents whose education level has not graduated from senior high school, and only a small number have a bachelor's degree. In terms of income level, the majority have an income of less than IDR 1,500,000, around 50 people (54.9%), 26.4% have income between IDR 1,500,000-IDR 2,500,000, 11.0% of parents have income between IDR 2,500,000-IDR 3,500,000, and only seven people (7.7%) had revenue of more than IDR 3,500,000.

Table 1. Parental demographic

Parents Demographic	Total	Percentage (%)
Job		
Government employees	6	6.6%
Private employees	8	8.8%
Others	23	25.3%
Unemployment	54	59.3%
Gender		
Male	20	22.0%
Female	71	78.0%
Age		
20-29 Years	1	1.1%
30-39 Years	25	27.5%

>40 Years	65	71.4%
Education Level		
Less than high school	31	34.1%
High school graduate	47	51.6%
Bachelor	13	14.3%
Income Level		
<Rp1.500.000	50	54.9%
Rp1.500.000 - Rp2.500.000	24	26.4%
	10	11.0%
>Rp3.500.000	7	7.7%
Total	91	100.0%

Table 2 shows the recapitulation of children's habits related to dental health. Most children brushing their teeth twice a day is around 75.8%. However, about 18.7% of children are brushing their teeth once a day, about 18.7%. Most children brush their teeth while bathing in the morning and evening, with a percentage of 72.5%, using toothpaste containing fluoride. More than 90% of this study's children with special needs did not use dental floss. As many as 58.2% of children used milk bottles when drinking milk, and the remaining 42.6% did not use milk bottles. Around 95.6% of people do not routinely go to the dentist, and only 4.4% of parents do their dental checkups regularly—the main reason parents take their children to the dentist while children feel pain around 97.7%. Most parents take control of children visiting the dentist for

more than six months, and the number who have never been to a dentist is 37.4%.

Table 2. Parents' perceptions of the habits of children with special needs

Habit on children	Total	Percent age (%)
Frequency of brushing		
Once	17	18.7%
Twice	69	75.8%
More than twice	5	5.5%
Time of brushing		
After breakfast and before sleep	15	16.5%
While taking a bath in the morning and evening	66	72.5%
Others	10	11.0%
How to Brush		
Supervision	30	33.0%
Alone	61	67.0%
Fluoride Paste		
Yes	70	76.9%
No	9	9.9%
Do not know	12	13.2%
Dental Floss		
Yes	3	3.3%
No	88	96.7%
Drink milk with a bottle.		
Yes	53	58.2%
No	38	41.8%
Regular Dental Checkup		
Yes	4	4.4%
No	87	95.6%
Reason To dentist		
Pain	88	97.7%
Routine visit every 3-6 months	3	3.3%
Last time to the dentist		
Less than six months	6	6.6%
More than six	51	56.0%

Habit on children	Total	Percent age (%)
months		
Never	34	37.4%
Total	91	100.0%

Table 3 regarding perceptions related to the level of parental knowledge, which is used to see how far parents' knowledge of children is related to dental health in children. There are 9 statement items used to measure the level of parental knowledge of dental health. This data is shown in Table 3. Based on the recapitulation results, it can be seen that there are still quite some parents who do not know about the benefits of fluoride toothpaste, the consumption of sweet foods can damage teeth, knowledge about dental plaque, knowledge about periodontal diseases which can manifest bleeding gums when brushing teeth, information about the etiological of caries and information that dental health will have an impact to the body system. Based on the result, many parents still have less knowledge, so it is advisable to provide counselling related to dental health for children, especially children with special needs.

Table 3. Level of parental knowledge

Knowledge	Total	Precent age(%)
Know about Fluoride		
Yes	58	63.7%

Knowledge	Total	Precent age%)
No	33	36.3%
Fluoride can protect teeth.		
Yes	66	72.5%
No	25	27.5%
Sweet foods can cause cavities.		
Yes	88	96.7%
No	3	3.3%
Milk bottles can damage teeth.		
Yes	68	74.7%
No	23	25.3%
Brush teeth can prevent cavities.		
Yes	91	100.0%
No	0	0.0%
Know about dental plaque.		
Yes	77	84.6%
No	14	15.4%
Bleeding of the gum is a normal		
Yes	20	22.2%
No	71	78.0%
Know the cause of cavities.		
Yes	76	83.5%
No	15	16.5%
Oral health can impact body health.		
Yes	87	95.6%
No	4	4.4%
Total	91	100.0%

DISCUSSION

After analyzing the data based on the questionnaire results, it is known that parents' habits in an effort to maintain dental and oral health are still very minimal.

This is indicated by the number of answers indicating that the habituation that was carried out did not comply with the AAPD recommendations regarding maintaining oral health.¹² However, as many as 55% of parents have good knowledge regarding dental health.

Parents must develop children's positive behaviour through good habits and oral hygiene. Even though it is undeniable that children with special needs have limitations, they need supervision to maintain oral health. Still, if they are trained early on about awareness and good behavior, it will help prevent tooth decay and oral health problems.¹⁶ Parents are expected to be role models for children, teaching them basic dental health habits such as the right time and proper technique while brushing their teeth and using fluoride toothpaste.^{2,14} Conversely, parents who are not disciplined in maintaining dental health will have a poor condition on the development and growth of the teeth. The most common oral health problems are tooth decay, gingivitis, and periodontitis.

Respondents' habits related to the frequency of brushing their teeth show that parents already have the awareness to brush their teeth at least two times a day, where the percentage is 75.8% of respondents brush their teeth at least 2x a day. It is following AAPD recommendation.^{12,14}

However, some parents brush their children's teeth only once daily, around 18.7%. Besides the frequency of brushing teeth, the correct brushing time has to be understood by parents. Based on recommendations from the WHO, brushing your teeth after eating breakfast and at night before going to bed is good.¹⁵ Brushing teeth, especially at night, will eliminate food residue, which can cause dental plaque and accelerate the process of caries and gum inflammation.¹⁴

Based on the results, as many as 72.5% of parents still misunderstood the correct time to brush their teeth because brushing teeth is carried out when bathing in the morning and evening. Based on this condition, children will have terrible dental health because brushing teeth, which is done only when bathing, will not remove debris on the teeth after night activities where children still consume sweet foods and drinks.

Regarding tooth brushing assistance, 67% of parents let their children brush their teeth without supervision. It certainly negatively impacts children's dental health because at the age of children they do not have good motor skills or high awareness, so cleaning will not be optimal. Therefore, the role of parents is to supervise and even brush children's teeth directly, especially for children with severe types of

disabilities who are unable to do activities independently.^{2, 9, 12}

Flossing is another thing that is no less important in efforts to maintain oral health. As many as 96.7% of parents do not know the importance of using dental floss. It may be due to the lack of parental information to maintain healthy teeth. Dental floss is an attempt to remove food residue between teeth that a toothbrush cannot clean.¹⁴

To avoid tooth decay, Children with special needs must check their teeth regularly at least once every 3-6 months. The data showed that only 4.4% of parents had regular dental checkups at the dentist and as many as 88.8% of parents came to visit the dentist because of tooth problems or tooth pain. It may be due to many factors such as cost, distance to health facilities, fear of visiting the dentist, or others. The results show that almost 37.4% of parents have never brought their children to a dental check; it is the responsibility of all stakeholders, both government and private or public schools, to share information and provide education regarding oral health.

Parents' knowledge about oral hygiene is vital in forming good habits that support children's oral hygiene. 8,9 knowledge about how to care for dental and oral hygiene can be obtained from formal and non-formal education. The involvement

of the government and other elements is significant. The results of this study related to the level of knowledge showed that more than 55% of parents have the correct knowledge and understanding about maintaining dental health. But this is inversely proportional to the awareness and discipline of parents. Based on the research results, a high level of knowledge does not guarantee good oral hygiene if there is no discipline in maintaining oral dental health and how to practice homecare. ^{16,17}

CONCLUSION

Parents have good knowledge about oral health, which is inversely related to their daily habits. Many parents still do not realize good habits associated with maintaining dental health which can improve the oral health of children with special needs.

CONFLICT OF INTEREST

We declare no potential conflict of interest in the scientific articles we write.

ACKNOWLEDGEMENT

Our thanks go to the professionals who assisted in the research and preparation of the paper.

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