

## Parent's knowledge, attitude and behaviour of the important role of primary teeth among children with special need

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### Abstract

Premature loss (early loss) of primary teeth will disrupt the eruption of permanent teeth due to reduced space for eruption of the permanent teeth. Lack of space causes permanent teeth to erupt outside the correct dental arch, or push against neighboring teeth causing malocclusion in children. Dental caries is one of the main factors causing premature loss of primary teeth, especially in children with low levels of oral hygiene. Children with disabilities tend to have higher rates of dental caries and premature loss of teeth than children without disabilities. The role of parents is much greater in maintaining dental and oral health, considering the limitations of children to carry out dental and oral care independently. The low awareness and attitude of parents in an effort to maintain primary teeth is influenced by the wrong stigma that primary teeth will be replaced by permanent teeth so that there is no need for optimal care or maintenance. This study aims to describe the level of knowledge, attitudes, and behavior of parents of children with special needs regarding the importance of the role of children's primary teeth in the Special Elementary School (SDLB) Surabaya. This type of research is observational analytic with a *cross-sectional approach*. The results obtained in this study are 44.6% of respondents have a fairly good knowledge, 58.4% of respondents have a fairly good attitude, and 37.6% of respondents in the category of behavior are quite good.

**Keywords:** Epidemiology; Children with special needs; Knowledge; Attitudes; Behavior

### 1. Introduction

Dental and oral health can affect the general health. Teeth and mouth are the gateway for all microorganisms to enter the body, so that they can affect the health of other body organs. Unhealthy teeth and mouth caused inadequate nutrient intake resulting in unoptimized health conditions [1]. Unhealthy teeth can also affect the ability to speak and eat. Furthermore, experience of discoloration and tooth loss which ultimately affects a person in social interaction, both because of aesthetic disturbances and social and economic productivity of life [2,3].

Dental and oral health problems are diseases that are experienced by almost half the world's population [4]. Based on The Global Burden of Disease Study, dental and oral health problems, especially dental caries, are a disease experienced by 3.58 billion people [5]. Dental caries or cavities is a common condition among Indonesian, which is 88.8% of the population experiencing dental caries according to the Basic Health Research (Riskesdas) in 2018 [6].

Dental and oral health problems most often attack children and are not uncommon for children with special needs [7]. The World Health Organization (WHO) states that the number of children with special needs in Indonesia is around 7%

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of the total number of children aged 0-18 years or 6,230,000 in 2007. Around 66,610 school-age children with disabilities are enrolled in special need schools (SLB) [8,9]. Based on the results of the 2018 Basic Health Research (Riskesdas), the prevalence of dental caries in children aged 5-6 years is 93%, with a national def-t rate of 8.43 which means that the average number of tooth decay in each child is 8 to 9 teeth [6]. Several studies have shown that children with special needs tend to have a higher rate of caries, premature loss, and a higher risk of periodontal disease compared to the general children [10].

Premature loss is a condition in which the primary teeth fall out before the eruption of the replacement teeth. If this happens, it will affect the length of the arch of the child's jaw as it grows so that there will not be enough space for the eruption of the replacement or permanent teeth. As a result of this insufficient space, there will be an impact in the form of irregularities in the contact of the teeth or occlusion such as tilted or rotated teeth, crowding or crowding of teeth, known as malocclusion [11].

Dental and oral hygiene problems in children with special needs are caused by physical limitations and lack of ability which makes their teeth and mouth susceptible to disease [12]. Children with special needs, due to various limitations that exist on them, such as being unable to clean their own oral cavity, thereby increasing the risk factors for tooth decay [13]. Research shows the low level of parental awareness to take care if a child has dental caries, resulting in a high rate of premature loss of primary teeth [10,14]. The low awareness and attitude of parents in an effort to maintain primary teeth is influenced by the wrong stigma that primary teeth will be replaced by permanent teeth so that there is no need for optimal care or maintenance [15].

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## **2. Material and methods**

### **2.1 Types of research**

This is an observational research with the use of a cross-sectional approach.

### **2.2 Research Population**

The research population is the special need schools (SDLB) in Surabaya.

### **2.3 Research time**

The research was conducted in March 2022 – April 2022.

### **2.4 Research sites**

The research was carried out at SDLB Surabaya, namely SDLB YPAC, SDLB Siswa Budhi, SDLB Sasanti Wiyata, SDLB YPAB, SDLB BC Optimal Surabaya.

### **2.5 Research Sample**

The sampling technique in this study used a convenience sampling technique. Convenience sampling is a sampling technique where the subject is selected because of the availability of the subject and easy accessibility. The samples in this study were parents of students at SDLB YPAC, SDLB Siswa Budhi, SDLB Sasanti Wiyata, SDLB YPAB, SDLB BC Optimal Surabaya and willing to be respondents. The sample inclusion criteria were parents of SDLB YPAC students, SDLB Budhi Students, SDLB Sasanti Wiyata, SDLB YPAB, SDLB BC Optimal Surabaya, and willing to be respondents. The sample exclusion criteria were not willing to be a respondent and not cooperative. Based on these calculations, the minimum sample size in this study was 96 people consisting of parents of SDLB YPAC students, SDLB Budhi Students, SDLB Sasanti Wiyata, SDLB YPAB, SDLB BC Optimal Surabaya.

### **2.6 Research variable**

The dependent variable in this study is the behavior of parents of children with special needs regarding the tooth preservation as the implementation of their understanding of the importance role of the child's primary teeth. The independent variables in this study were the knowledge and attitudes of parents of children with special needs regarding the importance role of children's primary teeth.

## 2.7 Research instrument

Measuring tools or data collection tools in this study are gadgets, online questionnaire forms related to respondents' identities which contain name, age, occupation, and last education. An online questionnaire form that includes a consent form to participate in the study and is willing to be a respondent, as well as a questionnaire consisting of a knowledge level questionnaire, an attitude questionnaire, and a behavioral questionnaire regarding the importance of the role of children's primary teeth. Computer with SPSS program to analyze data.

## 2.8 Data analysis

The data obtained were then collected, grouped, and presented in tabular form and then analyzed using statistical tests:

- Normality test using *Kolmogorov-Smirnov test*.
- Descriptive statistical test to see the mean, min, max, and standard deviation.
- Correlation test Contingency coefficient to determine the relationship between the level of knowledge and behavior, as well as the Spearman rho correlation test to determine the relationship between attitudes and behavior regarding the importance of the role of children's primary teeth.

## 3. Results

There are 101 respondents included in the final analysis. Table 1 shows the respondent's characteristics.

**Table 1** Characteristics of Respondents

Characteristics	n	%
<b>Respondent Age</b>		
30 years	9	8.9
31 - 35 years	13	12.9
36 - 40 years	28	27.7
41 years	51	50.5
<b>Respondent's Gender</b>		
Man	48	47.5
Woman	53	52.5
<b>Child Age</b>		
< 4 years	1	1
4 - 6 years	5	5
7 - 9 years	35	34.7
10 years	60	59.3
<b>Child Gender</b>		
Man	47	46.5
Woman	54	53.5
<b>Parents' Education Level</b>		
SD	5	5
Junior high school	10	10
SMA/SLTA	52	51.4
D1/D3/S1	34	33.6

<b>Job status</b>		
Working	71	70.3
Doesn't work	30	29.7
<b>Income</b>		
Less than IDR 1,000,000	16	15.8
IDR 1,000,000 - IDR 2,000,000	24	23.7
IDR 2,000,000 - IDR 3,000,000	22	21.8
IDR 3,000,000 - IDR 4,000,000	13	12.9
IDR 4,000,000 - IDR 5,000,000	15	14.9
More than IDR 5,000,000	11	10.9
<b>Children with Disabilities</b>		
Deaf	25	24.8
Blind	9	8.9
quadriplegic	14	13.9
Mentally disabled	31	30.6
Autism	11	10.9
Other	11	10.9
<b>There are cavities in children</b>		
There is	62	61.4
There isn't any	39	38.6
<b>There is a missing primary tooth in a child</b>		
There is	59	58.4
There isn't any	42	41.6
<b>Child's previous visit to the dentist</b>		
Once	59	58.4
Never	42	41.6
<b>Check your child's teeth to the dentist every 6 months</b>		
Yes	18	17.8
Not	83	82.2
<b>Respondent has health insurance</b>		
Have BPJS health insurance	73	72.2
Have non-BPJS health insurance	5	4.9
Have BPJS and non-BPJS health insurance	3	3.1
Don't have health insurance	20	19.8

The majority of respondents aged 41 years were 51 people (50.5%), 48 respondents were male and 53 respondents were female. The majority of the children's ages of the respondents were 10 years, as many as 60 children (59.3%), 47 children were male and 54 children were female. The majority of parents' education level is SMA/SLTA as many as 52 people (51.4%), working 71 people (70.3%), with the majority earning between IDR 1,000,000 - IDR 2,000,000 as many

as 24 people (23.7%). The majority of children with disabilities were mentally retarded or intellectually disabled as many as 31 children (30.6 %). 62 respondents (61.4%) stated that there were cavities in primary teeth in children, 59 respondents (58.4%) stated that there were missing primary teeth in children. The majority of parents stated that their child had visited the dentist as many as 59 people (58.4%), but only 18 people made regular visits every 6 months (17.8%). Majority respondent 73 people have BPJS health insurance (72.2 %).

Table 2, 3 and 4 shows the level of parents' knowledge, attitude and behaviour, respectively. The number of parents of children with special needs with good, sufficient, and less sequential knowledge categories are 30 (29.7 %), 45 (44.6%), and 26 (25.7%) of the 101 total respondents. The number of parents of children with special needs in the categories of good behavior, sufficient, and less sequential is 34 (33.7 %), 38 (37.6%) and 29 (28.7%) of the 101 total respondents.

**Table 2** Knowledge Level of Parents of Children with Special Needs Regarding the Importance of the Role of Primary Teeth

Parental Knowledge					
Well		Enough		Not enough	
n	%	n	%	n	%
30	29.7	45	44.6	26	25.7

**Table 3** Attitudes of Parents of Children with Special Needs Regarding the Importance of the Role of Primary Teeth

Parental Attitude					
Well		Enough		Not enough	
n	%	n	%	n	%
22	21.8	59	58.4	20	19.8

**Table 4** Behavioral Levels of Parents of Children with Special Needs Regarding the Importance of the Role of Primary Teeth

Parental Behavior					
Well		Enough		Not enough	
n	%	n	%	n	%
34	33.7	38	37.6	29	28.7

Table 5 shows factors affecting the level of knowledge, attitudes, and behavior of parents of children with special needs regarding the importance of the role of primary teeth. Based on Table 5. the majority of parents of children with special needs male have a low level of knowledge, as many as 19 people (39.6%), sufficient attitude as many as 28 people (58.3%), and poor behavior as many as 21 people (43.8%) related to the importance of the role of children's primary teeth. While the parents of children with special needs are female, the majority have a sufficient level of knowledge and attitudes respectively 28 people (52.8%) and 31 people (58.5%), good behavior as many as 26 people (49.2 %). Based on age, parents of children with special needs in the age range of 36-40 years and 41 years have a sufficient level of knowledge as many as 16 people (57.1 % and 31.4%). Meanwhile, in attitudes and behavior, parents in the age range of 41 years have sufficient attitudes and behaviors, namely 32 people (62.7%) and 23 people (45.1%) respectively.

Based on the level of parental education, the majority of parents with a high school/high school education level had a sufficient level of knowledge and attitudes, namely 21 people (40.4%) and 13 people (59.6%), with poor behavior as many as 21 people (40.4%).

**Table 5** Factors Affecting the Level of Knowledge, Attitudes, and Behavior of Parents of Children with Special Needs Regarding the Importance of the Role of Primary Teeth

Variable	Category	Knowledge, n (%)			Attitude, n (%)			Behavior, n (%)		
		Well	Enough	Not enough	Well	Enough	Not enough	Well	Enough	Not enough
Respondent's Gender	Man	12 (25%)	17 (35.4 %)	19 (39.6 %)	9 (18.8%)	28 (58.3%)	11 (22.9 %)	8 (16.7%)	19 (39.6 %)	21 (43.8 %)
	Woman	18 (34%)	28 (52.8 %)	7 (13.2 %)	13 (24.5 %)	31 (58.5%)	9 (17%)	26 (49.2%)	19 (35.8 %)	8 (15.1 %)
Respondent Age	30 years	3 (33.3 %)	5 (55.6 %)	1 (11.1 %)	4 (44.4 %)	4 (44.4 %)	1 (11.1 %)	5 (55.6%)	3 (33.3 %)	1 (11.1 %)
	31-35 years old	5 (38.5 %)	8 (61.5 %)	0 (0%)	2 (15.4 %)	9 (69.2 %)	2 (15.4 %)	9 (69.2%)	2 (15.4 %)	2 (15.4 %)
	36-40 years old	8 (28.6 %)	16 (57.1 %)	4 (14.3 %)	8 (28.6%)	14 (50%)	6 (21.4 %)	6 (21.4%)	10 (35.7 %)	12 (42.9 %)
	41 years	14 (27. %)	16 (31.4 %)	21 (41.2 %)	8 (15.7 %)	32 (62.7 %)	11 (21.6 %)	14 (27.5%)	23 (45.1 %)	14 (27.5 %)
Parents' Education Level	SD	1 (20%)	2 (40%)	2 (40%)	2 (40%)	3 (60%)	0 (0%)	2 (40%)	3 (60%)	0 (0%)
	JUNIOR HIGH SCHOOL	2 (20%)	5 (50%)	3 (30%)	2 (20%)	6 (60%)	2 (20%)	2 (20%)	6 (60%)	2 (20%)
	SMA/SLTA	17 (32.7 %)	21 (40.4 %)	14 (26.9 %)	9 (17.3 %)	13 (59.6 %)	12 (23.1 %)	12 (23.1 %)	19 (36.5 %)	21 (40.4 %)
	D1/D3/S1	10 (29.5 %)	17 (50%)	7 (20.5 %)	9 (26.1 %)	19 (55.1 %)	6 (17.4 %)	18 (53%)	10 (29.4 %)	6 (17.6 %)

Table 6 shows the results of the correlation test. A variable is said to have a significant relationship if the significance value ( $p$ ) is less than 0.05. The knowledge and behavior variable showed no significant relationship ( $p = 0.179$ ). Meanwhile, the attitude variable with behavior showed a significant relationship ( $p = 0.000$ ). The results of statistical tests on the attitude variable with behavior showed a weak correlation level ( $r = 0.381$ ) and a positive correlation coefficient which showed a unidirectional relationship between attitude and behavior variables, namely the better the attitudes of parents regarding the importance of the role of primary teeth in children with special needs in SDLB Surabaya, the better the behavior of parents.

**Table 6** Correlation Test Results

		Behaviour
Knowledge	Value	0.812
	Approximate significance	0.227
Attitude	Value	0.381
	Approximate significance	*0.000

#### 4. Discussion

This study aims to determine the relationship between knowledge and attitudes towards the behavior of parents of children with special needs regarding the importance of the role of the deciduous teeth in the special need schools (SDLB) in Surabaya. The research was conducted by distributing questionnaires based on Knowledge, Attitude, Practice (KAP) theory using a Likert scale. Based on KAP theory, there are three important variables which include knowledge, attitude and behavior. Knowledge is the result of human sensing or the result of someone knowing about objects through their senses. Attitude is a closed response from a person to a certain object or stimulus that involves opinion and emotion factors. While behavior is the realization of knowledge and attitudes in the form of a real action. Behavior can also be defined as a person's response to a stimulus in a real or open form. A stimulus will be responded to by someone in accordance with the meaning of the stimulus for the person concerned [16].

Based on the data obtained in table 2, it can be seen that parents of children with special needs with good, sufficient, and less sequential knowledge categories are 30 (29.7 %), 45 (44.6%), and 26 (25.7%) of 101 total respondents. When a child is in the primary dentition, parents need to pay more attention because the growth of the replacement permanent teeth will be affected by the condition of the primary teeth. In the knowledge questionnaire component, it was found that the majority of parents answered correctly on the question component about their child's primary teeth. The majority of parents know when their children's first deciduous teeth erupt when they are  $\pm$  6 months old (64.4 %) and all primary teeth will be replaced by permanent teeth (71.3%) and the general age of children's primary teeth being replaced by permanent teeth (6-7 years), but there were still 28 (51.5%) parents who answered incorrectly that the total number of children's primary teeth was 20. These results can indicate that parental care for children's growth and development, growth age and deciduous teeth are considered sufficient.

Based on the component data of parents' knowledge regarding the function of primary teeth and treatment for cavities in primary teeth, it was found that 45.5% of parents chose to have their primary teeth removed and 6.9% chose not to have treatment, and only 47.5% chose to have it done restoration of primary teeth. In connection with this knowledge point, it was also found in the behavioral section that most parents did not agree that cavities needed to be filled, but 60.4 % of parents agreed more that cavities were extracted. This is due to a lack of parental knowledge so that they consider the child's primary teeth to be unimportant, and will eventually be replaced by permanent teeth. Parents do not know that primary teeth have an important role, among others, as organs of mastication, maintaining the aesthetics of the child's face, and maintaining the child's speech function. In addition, primary teeth act as space maintainers and guide permanent teeth to grow in the correct position.

Primary teeth can be an early marker of an anomaly in the future, so parents or dentists can prevent abnormalities at a more appropriate time in changing habits and helping prognosis. The growth and development of permanent teeth can be disrupted if there is damage or premature loss of primary teeth [17]. Therefore, it is advisable to fill the primary teeth with small cavities and not immediately remove them. Premature loss of primary teeth will adversely affect the occlusive condition of future children due to lack of space for eruption of permanent teeth. In addition, tooth loss also results in impaired masticatory function, children have difficulty eating because some teeth cannot function optimally. Some patients also have aesthetic problems, children become insecure, speech disorders, children cannot pronounce words clearly, the development of bad habits of patients, namely the habit of chewing on one side so that the other side is full of tartar, and the emergence of psychological problems [18,19].

Based on the attitude component data obtained in table 3, it can be seen that parents of children with special needs with good, sufficient, and less sequential knowledge categories are 22 (21.8 %), 59 (58.4%), and 20 (19.8 %) of 101 total respondents. These data indicate that the majority of parents of children with special needs have a sufficient to good attitude towards the role of their child's primary teeth. Based on the distribution of parents' answers on the attitude component regarding their children's primary teeth, it was found that the majority of parents as much as 71.3 % thought they agreed that primary teeth were as important as permanent teeth. 75.3 % of parents agree that caries in primary teeth is common. This can be caused by the assumption that primary teeth will be replaced by permanent teeth.

In the statement that bottle feeding at night until the child falls asleep is common, 76.2 % of parents agreed to strongly agree, while 23.8% said they did not agree. The large number of parents who agree can be caused by giving their children bottle milk before going to bed, which is still often found and has become a habit in society. The existence of this habit in society is also due to the lack of knowledge of parents that giving bottle milk to children until they fall asleep can be a factor for the emergence of problems in children's dental and oral health. This statement is supported by Wasiah's research [20] which shows that 88.9% of mothers still give bottle milk to their children and 81.3% of them experience caries in their children's primary teeth.

Based on the cross-tabulation analysis in table 7, it was found that parents with children with mental retardation and deafness had a good to sufficient level of knowledge, sufficient attitudes, and behavior. Adequate attitudes and behavior for parents with mentally retarded children can be caused because dental care for mentally retarded children requires understanding, patience, and allocating sufficient time in educating or implementing children about how to maintain proper oral and dental health, so that some parents have difficulty to assist children in maintaining optimal oral and dental health at home [21]. Whereas for parents with deaf children, sufficient attitudes and behavior can be caused by obstacles between parents and children in conveying cognitive information related to how to maintain dental and oral health, so that attitudes and implementation of the knowledge possessed by parents are not optimal [22].

Based on the analysis of the data in table 10, it was found that knowledge had no correlation with attitudes with a significance of  $p > 0.05$  ( $p=0.262$ ). This is not in line with Azwar [23] which states that knowledge has an important role in shaping attitudes. This is influenced by three components that form attitudes, namely cognitive which is based on the knowledge gained, affective which is based on subjective emotionality, and conative which is based on the object at hand.

The results of the correlation test also showed that knowledge had no significant relationship to behavior,  $p > 0.05$  ( $p=0.227$ ). This is not in line with the theory of Lawrence Green [24] which states that knowledge has an important role in shaping behavior. There are three factors that shape behavior, namely predisposing factors consisting of knowledge, attitudes, beliefs, values, age, education, occupation, and family economic status as well as supporting factors consisting of the physical environment, the availability or absence of health facilities and infrastructure. The absence of a health program, and the driving factors consisting of the attitudes and actions of health workers or other people who are role models.

While in this study, attitudes have a correlation with behavior with a significance of  $p < 0.05$  ( $p = 0.000$ ). This is in line with Notoatmodjo [16] which states that attitude is closely related to behavior. Knowledge and positive attitudes or negative aspects will be able to determine the person's behavior towards an object. Behavior that is based on good knowledge accompanied by positive awareness and attitude, then the behavior will be more perfect and last longer. Therefore, parents of children with special needs should have good knowledge and attitudes regarding the importance of the role of primary teeth so that as long as primary teeth are in the oral cavity, children are always in a healthy condition to function properly [25].

The difference between the results of the study and the previous theory could be due to the bias that occurred in respondents when filling out a questionnaire regarding the importance of the role of primary teeth in children with special needs, namely that respondents had a tendency to fill in answers that looked good and covered up bad conditions that occurred. Another limitation is that during data collection from the sample, the researcher could not assist the respondent in filling out the questionnaire. In this study, the sampling technique used was convenience sampling. This causes the research results cannot be generalized and is only limited to the sample studied.

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## 5. Conclusion

There is no significant relationship between knowledge and behavior. However, there is a significant relationship between attitudes and behavior of parents of children with special needs regarding the importance of the role of children's primary teeth in the Special Elementary School (SDLB) Surabaya.

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## Compliance with ethical standards

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### *Disclosure of conflict of interest*

All the authors declared that there is no conflicts of interest.



### *Statement of ethical approval*

Ethical approval has been received from the ethics committee of Faculty of Dental Medicine Universitas Airlangga prior the data collection.

### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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## **References**

- [1] Witadiana H, Nur'aeny N, Wahyuni I. Level of knowledge and sources of information regarding oral ulcerated lesions in elementary school students. *Padjadjaran J Dent Res Student*. 2020, 4(1):27–35.
- [2] Kasihani N, Budiarti R, Pudentiana, Erwin, Mujahidah A. Risk Activities and Extrinsic Dental Stain Status in the Community RT 004 RW 001 KAMPUNG BALI TANAH ABANG. *JDHT J Dent Hyg Ther*. 2020, 1(1):16–20.
- [3] Suwandi T. Keterkaitan Antara Bidang Orthodonti dan Periodonti dalam Perawatan Estetika Rongga Mulut. *J Kedokt Gigi Terpadu* [Internet]. 2020 Aug 6, 2(1). Available from: <https://trijurnal.lemlit.trisakti.ac.id/jkgt/article/view/7533>
- [4] Kusuma A, Taiyeb A. Description of Dental Caries Incidence in Grade 2 Children of 20 Sungaiselan State Elementary School. *Heal Media Makassar Heal Polytech*. 2020, 15(2):238–44.
- [5] Putri J. The Effectiveness of Counseling with Social Media in Improving Dental and Oral Health Promotion [Bachelor's thesis]. Macassar: Hasanuddin University. 2020: 1–3.
- [6] Purnama T, Ngatemi, Sofian R, Kasihani N, Pudentiana R, Nurbayani S. The 5days Gosgi Model as an Effort for Establishing the Independence of Early Childhood Brushing Teeth in Schools. *Qual J Heal*. 2020, 14(1):19–24.
- [7] Rahmadani V. Description of Gingivitis Status in Children with Special Needs in Special Schools in Yogyakarta City [Bachelor's thesis]. Yogyakarta: Yogyakarta Muhammadiyah University; 2020: 1–6.
- [8] Agustina Y, Isnaeni, Khamid A. Dental and Oral Health Care in Reducing the Debris Index in Children with Special Needs at Special Schools in Bekasi City. *J Between Community Serv*. 2020, 3(2):36–41.
- [9] Batubara E, Darmana A, Anto. The Effect of Health Promotion on How to Brush Teeth in Children with Special Needs at Smart Aurica School Medan. *Community J Public Heal*. 2020, 2(2):13–21.
- [10] Wilson N, Lin Z, Villarosa A, George A. Oral health status and reported oral health problems in people with intellectual disability: A literature review. *J Intellect Dev Disabil*. 2018, 44(3):292–304.
- [11] Hanindira M, Zen Y, Juliani M. Prevalence of Malocclusion with Etiology of Premature Loss of Primary Teeth. *JKGT*. 2020, 2(2):61–3.
- [12] Fadhilah A, Prasetyowati S, Mahirawatie I. The Horizontal and Roll Tooth Brushing Method for Plaque Reduction on children with mental retardation. *Sci J Dent Nurs*. 2021, 2(2):201–7.
- [13] Satria E, Haris A, Yessi S. Parents' Determinants of the Experience of Dental Caries in Children with Special Needs in Banda Aceh. *J Aceh Med*. 2020, 5(2):26–36.
- [14] Onol S, Kirzioğlu Z. Evaluation of oral health status and influential factors in children with autism. *Niger J Clin Pr*. 2018, 21(4):429–35.
- [15] Ramadhanty A, Agustin T, Jeddy. The Relationship of Knowledge With Mother's Attitude About the Importance of the Role of Primary Teeth. *JKGT*. 2021, 3(1):74–80.
- [16] Notoatmodjo S. *Behavioral Health Sciences*. Jakarta: Rineka Cipta; 2014: 135–167.
- [17] Suarniti L. Early Extraction of Primary Teeth Due to Dental Caries Can Cause Tooth Crowding. *J Dent Heal*. 2014, 2(2):233–8.
- [18] Anggraini L, Utomo Rinaldi B, Sunarno, Dibyo P. Premature Loss and Jaw Development. *Insisiva Dent J Insisiva Dent Mag*. 2018, 7(2):53–7.
- [19] Syed Khaja A. Difference between primary and permanent teeth, Sequence of eruption, mixed dentition, causes of tooth loss. *Dent Anatomy, Physiol Occlusion Tooth Carving*. 2021, 2(1):26–8.

- [20] Wasiah A-. The impact of pacifier use on early childhood caries syndrome in children aged 3-6 years at Nurul Huda Village Kindergarten. Gedongboyountung kec. District close. Lamongan 2020. Surya j media Health Science Community [Internet] 2020, (Vol 12, No 1 (2020)):26–31. Available from: <http://jurnal.umla.ac.id/index.php/Js/article/downloadSuppFile/98/5>
- [21] Palupi D, Rachwati R, Anggarini Z. The Role of Nurses in Improving Dental and Oral Hygiene for Children with Mental Requirements. *Prodenta J Dent.* 2017, 1–13.
- [22] Agustina M, Ismail A, Firdausy M. The Relationship of Dental Health Knowledge with Oral Hygiene Conditions in School- Age Deaf Children. *J Medial.* 2015, 2(1):64–7.
- [23] Azwar S. *Human Attitude: Theory and Its Measurement.* Yogyakarta: Student Library, 2011:15–37.
- [24] Green L. *Health Education: A Diagnostic Approach .* The Johns Hopkins University, Mayfield Publishing Co.; 1980.
- [25] Wawan A, Dewi M. *Theory & Measurement of Knowledge, Attitudes and Human Behavior.* Yogyakarta: Nuha Medika. 2018: 24–127.