

THE INFLUENCE OF COUNSELING DEMONSTRATION METHODS ABOUT TEETH-BRUSHING ON CHANGES IN THE WAY OF BRUSHING TEETH (STUDY ON MENTALLY RETARDED CHILDREN AT SLB B-C OPTIMAL SURABAYA)

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ABSTRACT. Brushing teeth is the process of cleaning the surface of the teeth from soft deposits (debris) left in the mouth, brushing teeth skills can affect the debris index score, the debris index score of children with mental retardation (mild) is poor, because of less brushing teeth skills. One of the efforts to improve the Brushing teeth skills of children with mental retardation is by counseling the demonstration method. To find out the influence of demonstration method counseling on brushing teeth on changes in how to brush teeth of mentally retarded children (mild) SLB B-C Optimal Surabaya. The type of research used is Pre-experimental research with one group pretest-posttest design. it was conducted from January to March 2023, With a target of 33 children with mentally retarded (mild) with total sampling techniques and Data collection using an observation sheet to obtain information on a variable. The results of the Wilcoxon Test are p value = 0.00. With the existing requirements p value <0.05. This shows that the demonstration method counseling influences changes in children's brushing teeth skills. There is an influence of counseling demonstration method of brushing teeth on changes in how to brush teeth of mentally retarded children (mild) SLB B-C Optimal Surabaya.

Keywords: Brushing Teeth ; Demonstration Method; Mentally Retarded Children

1 BACKGROUND

Debris is food residue that remains in the mouth on the surface of the tooth structure and gums that are not cleaned immediately after eating. By moving the tongue, lips and cheeks or through rinsing the mouth can release debris easily (Ulfah et al., 2020). Based on the results of research data conducted by Arifian et al., (2022) the results of the index debris score were obtained for students with mentally retarded B-C Optimal Surabaya which was conducted on October 06, 2021. With the results of the research, the index debris score was obtained with an average score of 2.0, which was included in the poor category.

The primary cause of poor oral hygiene (debris) in elementary school students is due to poor tooth brushing attitudes in children. This is indicated by the presence of dental debris that is attached and accumulated in the molars of students (Ekasari et al., 2022).

Local factors such as dental plaques and deposits that cause dental caries and periodontal disease may be removed to improve the oral health (Moon & Kang, 2022). Plaque-induced gingivitis can be prevented with good oral hygiene, which includes regular tooth brushing and interproximal cleaning (Sangalli et al., 2021). The habit of not monitoring dental and oral hygiene is the primary factor that causes a lot of problems in the teeth and mouth in the form of cavities, tartar, inflammation of the gums, inflammation of the tooth supporting tissue and others caused by dental plaque (Ulfah et al., 2020). Maintenance of dental and oral hygiene is one of the efforts to improve health because it can prevent the occurrence of various oral diseases (Fadjeri et al., 2022).

Brushing your teeth is a commonly recommended way to remove various food debris adhering to the surface of your teeth and gums (Hadi et al., 2022). Tooth brushing aims to remove plaque, so it must be done properly and correctly so that the action is effective, which is based on choosing the right type of toothbrush and brushing technique. Maximum action to remove bacterial plaque and food impaction can be done after eating (Pindobilowo et al., 2023). Tooth brushing is a basic technique to prevent major oral diseases (e.g., dental caries and periodontal disease). Several methods of tooth brushing technique devised by some dental scholars have been introduced. However, some guidelines to select the proper method are needed for an individual patient considering age and oral status. (Bok & Lee, 2020).

Mental retardation means subaverage intellectual ability equivalent to or less than an IQ of 70 that is accompanied by significant deficits in abilities (as in communication or self-care) necessary for independent daily functioning, is usually present from birth or infancy, and is manifested especially by delayed or abnormal development, by learning difficulties, and by problems in social. (Munawar & Susetyo, 2019). Due to the nature of their psychological development, such children may not master all stages of work as deeply as necessary (Sobirovna, 2023). The AAMD classifies retardation into four categories according to intelligence quotient (IQ): Mild (50-55), moderate (35-40), severe (20-25) and profound below (20-25) (Tatuskar & KL, 2021). Children with mental retardation often experience problems related to dental and oral health, including periodontal disease, caries, and poor OHI-S this is due to an unclean oral cavity. (Anggela & Sugito, 2022).

Education for children with special needs must be planned with integrated programs, learning systems, and curricula that are appropriate to the abilities and

intelligence of children in receiving subject matter (Darmawati et al., 2019). Education using the demonstration method applied by nurses of children with mentally retarded can be adapted to the learning skills of each child and can be more focused on each child followed by the delivery of an understanding that is equivalent to a language that can be understood by children with mentally retarded (Az-Zahrah et al., 2021). The demonstration method is a method of delivering material by demonstrating or showing students a process, situation or certain objects that they are learning, either real or fake objects, with a verbal explanation (Dede et al., 2018).

According to the background that has been described above, the problem obtained in this study is the high debris index in children with mentally retarded in SLB B-C Optimal Surabaya, therefore the researcher is interested in conducting a study entitled "The influence of counseling demonstration methods about teeth-brushing on changes in the way of brushing teeth (Study on mentally retarded children at SLB B-C Optimal Surabaya)".

2 RESEARCH METHODS

This research has been approved by the Health Research Ethics Commission of the Polytechnic of Health Surabaya No.EA/1651/KEPK-Poltekkes_Sby/V/2023. The type of research used was Pre-Experiment One Group Pretest-Posttest, the research location was at SLB B-C Optimal Surabaya. The research time was carried out from January to March 2023. The target number was 33 children with mentally retarded (mild) with total sampling technique, data collection instrument with tooth brushing observation sheet (pre-post test). Wilcoxon test to analyze the influence of counseling on the demonstration method of brushing teeth with changes in how to brush the teeth of mentally retarded children.

3 RESULTS

Table 1. Frequency Distribution of Pre Test Data on How to Brush Teeth Before Counseling Demonstration Method, Surabaya in 2023

No	Category	Frequency	Percentage
1	Good	4	12,1%
2	Medium	13	39,4%
3	Bad	16	48,5%
Mean		1,82	

Based on the data table 1, it is known that the way to brush teeth in 33 children with mentally retarded (mild) SLB B-C Optimal Surabaya is mostly in the bad category as many as 16 or 48.5% and with an average value of 1.82.

Table 2. Frequency Distribution of Post Test Data on How to Brush Your Teeth After Counseling Demonstration Method 2023, Surabaya in 2023

No	Category	Frequency	Percentage
1	Good	8	24,2%
2	Medium	20	60,6%
3	Bad	5	15,2%
Mean		2,67	

Based on the data in table 2, it is known that how to brush the teeth of children with mentally retarded (mild) SLB B-C Optimal Surabaya, there is an increase with an increase in the percentage of the moderate category with as many as 20 or 60.6% and with an average value of 2.67.

Table 3. Wilcoxon Test of the Influence Of Counseling with Demonstration Methods on Changes in Brushing Teeth of mentally retarded children (Mild) SLB B-C Optimal Surabaya in 2023

Variable	N	Mean (minimum-maximum)	Sig
How childrens brush their teeth before counseling	33	1,82 (0-4)	0,00
How childrens brush their teeth after counseling	33	2,67 (1-5)	

Based on the data in Table 3, it is known that the average value (Mean) of how to brush teeth before and after counseling has changed. There is an increase in the Mean difference of 0.85 and with a p value = 0.00. With the existing requirements p value <0.05 which is 0.00 <0.05, it means that H0 is rejected and H1 is accepted so that this proves that the counseling of the tooth brushing demonstration method affects changes in the way mentally retarded (mild) children SLB B-C Optimal Surabaya brush their teeth.

4 DISCUSSION

4.1 How to Brush Teeth Before Counseling with Demonstration Method

Based on the results of data analysis that has been obtained that brushing the teeth of mentally retarded children (mild) before being given counseling with the demonstration method is more in the bad category. This can occur due to the lack of skills of children

with mentally retarded (mild) in brushing their teeth, this can be because children with mentally retarded (mild) have an IQ below the normal average with an IQ of 51-70 and are supported by less guidance from the closest people such as parents and teachers, so this has an impact on the lack of brushing skills of children with mentally retarded (mild).

Mentally retarded is a mental disorder with an intelligence quotient (IQ) between 55-70, besides those mentally retarded children are only able to think concretely (Istiqomah et al., 2022). "Mental weakness" is not simply a decrease in abilities, a lack of intelligence, but a change in the quality of all aspects of a person. In mental retardation, the child is mainly intellectually impaired, but there are significant defects in the emotional, volitional, behavior (Soliyevna, 2021). Mentally retarded individuals are susceptible to health hazard either as a direct consequence of their disability or due to lack of awareness regarding personal and environmental hygiene. Disabled children are not conscious of personal hygiene at school level. Health education intervention program was very much important to the growing children for their better health and upcoming future (Nabil et al., 2019).

Teachers have a very important role in the success or failure of learning that takes place at school. The use of learning strategies used by a teacher determines the success of every education (Prasetyowati et al., 2023). In day to day life, parents function as role models for their children, and, therefore, parents' knowledge about oral health is very crucial. Moreover, children with these disabilities are totally dependent on their parents even for basic necessities of life (Benedict & Baratakke, 2020). This is in line with the research of Laily et al., (2021) that The needs of children with mental retardation are very diverse, so they need the participation of teachers and parents to teach about tooth brushing, which is a maintenance effort. Parental participation influences the behavior of children.

4.2 How to Brush Teeth After Counseling with Demonstration Method

Based on the results of data analysis that has been obtained, it shows that brushing the teeth of children with mentally retarded (mild) after being given counseling with the demonstration method there is an increase in the moderate category. This shows that the selection of the demonstration method is one of the effective methods, and can be used for teaching methods for children with mentally retarded (mild).

Mental retardation is a child who has intellectual limitations. They have slower adjustment abilities than other children of their age (Astuti et al., 2022). A differentiated approach to teaching oral hygiene, based on the possibilities of developing self-care skills in mentally retarded children, taking into account their mental and physical capabilities, can significantly improve oral hygiene and the condition of periodontal tissues (Indiaminova et al., 2021).

The demonstration method is a method of presenting or delivering teaching materials by showing a process directly. The demonstration method is more useful for getting a clearer picture of matters related to a real activity implementation process so that students can make careful and thorough observations and full attention and participation in what the teacher has done (Mukhtar, 2023). Maričić Mirjana, Cvjetičanin Stanko, (2019) Found that Group work with a demonstration approach to performing experiments has positively influenced the removal of student's misconceptions, E group students have shown better results. In accordance with the

research results R. E. et al., (2023) The results of this study then found that the demonstration method had the greatest difference in improvement (60%) compared to leaflets (12%) and posters (24%). This then shows that the demonstration method group has achieved a greater percentage than the poster and leaflet media.

4.3 The Effect of Counseling with Demonstration Methods on Changes in How to Brush Teeth of Children With Mentally Retarded (Mild) SLB B-C Optimal Surabaya.

Based on the results of data analysis, it shows that there is an effect of counseling with the demonstration method on changes in how to brush the teeth of children with mentally retarded (mild) SLB B-C Optimal Surabaya. So that it shows an increase before-after counseling demonstration method. Counseling using the demonstration method, can help children with mentally retarded (mild) in understanding the material presented, where there is an increase in the skill of how to brush teeth from the bad category to the moderate category. Which is expected with the increase in brushing skills can have a good effect on the status of the debris index value of children with mentally retarded (mild).

This is related to changes in the behavior of mentally retarded children before-after counseling. According to Skinner quoted by Notoatmodjo (2003), formulates that behavior is a person's response or reaction to stimuli or stimuli from outside. Because this behavior occurs through the process of a stimulus to the organism, and then the organism responds, Skinner's theory is called the "S-O-R" or Stimulus - Organism - Response theory (Albertus et al., 2022). In accordance with the research content Mahargias et al., (2022) In addition, related to differences in the behavior of nurses in implementing patient safety goals before and after training, Skinner's theory (1996) formulates that behavior is a person's response or reaction to external stimuli or stimuli. Because this behavior occurs through the process of a stimulus to the organism, and then the organism responds, Skinner's theory is called the "S-O-R" theory or Stimulus - Organism - Response.

The demonstration and video animation method is proven to be effective in increasing the knowledge level of brushing teeth in mentally retarded children (Sari et al., 2022). The results of research by Az-Zahrah et al., (2021) The demonstration method is included in the types of things that can improve the teeth brushing skills of children with disabilities.

5 CONCLUSION AND RECOMMENDATION

According to the results of the analysis and discussion obtained the conclusion that there is an effect of counseling demonstration methods on changes in the way children with mentally retarded (mild) SLB B-C Optimal in brushing their teeth. With the results of this study, it is hoped that teachers will be able to apply the demonstration method in the teaching-learning process for children with mentally retarded. Which is able to provide assistance to children with mentally retarded to understand the material that is being delivered.

6 REFERENCES

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