

THE ROLE OF PARENTS AND THE LEVEL OF DENTAL AND ORAL HYGIENE OF MENTALLY RETARDED STUDENTS (STUDY AT SLB PAEDAGOGIA SURABAYA)

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ABSTRACT. Condition Children with mental retardation have a higher risk of dental and oral health problems, due to the lack and mental limitations in maintaining optimal dental and oral hygiene. One of the influencing factors is the role of parents in helping mentally retarded children maintain oral hygiene. So the aim of this research is to determine the relationship between the role of parents and the level of oral hygiene of mentally retarded students at SLB Paedagogia Surabaya. The research was conducted in January 2023 at SLB Paedagogia Surabaya with a sample of 30 parents and mentally retarded students. Analysis of the relationship between the role of parents and oral hygiene in students mental retardation SLB Paedagogia utilizes the Statistical Package For The Social Science (SPSS) by using the Spearman Rank Correlation test. **Results** Sig. (2-tailed) of 0.003 <0.05. Therefore, it can be interpreted there is significant relationship between parental role variables and the level of dental hygiene and mouth of mentally retarded students. There is a relationship between the role of parents with the level of dental and oral hygiene at SLB Paedagogia Surabaya.

Keywords :Dental and oral hygiene, the role of parenst, mentally retarded students

1 INTRODUCTION

According to the 2018 Basic Health Survey, the national prevalence of dental and oral problems is 57.6% (Kemenkes RI, 2019). The results of a study in Mysore, India showed that most mentally retarded children (36.73%) had clean oral cavities, lower than normal children, 9.18%(Bennadi *et al.*, 2020). The results of a survey on mentally retarded students at SLB B-C Karya Bhakti and SLB B-C Optimal, obtained an average debris index score of 2.17 and 2.7 with the criteria for a poor index debris assessment (Ulfah *et al.*, 2020) (Trentin, M. S *et al.*, 2017)

Dental problems in mentally retarded children are caused by a lack of attention to dental and oral hygiene, for example caries or tartar, as well as inflammation of the gums, etc., which is caused by debris (Noer *et al.*, 2018)(Bhambal, A *et al.*, 2011). The thing to do in caring for oral hygiene is brushing your teeth at the right place and in the right way (Az-Zahrah *et al.*, 2021) (Radha, G *et al.*, 2016)

Brushing teeth is one of the shortcomings and limitations felt by children with special needs in caring for themselves (Jain, M *et al.*, 2009) (Kumar, S *et al.*, 2009). Parents can help OHI-S students with special needs by practicing self-care, especially by cleaning their teeth regularly to maintain oral hygiene. Not only helping children with special needs to brush their teeth just once, it needs continuous action. The aim of helping children with special needs to wash their teeth is so that they get used to it and

want to do it (Nurizza *et al.*, 2020) (Pareek, S et al., 2015). According to Greene and Vermillion, the OHI-S assessment criteria are 0.0-1.2 good categories, 1.3-3.0 moderate categories and 3.1-6.0 bad (Anwar *et al.*, 2020). Based on the results of a dental examination at SLB Paedagogia Surabaya from a total of 10 mentally retarded students. The results obtained were that 5 mentally retarded students had poor OHI-S scores, 4 mentally retarded students had moderate criterion OHI-S results and 1 mentally retarded student had good criteria. Based on the description above, researchers want to conduct research on the relationship between the role of parents and the level of dental and oral hygiene of mentally retarded students at SLB Paedagogia Surabaya in 2023.

2 RESEARCH METHODS

This research has been approved by the Health Research Ethics Commission of the Polytechnic of Health Surabaya No. EA/1392/KEPK-Poltekkes_Sby/V/2023. This study uses quantitative research methods with a cross sectional approach. The targets in this study were children with disabilities in SLB Paedagogia Surabaya totaling 30 parents with deaf children. The sampling technique was carried out by total random sampling technique. In this study, the instrument used was a questionnaire to determine the role of parents and to assess the level of dental and oral hygiene by using the OHI-S examination and recorded on the dental hygiene observation sheet (OHI-S). Analysis of the relationship between the role of parents and oral hygiene in students mental retardation SLB Paedagogia utilizes the Statistical Package For The Social Science (SPSS) by using the Spearman Rank Correlation test with a significance level (α) = 0.05.

3 RESULTS AND DISCUSSION

3.1 The role of parents about dental and oral hygiene in mentally retarded students at SLB Paedagogia Surabaya

Table 1. Distribution of Measurements of the role of parents about dental and oral hygiene in mentally retarded students at SLB Paedagogia Surabaya

Category	Frequency	Presentase (%)
The Role Of Parents	(n)	
Very Good	6	20
Good	5	16,7
Enough	15	50
Not Enough	3	10
Very Less	1	3,3

Based on the results of statistical tests using the Sperm Rank data analysis technique, a value of . The value is 0.003 which means that it is greater than the significant value (α) which is set at 0.05 ($0.003 < 0.05$), so it can be interpreted that there is a relationship between the role of parents and the level of dental and oral hygiene of mentally retarded students at SLB Paedagogia Surabaya.

4 DISCUSSION

The majority of parents' role in maintaining dental and oral hygiene was included in the sufficient classification, namely 50%. Relevant to research by Husna, A (2015) quoted from (Sutomo *et al.*, 2020) that the results of research on the role of parents are quite active, meaning that if the role of parents is more active, it means that children's activities are also better (Shukla, D *et al.*, 2014). Research by (Kristiyanto *et al.*, 2017) that when parents are able to provide a good role in teaching the right time to brush their teeth, so as to foster a good behavior in children, namely brushing their teeth before going to bed at night . This is in line with (Thioritz *et al.*, 2022) that the role of parents influences the motivation and actions of brushing children's teeth, so that parents' motivation is getting better so that children will behave well regarding how and when to brush their teeth properly (Altun, C *et al.*, 2010) (Bennadi, D *et al.*, 2020)

The majority of the oral hygiene level of mentally retarded students was classified as moderate, namely 70%. This is due to the difficulty in maintaining oral hygiene due to the mental or physical limitations of mentally retarded children. This is in accordance with the research of (Sujarwati, 2019) that mentally retarded children really need special attention and require extra patience and patience to ease efforts to care for oral hygiene, so that they can and want to act well in caring for the cleanliness of the oral cavity. Children who show signs of mental retardation, like to waste time and find it difficult to learn new things, really need parental supervision in caring for oral hygiene. Relevant to (Sandy, 2018), parents have a crucial role in showing the existence of children with special needs. When children with special needs are recognized, they feel more confident about participating in activities and want to demonstrate their skills (Solanki, J *et al.*, 2015) (Mandic, J *et al.*, 2018).

Based on the results of statistical tests using the Sperm Rank data analysis technique, a value of . The value is 0.003 which means that it is greater than the significant value (α) which is set at 0.05 ($0.003 < 0.05$), so it can be interpreted that there is a relationship between the role of parents and the level of dental and oral hygiene of mentally retarded students at SLB Paedagogia Surabaya. This is relevant to the research of (Qomariyah *et al.*, 2020). The role of parents is very crucial in order to increase the level of cleanliness of the child's oral cavity. The role of parents will help to try to care for the cleanliness of the child's oral cavity (Khadem, P *et al.*, 2011) (Nirmala, S. V. S. G *et al.*, 2018). The limitations that exist in a child with special needs require the help and attention of others in cleaning the oral cavity. Relevant to research by (Qomariyah *et al.*, 2020), parents play an important role in maintaining children's attitudes in maintaining oral hygiene, which is important to ensure oral health is maintained at the highest possible level (Hegde, A. M *et al.*, 2015) (Shivakumar, K. M *et al.*, 2018)

5 CONCLUSION AND RECOMMENDATION

After conducting research on "The Relationship between the Role of Parents and the Level of Dental and Oral Hygiene of Mentally Disabled Students at SLB Paedagogia Surabaya" can be meaningful? The role of parents in maintaining the dental and oral hygiene of disabled students at SLB Paedagogia is included in the sufficient classification, The level of dental hygiene of mentally retarded students at SLB Paedagogia is included in the moderate classification, There is a relationship between the role of parents and the level of dental and oral hygiene in mentally retarded students at SLB Paedagogia Surabaya.

Based on the research results and conclusions above, the following suggestions can be given increasing the frequency of dental and oral health appointments, working with schools to increase the level of dental and oral hygiene by educating teachers and integrating UKGS activities such as counseling and joint tooth brushing, and increasing visit schedules. After this research, it is hoped that parents can have an active role in supervising, nurturing, encouraging, and educating their children in maintaining oral hygiene. For the school to activate UKGS and increase the role of the teacher to guide the joint tooth brushing program at school and pay more attention to and teach to maintain dental and oral hygiene of mentally retarded students.

6 REFERENCES

- Anwar, A. I., Abdat, M., Ayub, A. A., & Yusrianti, M. (2020). Status Kebersihan Mulut Berdasarkan Indeks Oral Hygiene Index Simplified (Ohi-S) Pada Siswa Sekolah Usia 9, 10 Dan 11 Tahun. *Cakradonya Dental Journal*, 11(2), 86–90. <https://doi.org/10.24815/cdj.v11i2.16149>
- Az-Zahrah, A., Hado, S., & Prasetyowati, S. (2021). Upaya Meningkatkan Keterampilan Menyikat Gigi Pada Anak Tunagrahita. *Jurnal Ilmiah Keperawatan Gigi (JIKG)*, 3(2), 518–537.
- Bennadi, D., Konekeri, V., M, M., Reddy, V., & G, S. (2020). Oral hygiene negligence among institutionalized mentally disabled children in Mysore city—A call for attention. *Journal of Family Medicine and Primary Care*, 6(2), 169–170. <https://doi.org/10.4103/jfmpe.jfmpe>
- Kemendes RI. (2019). Hasil Riset Kesehatan Dasar Tahun 2018. Kementerian Kesehatan RI, 53(9), 1689–1699.
- Kristiyanto, Y. D., Asih, S. W., Permatasari, E., Universitas, M., Jember, M., Fakultas, D., Kesehatan, I., Muhammadiyah, U., Fakultas, D., Kesehatan, I., Muhammadiyah, U., Menyikat, P., Sebelum, G., & Sekolah, A. (2017). Menyikat Gigi Dengan Perilaku Menyikat Gigi Sebelum Tidur Pada Anak Usia Sekolah (Kelas 3-5) Di Sd Negeri Yosowilangun Kidul 01 Kabupaten Relation Of The Role Of Parents In Guiding Teeth Brushing With Teeth Brushing Behavior Before Sleeping In School Ag. 27. [Http://Repository.Unmuhjember.Ac.Idid/Eprint10466](http://Repository.Unmuhjember.Ac.Idid/Eprint10466)
- Noer, K., Hanifah, F., Rahayu, C., Nugroho, C., Miko, H., Keperawatan, J., Poltekkes, G., Tasikmalaya, K., & Tasikmalaya, K. (2018). Gambaran Status Kesehatan Gigi dan Mulut pada Anak Tunagrahita Usia 12-18 Tahun di SLB Negeri Widiasih Kecamatan Pari Kabupaten Pangandaran. *ARSA (Actual Research Science Academic)* Vol. 3 No. 2-Agustus 2018 ISSN 2548-3986 (Online) Gambaran, 3(2), 10–15

- Nurizza, E., Purwaningsih, E., Surabaya, P. K., Gigi, J. K., Pucang, J., & Tengah, J. (2020). Pengaruh peran orangtua terhadap debris index score siswa inklusi SDN Pakis VIII Surabaya Tahun 2020. *E-Journal.Poltekkesjogja.Ac.Id*, 8(1), 22–27. <http://www.ejournal.poltekkesjogja.ac.id/index.php/JGM/article/view/598>
- Qomariyah, A. W., Prasko, & Nugraheni, H. (2020). *Jurnal Kesehatan Gigi*. *Jurnal Kesehatan Gigi* 7 Nomor 1 (2020), 1, 79–82. <http://ejournal.poltekkes-smg.ac.id/ojs/index.php/jkg/index>
- Sandy, L. P. A. (2018). Peran Orang Tua Terhadap Keterampilan Menyikat Gigi Dan Mulut Pada Anak Disabilitas Intelektual. *Jurnal Teknosains*, 7(1), 53. <https://doi.org/10.22146/teknosains.32343>
- Sujarwati, F. P. (2019). Pengaruh Parent Education Program Terhadap Kemampuan Menggosok Gigi Anak Tunagrahitadi Slb Negeri Sragen. 000, 1–12. <https://eprints.ukh.ac.id/id/eprint/511>
- Sutomo, S. Y., Usman, A., Yulandari, V., & Wikandari, D. (2020). Peran Orang Tua Terhadap Perilaku Perawatan Gigi Pada Anak Usia Sekolah (6-12 Tahun) Di Dusun Paok Odang Desa Sisik Kecamatan Pringgarata Kabupaten Lombok Tengah. *Jurnal Kesehatan Qamarul Huda*, 8(1), 47–53. <https://doi.org/10.37824/jkqh.v8i1.2020.198>
- Thioritz, Ernie Asridiana, Safri, M. (2022). Motivasi dan perilaku terhadap frekuensi menggosok gigi. *Media Kesehatan Gigi P-ISSN 2087-0051 E-ISSN 2622-7061*, 21(2). <https://doi.org/https://doi.org/10.32382/mkg.v21i2.3040>
- Ulfah, S. F., Prasetyowati, S., & Isnanto. (2020). Pemberdayaan Guru Dalam Rangka Meningkatkan Slb Bc Optimal Dan Slb Bc Karya Bhakti Surabaya. *Prosiding Seminar Nasional Kesehatan Politeknik Kesehatan Kementerian Kesehatan Surabaya* Surabaya, 28 Nopember 2020, 2, 1–4.
- Trentin, M. S., Costa, A. A. I., Barancelli, M., Marceliano-Alves, M. F. V., Miyagaki, D. C., & Carli, J. P. D. (2017). Prevalence of dental caries in patients with intellectual disabilities from the Association of Exceptional Children's Parents and Friends of Southern Brazil. *RGO-Revista Gaúcha de Odontologia*, 65, 352-358.
- Bhambal, A., Jain, M., Saxena, S., & Kothari, S. (2011). Oral health preventive protocol for mentally disabled subjects—A review. *Journal of Advanced Oral Research*, 2(1), 21-26.
- Jain, M., Mathur, A., Sawla, L., Choudhary, G., Kabra, K., Duraiswamy, P., & Kulkarni, S. (2009). Oral health status of mentally disabled subjects in India. *Journal of oral science*, 51(3), 333-340.
- Kumar, S., Sharma, J., Duraiswamy, P., & Kulkarni, S. (2009). Determinants for oral hygiene and periodontal status among mentally disabled children and adolescents. *Journal of Indian Society of Pedodontics and Preventive Dentistry*, 27(3), 151-157.
- Pareek, S., Nagaraj, A., Yousuf, A., Ganta, S., Atri, M., & Singh, K. (2015). Effectiveness of supervised oral health maintenance in hearing impaired and mute children-A parallel randomized controlled trial. *Journal of International Society of Preventive & Community Dentistry*, 5(3), 176.
- Altun, C., Guven, G., Akgun, O. M., Akkurt, M. D., Basak, F., & Akbulut, E. (2010). Oral health status of disabled individuals oral health status of disabled individuals attending special schools. *European journal of dentistry*, 4(04), 361-366.
- Shukla, D., Bablani, D., Chowdhry, A., Jafri, Z., Ahmad, N., & Mishra, S. (2014). Oral health status and dental caries experience in mentally challenged individuals. *Ann Public Health Res*, 1(2), 1008.

- Bennadi, D., Konekeri, V., Maurya, M., Reddy, V., Satish, G., & Reddy, C. V. K. (2020). Oral hygiene negligence among institutionalized mentally disabled children in Mysore city—A call for attention. *Journal of family medicine and primary care*, 9(4), 2045.
- Solanki, J., Khetan, J., Gupta, S., Tomar, D., & Singh, M. (2015). Oral rehabilitation and management of mentally retarded. *Journal of clinical and diagnostic research: JCDR*, 9(1), ZE01.
- Mandic, J., Jovanovic, S., Mandinic, Z., Ivanović, M., Kosanovic, D., Milicic B., & Zivojinovic-Toumba, V. (2018). Oral health in children with special needs. *Vojnosanitetski preglod*, 75(7), 675-681.
- Hegde, A. M., Babu, A. A., Mohammed, A., John, A., Singh, K., & Shetty, S. (2015). Special needs of special children-parental view. *Journal of Health and Allied Sciences NU*, 5(02), 038-044.
- Shivakumar, K. M., Patil, S., Kadashetti, V., & Raje, V. (2018). Oral health status and dental treatment needs of 5–12-year-old children with disabilities attending special schools in Western Maharashtra, India. *International Journal of Applied and Basic Medical Research*, 8(1), 24.
- Khadem, P., Karami, M., & Salehinia, R. (2011). Evaluation of oral health status in mild to moderate mental disabled children in comparison with normal children in Isfahan (Iran). *Journal of Mashhad Dental School*, 35(4), 253-262.
- Nirmala, S. V. S. G., Saikrishna, D., & Nuvvula, S. (2018). Dental concerns of children with intellectual disability—A narrative review. *Dent Oral Craniofac Res*, 4(5), 1-4.
- Radha, G., Swathi, V., & Jha, A. (2016). Assessment of salivary and plaque pH and oral health status among children with and without intellectual disabilities. *Journal of Indian Society of Pedodontics and Preventive Dentistry*, 34(3), 257-261.