

SPECIAL METHODS OF SCHOOL HEALTH PROGRAMME FOR SPECIAL NEEDS CHILDREN IN DENTISTRY

Amelia Elizabeth Pranoto¹, Endah Wahjuningsih², Ayulistya Paramita³, Nur Tsurayya⁴, Istien Wardhani⁵, Anindita Apsari⁶, Sinta Puspita⁷, Paulus Budi Teguh⁸, Eriza Juniar⁹, Dyah Ayu¹⁰, Sarianoferni¹¹, Noengki Prameswari¹², Pambudi Rahardjo¹³, Mohammad Basroni Rizal¹⁴, Eddy Hermanto¹⁵ ^{1,2,3,4,5,6,7,8,9,10,11,12,13,14}Fakultas Kedokteran Gigi Universitas Hang Tuah Surabaya

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ABSTRACT

School health program is a program of preventive promotional activities in the field of dentistry using the method "trainer of trainer" or abbreviated as ToT. The program is organized by the Indonesian Association of Dentists (PDGI) together with dental faculties across Indonesia as trainers and multinational company as facilitator. The goal of this program is to create a generation of a nation that will be free of tooth cavities by 2030. Teachers and parents of students with special needs are the target audience for this training, enabling them to carry out morning and night toothbrushing activities for good dental and oral health. ToT's activities include two things: giving advice to teachers and students' parents and brushing their teeth in the morning and evening for 21 days. The problem is that children with special needs do not have the same abilities as other children in terms of receiving information, responding to teaching, and applying what has been taught. Low levels of independence and varying levels of learning difficulties are challenges for trainees. Special methods in teaching morning and night toothbrush activities should be applied well to both teachers and parents of students with special needs, such as how to brush their teeth, the habits of brushing the teeth properly, the use of special brushes, and tips and tricks that can be implemented by the teacher and parents so that children with special requirements can run the program.

ABSTRAK

Program kesehatan sekolah merupakan program kegiatan promosi preventif di bidang kedokteran gigi dengan

menggunakan metode "trainer of trainer" atau disingkat ToT. Program ini diselenggarakan oleh Persatuan Dokter Gigi Indonesia (PDGI) bersama fakultas kedokteran gigi se-Indonesia sebagai trainer dan perusahaan multinasional sebagai fasilitator. Tujuan dari program ini adalah untuk mewujudkan generasi bangsa yang bebas gigi berlubang pada tahun 2030. Guru dan orang tua siswa berkebutuhan khusus menjadi sasaran pelatihan ini sehingga mereka dapat melaksanakan kegiatan menyikat gigi pagi dan malam hari. kesehatan gigi dan mulut yang baik. Kegiatan ToT meliputi dua hal yaitu memberikan penyuluhan kepada guru dan orang tua siswa serta menggosok gigi pagi dan sore hari selama 21 hari. Permasalahannya adalah anak berkebutuhan khusus tidak mempunyai kemampuan yang sama dengan anak lainnya dalam menerima informasi, menyikapi pengajaran, dan menerapkan apa yang telah diajarkan. Rendahnya tingkat kemandirian dan tingkat kesulitan belajar yang bervariasi menjadi tantangan bagi peserta pelatihan. Metode khusus dalam pengajaran kegiatan sikat gigi pagi dan malam hendaknya diterapkan dengan baik baik kepada guru maupun orang tua siswa berkebutuhan khusus, seperti cara menyikat gigi, kebiasaan menyikat gigi yang benar, penggunaan sikat khusus, serta tips dan trik. yang dapat dilaksanakan oleh guru dan orang tua agar anak berkebutuhan khusus dapat menjalankan program tersebut.

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*Corresponding author email: <u>aepranoto@gmail.com</u>

INTRODUCTION

What is special needs children

A child is considered to have special educational needs if they possess a learning difficulty or handicap that hinders their learning process more significantly than the majority of children in their age group. They may have difficulties in academic performance, interpersonal communication, or behavioral conduct. The term Special Needs Education (SNE), as defined by the International Standard Classification of Education (ISCED-97) (UNESCO, 1997), refers to educational measures and assistance specifically aimed at addressing Special Educational Needs (SEN).¹

How to communicate with special needs children

Studies indicate that employing extensive contact and/or a sensory-based strategy is beneficial for children who have substantial and numerous learning issues, specifically in terms of their speech and interaction challenges. Professional mentoring often places a strong emphasis on teaching transferable thinking and learning skills. Effective teaching strategies may involve the utilization of 'procedural facilitators' such as planning sheets, writing frames, story mapping, and teacher demonstration of cognitive strategies. However, to ensure high-quality and independent learning, it is essential to supplement these technical aids with sophisticated 'higher order' questioning and dialogue between teachers and students.²

How to encourage and practice new behavior for special needs children.

Peers can be a helpful resource in both behavior control programs, such as peermonitoring, and peer-oriented interventions, like the buddy system. Approaches that promote children's ability to control their behavior through the teaching of self-monitoring, self-instruction, and self-reinforcement abilities have been proven to be helpful in facilitating adaptive changes in behavior, such as improved focus and decreased anti-social behavior.²

Approaches employing positive reinforcement, behavior reduction strategies, and response cost have shown effectiveness in enhancing on-task behavior. Positive reinforcement involves promptly rewarding appropriate behavior, while behavior reduction strategies encompass reprimands and redirection. Response cost, on the other hand, entails the removal of something significant as a form of punishment. Combining several approaches, such as cognitive-behavioral therapy with family therapy, is more effective in promoting favorable social, emotional, and behavioral results compared to using single approaches in isolation. The research indicates that the efficacy is heightened when parents actively engage as collaborators in their child's education.²

What is school health program?

At the beginning of the study, the committee formulated its own operational definition of a Comprehensive School Health Program (CSHP) as a coordinated and organized collection of initiatives, activities, and services that are connected to the school and aimed at enhancing the overall physical, emotional, social, and scholastic growth of students. The program encompasses and promotes family involvement and is guided by the local community, taking into account community needs, resources, norms, and criteria. The program is overseen by a diverse team of experts and is responsible to the community for ensuring the quality and efficacy of the program.³

Copeland and Crepeau-Hobson (2004) showed The School Health Programs have developed a complete educational model for students. As to the approach, a comprehensive school plan offers a curriculum that encompasses and incorporates knowledge on various specific health topics, tailored to the proper stages of development, guidelines for a certain duration at each grade level, proper guidance provided by certified educators, healthcare experts, and engaged members of the community, in this term we can rely on parents and peer study.⁴

Why is school health program in dentistry important for special needs children?

Prior research has indicated that the occurrence rate of dental caries in children with special healthcare needs (SHCNs) is comparable to that of children in the same age group.⁵ Nevertheless, the dental health of children with special healthcare needs (SHCNs) typically declines more rapidly than that of the general population as they age. Children with special healthcare needs (SHCNs) exhibit a higher prevalence of missing teeth, untreated dental caries, and a lower number of dental restorations compared to the general population.⁶

Furthermore, a comprehensive analysis conducted by Davis and Anders (2010) highlighted that individuals with special healthcare needs (SHCNs) have a higher occurrence of untreated dental caries and periodontal disease compared to the general population. The psychological well-being of an individual is greatly influenced by their oral health.⁶ Impaired dental health can lead to decreased consumption of nutrients, hindered social interactions, challenges in performing daily tasks, and accompanying anxiety.^{7,8} It is important to consider that certain children with special healthcare needs may have difficulty understanding the significance of preventative oral health practices and

may not be able to cooperate as expected.⁹ Insufficient information and understanding of the importance of dental hygiene can pose a difficulty for parents or caregivers.¹⁰

Regardless of the challenges they may face, children with special healthcare needs (SHCNs) should have the ability to achieve optimal oral health, which encompasses being free from discomfort and having the ability to eat and enjoy food with building good habits in oral and dental health.¹¹ This article aims to provide guidance on the application and implementation of a school health program specifically designed for special needs children, such as brushing teeth both in the morning and evening continuously for over 21 days.

METHOD

The procedure utilizes a digital platform using the Zoom application. The participants included of four parents and seven teachers from YPLB ALPA KUMARA. 1. The activity's mechanism is the implementation of a "Training of Trainer" (ToT) program designed for teachers and student guardians.

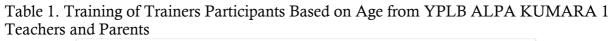
Dentists affiliated with the Faculty of Dentistry at Hang Tuah University Surabaya. The dentists will be allocated to deliver dental health education and provide online training on proper tooth brushing techniques to teachers and guardians of students through the Zoom platform. Dentists utilize PowerPoint presentations and instructive DVDs as tools for delivering education. The dissemination of dental health education to teachers and guardians of students involves the utilization of educational videos and the Dental Health Education Calendar (Ekagi). This calendar encompasses comprehensive information on dental and oral health, including the causes of cavities, swollen gums, and bleeding gums, as well as proper tooth brushing techniques for special needs children, optimal timing for brushing teeth, and dietary recommendations for maintaining good dental health.

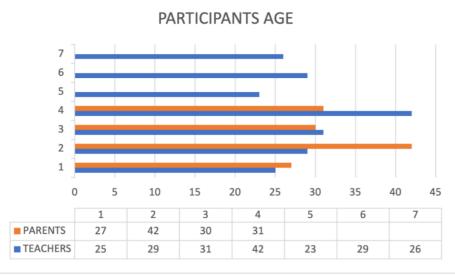
The program, known as "Training of Trainer" (ToT), involves dentists conducting training sessions for teachers and student guardians. Subsequently, instructors and student guardians provide training to the students. Assess the effectiveness of the program by administering a knowledge assessment on oral health both before and after the Training of Trainers (ToT) activity is implemented. Representatives of teachers and student guardians, who have participated in Training of Trainers (ToT) sessions with dentists, will impart health education and offer reporting standards to teachers and other student guardians. This will serve as a reference for disseminating knowledge to other children.

RESULTS AND DISCUSSION

Participants of training had a test before and after training of trainer programs, it used to know how participants understand about this program and to evaluate the effectiveness of "Training of Trainers" methods. Data from pre-test and post-test results were processed and statistically tested using Microsoft Excel 365 and WPS XLS.

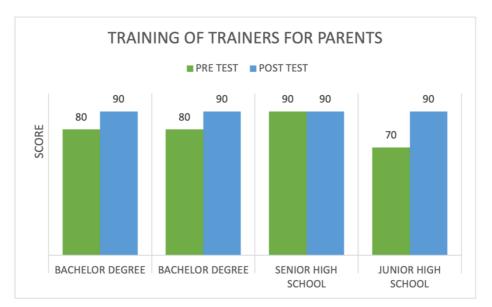
All participants were female, with an average age of 30.5 years. They were divided into two groups: teachers, with an average age of 29.2 years, and parents, with an average age of 32.5 years. They are of the same age and are regarded to belong to the same generation. This implies that we may offer knowledge using similar methods and approaches for both teachers and parents, as there is no significant age difference (Table 1).

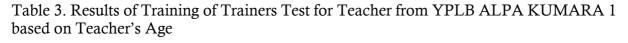


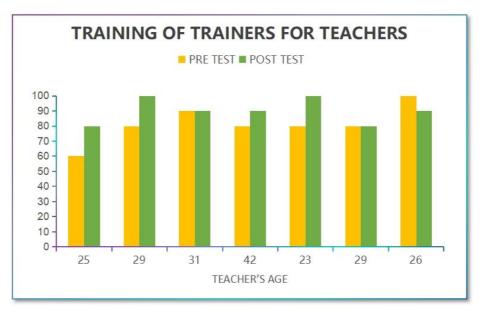


On the other hand, the dental and oral health test results in both groups of respondents exhibited elevated scores following the provision of consent. This results showed an effective communication between the dentist and the respondent. The educational status and age disparities among respondents do not hinder the provision of information, as seen by scores that show no significant difference between pre- and posttest scores. (Table 2 and 3).

Table 2. Results of Training of Trainers Test for Parents from YPLB ALPA KUMARA 1 Based on Their Educational Level







Following approval, educators will impart the acquired knowledge to the kids, whereas parents will establish the practice of brushing their teeth twice a day (in the morning and before bedtime) consecutively for a period of 21 days. Teaching and assisting students with special needs in toothbrushing processes can be challenging for both instructors and parents, since it necessitates the employment of specialized strategies. Providing a sticker as a reward on a calendar for brushing their teeth twice daily can serve as a motivating factor for children with special needs to consistently engage in this habit for a consecutive period of 21 days.

CONCLUSION

School health program is an effective way to deliver information and train teacher and parents in order to preserve and maintain oral health for special needs children. Teaching and encouraging toothbrushing practices in children with special needs present numerous difficulties. Therefore, it is crucial to employ suitable and pertinent strategies to educate instructors and parents of students with specific requirements about the significance of maintaining oral hygiene.

REFERENCE

- [1] Stankovska G, Angelkoska S, Agrncaroska P. Education of students with special educational needs and their inclusion in the community. 2015;0:306-312. https://files.eric.ed.gov/fulltext/ED568665.pdf
- [2] Davis P, Florian L. Searching the Literature on Teaching Strategies and Approaches for Pupils with Special Educational needs: Knowledge Production and Synthesis. Journal of Research in Special Educational Needs. 2004;4(3):142-147. doi:https://doi.org/10.1111/j.1471-3802.2004.00029.x
- [3] Allensworth D, Lawson E, Nicholson L, Wyche J. Institute of Medicine.; 1997. Accessed December 9, 2023. <u>https://www.ncbi.nlm.nih.gov/books/NBK232691/pdf/Bookshelf NBK232691.pd</u> <u>f</u>

- [4] Copeland EP, Crepeau-Hobson F. Health Promotion in Schools. ScienceDirect. Published January 1, 2004. Accessed December 9, 2023. https://www.sciencedirect.com/science/article/abs/pii/B0126574103007753
- [5] Whelton H., Crowley E., Nunn J., Murphy A., Kelleher V., Guiney H., Cronin M., Flannery E. Oral Health of Children Attending Special Needs Schools and Day Care Centres Item Type Report. 2009. [(accessed on 31 October 2020)]. Available online: <u>http://hdl.handle.net/10147/119005Findthisandsimilarworksathttp://www.lenus.ie/hse</u>
- [6] Anders P.L., Davis E.L. Oral health of patients with intellectual disabilities: A systematic review. Spec. Care Dent. 2010;30:110–117. doi: 10.1111/j.1754-4505.2010.00136.x.
- [7] Clements L., Read J. Disabled People and the Right to Life: The Protection and Violation of Disabled People's Most Basic Human Rights. Routledge; London, UK: 2008.
- [8] Breslau N., Staruch K.S., Mortimer E.A. Psychological Distress in Mothers of Disabled Children. Am. J. Dis. Child. 1982;136:682–686. doi: 10.1001/archpedi.1982.03970440026007.
- [9] Bertness J., Holt K.A. Oral Health Services for Children and Adolescents with Special Health Care Needs: A Resource Guide. National Maternal and Child Oral Health Resource Center; Washington, DC, USA: 2011.
- [10] Bonito A.J. Bonito Executive Summary: Dental Care Considerations for Vulnerable Populations. [(accessed on 19 May 2020)];2002 Available online: <u>https://pubmed.ncbi.nlm.nih.gov/12375747/</u>
- [11] Alamri H. Oral Care for Children with Special Healthcare Needs in Dentistry: A Literature Review. Journal of Clinical Medicine. 2022;11(19):5557. doi:https://doi.org/10.3390/jcm11195557