

# Educators' and caregivers' perspectives on an implemented oral health promotion event at special needs schools in eThekweni district: a qualitative study

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S Gumede<sup>1</sup>, S Singh<sup>2</sup>, M Radebe<sup>3</sup>

## ABSTRACT

### Introduction

The school setting is critical for supporting oral health self-care practices among learners with special needs. However, not much is known about how educators and caregivers engage with these initiatives.

### Aims and objectives

The study aimed to explore educators' and caregivers' perspectives on an implemented oral health promotion event conducted in special schools in the eThekweni district.

### Design

An exploratory qualitative research design.

### Methods

An oral health promotion event was conducted in 22 special schools; thereafter, purposive sampling was used to select educators and caregivers (7 participants) for a focus group discussion (FGD). One FGD was held per school (22 focus groups). Thematic analysis was used to analyse the data.

### Results

The emergent themes included updated oral health self-care practices, perceived improvement in knowledge and oral hygiene skills and challenges in translating perceived

improvements in knowledge into practice. Participants stated that the toothbrushing process and the three-step routine of toothbrushing were the most informative aspect of the event. However, lack of resources, financing and limited available time were cited as potential barriers to implementing such events.

### Conclusion

Participants believed that such initiatives were valuable but that they must be implemented consistently and should be sustainable.

## INTRODUCTION

Individuals with disabilities often struggle with oral hygiene care, leading to poor oral health, untreated dental caries, missing teeth, and periodontal disease.<sup>1</sup> Factors such as low physical abilities, systemic illness, intellectual capacity, living conditions, age, and impairment severity contribute to these conditions.<sup>2</sup> Most disabled individuals rely on caregivers for oral hygiene, often lacking knowledge, having negative attitudes and poor practices in relation to proper diet and oral hygiene.<sup>3</sup> As a result, this can lead to unhealthy eating habits and consumption of cariogenic snacks.<sup>4</sup> Despite their challenges, oral health care is often underserved, often due to inadequate dental care or poor public health measurements.<sup>5,6</sup>

Schools can play a crucial role in promoting oral health, reaching more than one billion scholars globally.<sup>7</sup> Poor oral health can lead to more than 50 million school hours lost and can negatively impact children's standard of living, school performance and life success.<sup>7-9</sup> The World Health Organization (WHO) aims to promote children's health through schools, and health-promoting schools integrate external conditions and internal actions.<sup>10</sup> These schools focus on health education, healthy school environments, health services, community projects, staff promotion programmes, nutrition, physical exercise, mental health and policy development.<sup>11</sup> School health policies are essential for implementing these initiatives, and South Africa prioritises school-based preventive programmes.<sup>8,12,13</sup> A South African study found that policy implementation of school oral health programmes in Tshwane faces challenges due to a lack of planning, resources, infrastructure, stakeholder support and consistent policy interpretation.<sup>14</sup>

In KwaZulu-Natal, schools face challenges such as sustainable funding, lack of resources and untrained

### Authors' information

1. Sinenhlanhla Gumede, *BDentTher, MMedSc, PGDip* in Public Health, School of Health Sciences, Discipline of Dentistry, University of KwaZulu-Natal  
ORCID: 0009-0008-6171-9867
2. Shenuka Singh, *PhD, PhD*, School of Health Sciences, Discipline of Dentistry, University of KwaZulu-Natal  
ORCID: 0000-0003-4842-602X
3. Mbuyiselwa Radebe, *PhD*, Faculty of Health Sciences, School of Dental Sciences, Durban University of Technology  
ORCID: 0000-0001-7201-1524

### Corresponding author

Name: S Gumede  
Email: Sinenhlanhla.gumede41@gmail.com

### Author's contribution

1. S Gumede – study conceptualisation, data analysis, manuscript preparation, writing and final editing (60%)
2. S Singh – data analysis, manuscript preparation and editing (20%)
3. M Radebe – data analysis, manuscript preparation and editing (20%)

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### Conflict of interest

The authors declare that there is no conflict of interest

staff.<sup>14</sup> Access to education is limited in densely populated areas, making it difficult to create a supportive and integrated approach, especially in developing countries.<sup>15,16</sup> Commercial partners and manufacturers play a crucial role in regulating the price and availability of affordable oral health promotion materials.<sup>17,18</sup> Educators are expected to teach basic dental and oral health education which could be due to a shortage of trained professionals.<sup>19,20</sup> However, challenges in promoting oral health may be too great without supportive policies, infrastructure, budgets and dedication from various government departments.<sup>21</sup> Partnerships with organisations and programmes, assistance from global, regional, national and local HPS unions and funding from multidisciplinary departments are essential.<sup>8,22</sup>

This paper forms part of a big larger study entitled “Oral health care for children attending schools for special needs in eThekweni district, KwaZulu-Natal, South Africa”. The main findings of this epidemiological study indicated that a high number of dental caries were recorded in primary and permanent dentition with a low number of restored teeth, which led to the need to design an information-sharing event to raise oral health awareness among learners, caregivers and educators in special needs schools in the eThekweni district.

## METHODS AND MATERIALS

### Study design

An exploratory research design, which is qualitative in nature, was used to conduct this study.

### Setting

This study was conducted in 22 out of 33 special schools in the eThekweni district, as they were the only schools that consented to participate.

### Study size

The study population included educators and caregivers within the 22 schools participating in the oral health education and promotion event. Only selected educators and caregivers were included in the review of the intervention, with each focus group consisting of 7 participants. This is outlined in the table below. The results are reported per FGD, not per individual participant (1 focus group per school, n=22).

Table 1: Composition of each focus group

Focus group	
Participants	Number of participants
Principal	1
Deputy principal	1
Caregiver/s	3
Grade coordinators: educators (Grade 8-12) or (Grade 1-7)	2
<b>Total</b>	<b>7</b>

### The sampling process for the study participants

A whole population approach was used to recruit educators, caregivers, and learners to implement the oral health promotion event. Purposive sampling was used to recruit educators and caregivers to obtain a focus group.

Participation was voluntary for all who were willing to participate and consent. Those who were unwilling to participate and had not given consent were excluded from the study.

### Ethical consideration

The study was approved by the University of KwaZulu-Natal's Biomedical Research Ethics Committee (BREC00003814/2022) and ethical procedures were followed to protect study participants. The KZN Department of Education granted gatekeeper permission.

### Rights and privacy of the study participants

The researcher ensured that participants' privacy and confidentiality were upheld by not disclosing their names. Informed consent was obtained from all study participants. Participants were fully informed about all study procedures and could withdraw at any time without any negative consequences. Codes were used for data anonymity. Data was only accessible to supervisors and the principal investigator.

### Data sources and measurements

The aforementioned oral health promotion event was based on previously collected data in the main study.<sup>23-25</sup>

A 30-minute once-off oral health promotion information-sharing event was conducted as a presentation in each school assembly in the presence of learners, educators and caregivers (n=22 presentations). This was done to create oral health awareness and to help improve schools' oral health service delivery. All participants were provided with dental kits consisting of toothbrushes and tubes of toothpaste. Demonstrations with visual aids in the form of show-tell-do (pictographic guided support and visual schedules) were then conducted to educate, promote and help improve individual oral health independence during oral hygiene maintenance in learners, educators and caregivers in special schools in KwaZulu-Natal.

Materials that were used in this process of training and demonstration included (1) mouth models, (2) samples of toothbrushes and toothpaste, and (3) oral health educational charts, which the researcher supplied. The intervention activities included:

(1) identification of the functions of healthy teeth; (2) demonstration of correct brushing techniques; (3) identification of nutritious meals; and (4) behaviours to improve general and oral health and the importance of the avoidance of dental and facial injuries. Posters about periodontal disease and dental caries were also shown to the participants. Participants were also given brochures about correct toothbrushing techniques and the effects of oral hygiene habits on oral health. Finally, the implementation of the oral health education and promotion event included information on the reduction of risk factors associated with oral health, the improvement of oral health knowledge and attitudes, as well as the development of skills and behaviours for good oral health. Learners were also made aware of their ability to take control of their health.

The oral health education and promotion event was then reviewed using Focused Group Discussions (FGDs) with the caregivers and educators. Data collection comprised a semi-structured focus group schedule with 22 groups of educators and caregivers who volunteered to participate in the study; one group discussion was conducted per

school. The FGDs included questions such as (i) What was the most interesting part about the oral health education event? (ii) Did you learn new information at the event? (iii) Did this event influence your current oral health knowledge? (iv) Do you think the event had an impact on the learners? (v) Was this oral health education event suitable for your learners' needs? (vi) What challenges do you anticipate encountering when you carry out this oral health education programme on your own? Do you think this educational event is sustainable? (vii) Would you be able to carry out this oral health education event with your learners independently? Is there anything else you would like to say about the event? and (viii) How can this oral health education event be improved in the future?

For the data collection procedure, the group discussions were conducted with the identified school groups of educators and caregivers based on their choice and availability in each group. Informed consent was obtained from all participants before the discussions commenced. The audio recordings were only done when permission was obtained from the groups and after all confidentiality issues were explained. The researcher engaged with participants by impartially presenting questions while paying close attention to participants' responses, which prompted discussion. Each FGD was approximately 30 minutes in duration and data collection occurred from August to September 2022. Field notes were made during the discussions.

**Data analysis**

Thematic analysis was used to examine qualitative data inductively. The transcripts were transcribed and reviewed for quality, and preliminary codes reflecting meaning and patterns were refined. The codes were organised into topics and reviewed, with the results presented as a narrative. The data analysis procedure consisted of four stages: identifying initial concepts, coding the data, sorting the data by theme and interpreting the data. The codes were first checked. The researcher and the two supervisors analysed the emergent themes that were further interrogated, and an agreement was reached. There were no differences of opinion in the analysis phase.

**RESULTS**

Three main themes emerged from the focus group discussion. These themes included the following: (1) Updated oral health self-care practices, (2) Perceived improvement in knowledge and oral hygiene (OH) skills, and (3) Challenges in translating perceived improvements in knowledge into practice. The first theme highlighted the current toothbrushing process and toothbrushing routine that should be taught to learners in special schools. The second theme highlighted the event's contributions to caregivers' and educators' oral health knowledge, the perceived impact on learners and the suitability of the oral health educational event for learners with special needs. Finally, the third theme highlighted educators' perceived challenges when implementing the oral health promotion programme in their schools.

Questions	Illustrative quotes	Codes	Subthemes	Themes
<p><b>Engagement questions</b></p> <p>1. What was the most interesting part about the event?</p> <p>2. What was new that you learned from the event?</p>	<p><i>"Seeing the proper toothbrushing process demonstrated to us and the students."</i></p> <p><i>"The 3-step routine of brushing teeth was new to me; I didn't know you had to floss. brush and then mouthwash."</i></p>	<ul style="list-style-type: none"> <li>• Toothbrushing process</li> <li>• Tooth brushing routine</li> </ul>	<ul style="list-style-type: none"> <li>• Toothbrushing regimen</li> <li>• 3-step routine</li> </ul>	Updated oral health self-care practices
<p><b>Exploratory questions</b></p> <p>3. Did this event influence your knowledge, attitudes and practices?</p> <p>4. Do you think the event had an impact on your students?</p> <p>5. Was this event suitable for your students' needs?</p>	<p><i>"This intervention added and improved my existing information."</i></p> <p>4. <i>"Yes, because I believe most of them were seeing such a demonstration for the first time since what we do with them is not this detailed and precise."</i></p> <p><i>"Yes, because students with special needs learn better by either seeing visuals in forms of demonstration or by feel and touch as it was done in the demonstrations."</i></p>	<ul style="list-style-type: none"> <li>• Added information</li> <li>• First-time demonstrations</li> <li>• Detailed and precise</li> <li>• Visuals with feel and touch</li> </ul>	<ul style="list-style-type: none"> <li>• The value of visual aids</li> <li>• Reflection on current OH education and skills transfer</li> </ul>	Perceived improvement in knowledge and OH skills
<p>8. Would you be able to carry out this event with your students?</p>	<p><i>"Yes, this will be possible to do in our life skills lesson and as part of daily health education lesson."</i></p>	<ul style="list-style-type: none"> <li>• Independent implementation</li> <li>• Life skills lesson</li> <li>• Health education lesson</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of resources</li> <li>• There is a need for ongoing educational support</li> </ul>	Challenges in translating perceived improvements in knowledge into practice
<p>6. What challenges do you anticipate encountering when you carry this out on your own?</p> <p>7. Do you think this event is sustainable?</p>	<p>6. <i>"It is not having all the resources that you had when demonstrating, mainly mouth models, toothpaste and toothbrushes."</i></p> <p>7. <i>"Yes, depending on funding and available time."</i></p>	<ul style="list-style-type: none"> <li>• Resources (toothbrushing kits)</li> <li>• Funding</li> <li>• Time</li> </ul>		
<p><b>Exit questions</b></p> <p>9. Is there anything else you would like to say about the event?</p> <p>10. How can this oral health event be improved in the future?</p>	<p><i>"Overall, the intervention is good for our schools but we hope this is not the last of its kind, as we hardly have such initiatives for our students."</i></p> <p><i>"The rollout should target all the special schools, not just a few, and it should be offered regularly."</i></p>	<ul style="list-style-type: none"> <li>• Sustainability</li> <li>• Continuity</li> </ul>		

**Theme 1: Updated oral health self-care practices**

Many participants and groups stated that the most interesting and informative part of the oral health education and promotion event was the toothbrushing demonstrations. This was done with all the necessary tools and materials, including mouth models, toothbrush samples, toothpaste, oral health education and the toothbrushing technique itself. This was done to promote learners' oral health, including providing oral health education and dietary advice. Most of them also stated that the three-step brushing routine (flossing, toothbrushing and mouthwash) was new information to them.

What was the most interesting part about the oral health event? *Seeing the proper tooth brushing process demonstrated to us and the learners.*

Was there anything new that you learned at the educational event? *The three-step routine of brushing teeth was new to me; I didn't know you had to floss, brush, then mouthwash.*

Would you be able to carry out this oral health education with your learners? *"Yes, it will be possible to do this with the learners in our life skills lesson and as part of daily health education lessons."*

What challenges do you anticipate encountering when you carry out this event on your own? *"It's not having all the resources that you had when demonstrating, mainly mouth models toothpaste and toothbrushes."*

Do you think this oral health education event is sustainable? *"Overall, the intervention is good for our schools, but we hope this is not the last of its kind, as we hardly have such initiatives for our students."*

How can this oral health education event be improved in the future? *"The rollout should target all the special schools, not just a few, and it should be offered regularly."*

**Theme 2: Perceived improvement in knowledge and OH skills**

The majority of participants in the FGD stated that the oral health education and promotion event helped to improve their existing oral health knowledge. This will also assist them in independently carrying out such events with the learners in schools. They also stated that they believed the oral health event had a positive impact and was suitable for learners with special needs. This is because they believed most learners saw such detailed and precise demonstrations for the first time. The focus on visual and tactile senses during the demonstrations was seen as being more appropriate for the learners.

Did this event influence your KAP? *"This intervention added to and improved my existing knowledge."*

Do you think the event had an impact on your learners? *"Yes, because I believe most of them were seeing such a demonstration for the first time since what we do with them is not this detailed and precise."*

Was this event suitable for your learners' needs? *"Yes, because learners with special needs learn better by either seeing visuals in the form of demonstrations or by feeling and touching, as was done in the demonstrations."*

**Theme 3: Challenges in translating perceived improvements in knowledge into practice**

Most participants stated that they will be able to carry out this oral health education and promotion event with their learners independently in schools, in their life skills lessons, or as part of health education. However, some participants highlighted potential challenges they foresee when implementing oral health education independently, namely lack of resources (toothpaste, toothbrushes, and mouth models). They also stated that the continuity of the implementation of oral health education would also depend on available time, as other curricula demand limited time for such programmes. Lastly, participants indicated the need for such programmes to be offered regularly.

**DISCUSSION**

The objectives for the oral health education and promotion event were to educate, raise oral healthcare awareness and enhance programmes for oral health promotion in special schools in KwaZulu-Natal. On the review of the event, the participants in FGD revealed that the provision of personalised oral health care materials and demonstrations with a visual aid in the form of tell-show-do is the best way people with special needs learn. May et al reported similar findings when they investigated using visual aids to improve dental care collaboration in 14 boys with autism and found a beneficial effect.<sup>26</sup> The American Academy of Pediatric Dentistry has recommended behaviour guidance approaches for children with autism, including tell-show-do and verbal positive reinforcement.<sup>26,27</sup> Providing personalized oral health care materials has been shown to lead to higher acceptance ratings from residents with disabilities compared to those who do not.<sup>27,28</sup>

The current study's oral health education and promotion event provided personalised oral health care materials and used demonstrations with visual aids. This is consistent with a previous study, which stated that oral health programmes for people with special needs should focus on educating patients and parents or caregivers about preventing and treating oral conditions, which should begin in the early stages.<sup>29</sup> Another similar study reported that its oral health programme also focused on individualised oral care practices, providing personal dental equipment and encouraging daily oral health routines.<sup>28</sup> This will promote and enhance oral health while reducing illness and operative intervention because extractions and surgical operations in particular often produce major problems for individuals with special needs.<sup>29</sup>

Based on the review of the oral health event on the FGD, most participants (caregivers and educators) expressed high levels of confidence in carrying out their oral health programmes. This is similar to what was stated by Faulks et al, who also found increased caregiver confidence in oral care after the introduction of an oral health programme across a range of centres for people with intellectual disabilities.<sup>30</sup> However, participants in the FGD mentioned that their implementation of oral health promotion in schools independently may be



hampered by issues such as a lack of resources, financing and available time. These findings are similar to what is reported by the Integrated School Health Policy, which highlights suboptimal provision of school health services as a result of problems such as unequal resource distribution and competition for limited resources.<sup>31</sup> Furthermore, research conducted in Tshwane district reported that low finance is one of the issues that affects oral health programmes in South Africa.<sup>32</sup> Therefore, it may be crucial to investigate how educators and caregivers carry out oral health promotion independently with their learners in the future.

This study adds to the existing knowledge from Naidoo and Singh's work in the province, which focuses on learners with autism spectrum disorder. However, this study concentrated on learners with different types of disabilities in identified special schools.<sup>33</sup> Poor oral health in individuals with special needs has been linked to caregivers' lack of education, limited access to resources and individuals' reluctance and/or difficulty with independent or supported oral hygiene maintenance.<sup>26</sup> In the current study, specific strategies were used to eliminate these barriers using an oral health promotion event. Moreover, the main contribution of this study is that it highlights the need for obtaining and maintaining oral health care of individuals with special needs and raises awareness of oral health care among educators and caregivers in special schools. This study's oral health promotion event is a prelude to an intervention that may be carried out and monitored over time. That can be used to assess behavioural changes in special schools, as it has the potential to improve oral health outcomes and possibly resolve oral health difficulties in this population.

## STRENGTHS AND LIMITATIONS

The current study provided a better understanding of how research participants engaged with the implemented oral health awareness programme in special schools in the eThekweni district. The exploratory qualitative study design, information-sharing event and thematic analysis provided descriptive data that helped establish a clear understanding of the educators' and caregivers' perspectives of the event. However, some limitations still exist. Due to the nature of these research instruments, which are focused group discussions, there is no generalisability beyond this population. Furthermore, in a group, peer pressure may influence the respondents' responses and dominant group members can impact the discussions. Pre- and post-intervention assessments were not conducted with learners, which could have demonstrated the event's effectiveness in the target population; nevertheless, the review was conducted with caregivers and educators, as the targeted population depends on them for support in day-to-day activities.

## CONCLUSION

Overall, the oral health promotion event was well received by the learners, educators and caregivers in the special schools. However, to ensure improvements in oral health outcomes for students with special needs in the future, such initiatives must be implemented and sustained over time.

## REFERENCES

1. Khan MRH, Ahmad M, Islam MM, Ahmed S, Prodhon MRA, Sharminakter. Oral health status of disabled children attending special schools of Dhaka city. *Update Dent Coll J*. 2019;9(2):32-5
2. Chen CY, Chen YW, Tsai TP, Shih WY. Oral health status of children with special health care needs receiving dental treatment under general anesthesia at the dental clinic of Taipei Veterans General Hospital in Taiwan. *J Chinese Med Assoc*. 2014;77(4):198-202
3. Oredugba FA, Akindayomi Y. Oral health status and treatment needs of children and young adults attending a day centre for individuals with special health care needs. *BMC Oral Health*. 2008;8(1):1-8
4. Naseem M. Oral health knowledge and attitude among caregivers of special needs patients at a Comprehensive Rehabilitation Centre: An Analytical Study. *Ann Stomatol (Roma)*. 2017;8(3):110
5. Wilson N, Lin Z, Villarosa A, Lewis P, Philip P, Sumar B, et al. Countering the poor oral health of people with intellectual and developmental disability: A scoping literature review. *BMC Public Health*. 2019;19(1):1-16
6. Akinwommi B, Adekoya-Sofowora C. Oral health characteristics of children and teenagers with special health care needs in Ile-Ife, Nigeria. *African J Oral Health*. 2019;8(2):13
7. Jackson SL, Vann WF, Kotch JB, Pahel BT, Lee JY. Impact of poor oral health on children's school attendance and performance. *Am J Public Health*. 2011;101(10):1900-6
8. Kwan SYL, Petersen PE, Pine CM, Borutta A. Health-promoting schools: an opportunity for oral health promotion. *Bull World Health Organ*. 2005;83(9):677-85
9. Bingaman J, Feingold RD, Barrett TM, Obey DR. Oral Health. Dental disease is a chronic problem among low-income populations. In: United States General Accounting office. 2000
10. World Health Organization. Making every school a health promoting school [Internet]. World Health Organization. 2021 [cited 2022 Jul 18]. Available from: <https://www.who.int/initiatives/making-every-school-a-health-promoting-school>
11. World Health Organization. Health promoting schools [Internet]. World Health Organization. 2022. Available from: [https://www.who.int/health-topics/health-promoting-schools#tab=tab\\_1](https://www.who.int/health-topics/health-promoting-schools#tab=tab_1)
12. National Department of Health. National Oral Health Strategy. Pretoria: NDoH. 2004
13. National Department of Health. National Guidelines For The Development of Health Promoting Schools/Sites in South Africa (Draft 4). 2000;1-42
14. Reddy M. Challenges Implementing Oral Health Promotion at Schools: Perspectives of Teachers and Health Managers. *Early Child Educ J* 47. 2018
15. World Health Organization. Shape healthy environments for children. 2003
16. WHO. WHO | Promoting Oral Health in Africa. Who. 2016. 126 p
17. World Health Organization. WHO Information Series on School Health. *Educ Dev Center, Inc*. 2003;1-65
18. Adyatnaka A, Sutop U, Carlsson P, Bratthall D, Pakhomov P. School-based Primary Preventive Programme for Children.pdf. 1998
19. Nyandindi U, Palin-Palokas T, Milén A, Robison V, Kombe N, Mwakasagule S. Participation, willingness and abilities of school-teachers in oral health education in Tanzania. *Community Dent Heal*. 1994;11(2):101-4
20. Jurgensen N, Petersen PE. Promoting oral health of children through schools – Results from a WHO global survey 2012. *Community Dent Health*. 2013;30(4):204-18
21. World Health Organization, United Nations Educational S and CO. Making every school a health-promoting school Country case studies. 2021
22. Young I, Leger LS, Blanchard C. Commentary Health-promoting schools : working in partnership to address global needs, a collaboration leading to the production of practical tools for practitioners. *Glob Health Promot*. 2013;20(4):122-7
23. Gumede S, Singh S, Radebe M. Educators' and caregivers' oral health knowledge, attitudes and practices in special education schools in the eThekweni District, KwaZulu-Natal. 2024;79(5):246-52
24. Gumede S, Singh S, Radebe M. Prevalence of dental caries among learners with disabilities attending special education schools in the eThekweni District, KwaZulu-Natal. *South African Dent J*. 2023;78(06):292-9
25. Gumede S, Singh S, Radebe M. Oral health care service delivery in schools for special needs in eThekweni District, KwaZulu-Natal. *South African Dent J* .... 2024;79(1)
26. Mah JWT, Tsang P. Visual schedule system in dental care for patients with autism: A pilot study. *J Clin Pediatr Dent*. 2016;40(5):393-9
27. Dhar V, Gosnell E, Jayaraman J, Law C, Majstorovic M, Marghalani AA, et al. Nonpharmacological Behavior Guidance for the Pediatric Dental Patient. *Pediatr Dent*. 2023;45(5):385-410
28. Rojo BL, Brown S, Barnes H, Allen J, Miles A. Home-based oral health program for adults with intellectual disabilities: An intervention study. *Disabil Health J*. 2024;17(1):101516
29. Davies R, Bedi R, Scully C. Oral health care for patients with special needs. *Br Med J*. 2000;321(7259):495-8
30. Faulks D, Hennequin M. Evaluation of a long-term oral health program by carers of children and adults with intellectual disabilities. *Spec Care Dent*. 2000;20(5):199-208
31. Department of Health and Basic Education. Integrated school health policy. 2012 p. 140-4
32. Molete M, Stewart A, Bosire E, Igumbor J. The policy implementation gap of school oral health programmes in Tshwane, South Africa: A qualitative case study. *BMC Health Serv Res*. 2020;20(1):1-11
33. Naidoo M, Singh S. The oral health status of children with autism spectrum disorder in KwaZulu-Natal, South Africa. *BMC Oral Health*. 2018;18(1):1-9