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Assessment of Oral Health among Intellectually Disabled Residing at Special Care Home in Raichur

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Abstract:-

- ***Introduction:***

Oral health contributes to holistic health, which should be a right rather than privilege. Intellectual disability means a significantly reduced ability to understand new or complex information. To make the health services according to the needs of intellectually disabled we must first know the oral hygiene practices they follow, their diet and oral problems from their perspective.

- ***Objective:***

To assess the knowledge, behavior, perception and practices of intellectually disabled towards oral health.

- ***Methodology:***

Convenience sampling was done. Sample was taken from special care home in Raichur. A closed ended, specially designed and modified questionnaire was used. Individuals residing in Nirasritara Parihara Kendra with recognized intellectual disability were included in the study. Individuals who are not able to participate were excluded. Total sample size was 100.

- ***Results:***

Mean age group was 42.7. Out of 100, 36% participants thought their oral condition was poor,68% never visited dentist,80% were never aware of dentist,71% were not interested in visiting dentist and 56% said they won't be ready for treatment.

- ***Conclusion:***

This study concluded that there is lack of awareness about dentists in intellectually disabled people residing in special care home in Raichur. The individuals with disabilities deserve the same opportunities for dental services as those who are healthy.

Keywords: *Oral Health, Self Assessment, Intellectually Disabled.*

I. INTRODUCTION

Intelligence is not a unitary characteristic but is assessed on the basis of a large number of different, more or less specific skills. Although the general tendency is for all these skills to develop to a similar level in each individual, there can be large discrepancies, especially in people who are intellectually disabled[1]. Intellectual disability means a significantly reduced ability to understand new or complex information and to learn and apply new skills (impaired intelligence). This results in a reduced ability to cope independently (impaired social functioning), and begins before adulthood, with a lasting effect on development.[2]

The disabled comprise of a substantial section of the community and it is estimated that there are about 500 million people with disabilities worldwide. The recent NSSO report suggests that the number of disabled persons in the country is estimated to be 18.49 million , accounting for about 1.8% of the total population , while intellectually disabled population amounted to 0.44 million individuals . According to census 2001, there are 21 million people with disabilities in India who constitute 2.13% of the total population. However the experts working in the field of developmental disabilities feel that prevalence of intellectual disability is much higher[3]. Oral health and oral health care contribute to holistic health, which should be a right rather than a privilege. That is why the individuals with disabilities deserve the same opportunities for dental services as those who are healthy[4,5].

Healthcare research argues that failing to ask disabled people for their views and to take them seriously, has meant that services and indeed policies have been built and delivered in ways that are not accessible or acceptable to people with learning disabilities[6]. To make the health services and policies according to the needs of intellectually disabled we must first know the oral hygiene practices they follow, their diet and oral problems from their perspective. While considering the issues possibly influencing oral hygiene practices for the population with intellectual disability it is important to consider the specific barriers to regular oral hygiene practices that might exist for people with intellectual disability and to consider facilitators to promoting regular oral hygiene practices that might exist for people in intellectual disability.

II. METHODOLOGY

Pre-tested, specially designed, closed ended pictorial questionnaire was used in this study. The questionnaire consists of total 24 questions. There were four different categories of questions based on knowledge, behaviour, perception and practices of intellectually disabled people. 24 questions were divided into knowledge(7) , behavior(4), perception (4) and practices(9). Pictures were added to every question for better understanding of questionnaire. A special care home for intellectually disabled people named NirasikaraParihara Kendra in Raichur District of Karnataka State was selected. Ethical approval was taken from ethical board of our institution. Individuals residing in the Nirasikara Parihara Kendra, Individuals with recognized intellectual disability and Individuals who are willing to participate and present on the day of conducting the study were included in the study. Individuals who are intellectually healthy, Individuals not willing to participate and who are not present on the day of conducting study were excluded from the study. Final sample size was 100. The questionnaire was prepared in two languages, Kannada and English.

Descriptive statistical analyses were carried out in the present study. Results on continuous measurements were presented on Mean ± SD and results on categorical measurement were presented in number (%).

The Statistical software IBM SPSS statistics 20.0 (IBM Corporation, Armonk, NY, USA) was used for the analyses of the data and Microsoft word and Excel were used to generate graphs, tables etc**.**

III. RESULTS

The mean age group was 42.70 ± 13.889. All the participants were males (100%). Majority of them had their natural teeth(73%) only few of them had dentures(27%).Among them few had the knowledge regarding the dental problems they were facing. 20% of participants complained about presence of pain in their teeth.29% said they have pain only while eating food and 28% of participants complained of loose teeth. **TABLE 1** Out of 100 only 3% participants have visited a dentist in less than 6 months, another 3% have visited a dentist before 1 year, and 68% never visited a dentist. Among those who visited the dentist, 7% just had their check-up done, 40% went for the dental treatment and rest 53% had no recollection of the reason for their visit to dentist. When asked about the reasons for not visiting the dentists, 10% said that they are afraid of dentists, 4% participants said that dental facilities are far away from them, 6% thought dental treatment is very expensive and 80% were not aware of dentists. The next question was whether they are willing to visit a dentist now, 29% said yes and71% said no. out of 29% who are willing to visit a dentist, were asked if they are ready to avail any treatments. 44% were ready for treatment and 56% were not keen for treatment. **TABLE 2.**

Participants were asked about their perception towards their oral health. 16% think their mouth is excellent in condition whereas 15% think they have excellent teeth. 7% and 10% think their mouth and teeth are in very bad condition respectively.15% feel embarrassed because of their teeth. 50% said it is difficult for them to go to dentists. **TABLE 3.** Participants were asked about their oral hygiene habits. Among 100 participants 69% brushed once, 25% brushed twice, 3% brushed trice daily and 3% brushed rarely.94% doesn' t require any assistance while brushing and rest 6% require guidance for brushing. When asked about what type of aids they use for their brushing, 42% use brush, 61% used paste, 8% used tooth powder for brushing and 55% still used their finger as a brushing aid. They also mentioned their method of brushing, for 18% it was vertical, 77% horizontal and 11% circular. The last visit to a dentist was also asked for which 3% said within 6 months, another 3% said within 1yr, 68% never visited a dentist and 26% answered don' t know. Majority of them ate 3 meals a day(86%) and drank 2ltrs of water(56%). **TABLE 4**

IV. DISCUSSION

This study was conducted to assess the knowledge, behaviour, perception and practices of intellectually disabled people towards oral health. It was evident that there is lack of awareness about dentists among intellectually disabled. According to Owen et al., The results for people with learning disabilities were compared to the results of the 2008 oral health postal survey of people in Sheffield. The main differences were that fewer people with learning disabilities reported wearing dentures. More people with learning disabilities reported not knowing whether they needed treatment[7]. The most commonly reported reason according to Owen et al., for difficulty in visiting a dentist were ' scared of dentists' , ' difficult to make the journey to the dentist' and ' no local dentist' . This was similar to our study where we found that 10% said that they are afraid of dentists, 4% participants said that dental facilities are far away from them, 6% thought dental treatment is very expensive and 80% were not aware of dentists.

Jain et al., highlighted that the oral health status of this mentally retarded population was poor and was influenced by aetiology of the disability, IQ level and parent' s level of education[8]. Traditionally, it has been found that people with a disability or other impairment may have worse oral health than those without such disabilities or impairments; not only can this cause physical problems, but it can potentially have a wider reaching impact as poor oral health can have a negative effect on self-esteem, quality of life and general health. Improving the levels of oral health in those with impairments or disabilities is, consequently, a major issue for the dental care services.

Children and adults with a learning disability suffer from the same common oral diseases and conditions as the rest of society; however, there is evidence that they experience poorer outcomes and the impact of oral disease on quality of life can be profound as it impairs eating, speaking socialising and comfort[9]. Even where needs are not significantly different across settings, an Australian survey demonstrated a number of important trends: higher odds of ' dental caries experience' were associated with age and having no oral hygiene assistance; higher odds of ' missing teeth' were associated with the type of disability, requiring a general anaesthetic for dental treatment, and both low and high carer-contact; finally, higher odds of having ' filled teeth' were associated with age, having no oral hygiene assistance and having high carer-contact. This underlines the importance of high quality daily care as well as regular dental care[10].Hicham et al. found that participants brushed ≥ 2/day independently (37.4%) followed by those that brushed 1/day without assistance (27.5%) and only a minority (6%) did not brush their teeth at all. 64.9% of the sample brushed independently without receiving assistance.[11]

In our study only 6% people required assistance while brushing. The rest were self-sufficient in this regard. Our study highlights that there is need for dental awareness.

V. CONCLUSION

Oral health is fundamental to wellbeing and this is specially the case for people with learning disabilities for whom dental treatment may prove challenging. Good oral health begins from birth with a healthy diet and good mouth hygiene. It may require the active support of caregivers in assisting with tooth brushing. Regular dental check-ups are required to monitor oral health and identify disease at an early stage when it maybe more easily treated. There should be access to dental services with specialised support for those with more profound learning disabilities of for whom dental care presents a challenge. It is important that dedicated oral health services are established to serve the needs of patients with disabilities or conditions which mean that they require 'special care'.

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Table 1 Knowledge Regarding their Oral Health

KNOWLEDGE	YES	NO	TOTAL
Natural teeth present	73(73%)	27(27%)	100%
Artificial teeth present	05 (5%)	95(95%)	100%
Presence of pain	20 (20%)	80(80%)	100%
Pain while eating	29(29%)	71(71%)	100%
Presence of loose teeth	28(28%)	72(71%)	100%

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Table 2 Behaviour of Intellectually Disabled Towards Oral Health

Reason for visiting dentist	**Check up 07(7%)**		**Treatment 40(40%)**	**Don' t know 53(53%)**	**Total 100%**
Reason for not visiting dentist	Fear 10(10%)	Faraway 04(4%)	Expensive 06(6%)	Not aware 80(80%)	100%
Willing to visit a dentist	Yes 29(29%)			NO 71(71%)	100%
Willing for dental treatment	Yes 44(44%)			NO 56(56%)	100%

Table 3 Perception Towards Oral Health

How healthy you think your mouth is?	**Excellent 16(16%)**	**Good 20(20%)**	**Medium 28(28%)**	**Poor 29(29%)**	**Very bad 7(7%)**	**Total 100%**
How healthy you think your teeth are?	Excellent 15(15%)	Good 21(21%)	Medium 31(31%)	Poor 23(23%)	Very bad 10(10%)	100%
Do you feel embarrassed of your teeth?	Yes 15(15%)		No 85(85%)			100%
Is it difficult to go to dentist?	Yes 50(50%)		No 50(50%)			100%

Table 4 Practices of Intellectually Disabled People

How many times do you brush?	**Once 69(69%)**	**Twice 25(25%)**	**Thrice 3(3%)**	**Rarely 3(3%)**	**Total 100%**
Do you need help while brushing?	Yes 06 (6%)		No 94(94%)		100%
Aids used for brushing?	Brush 42(42%)	Paste 61(61%)	Powder 08(8%)	Finger 55(55%)	100%
How do you brush your teeth?	Vertical 18(18%)	Horizontal 77(77%)		Circular 11(11%)	100%
Last visit to dentist?	6 months 3(3%)	1 year 3(3%)	Never visited 68(68%)	Don' t know 26(26%)	100%
Meals per day	2 meals 8(8%)	3 meals 86(86%)		4 meals 8(8%)	100%
Drinking water per day	1 litre 21(21%)	2 litre 56 (56%)		3 litre 23(23%)	100%