

Knowledge, Attitude and Practices About Oral Health In Street Children of Bhopal City, Central India: A Cross Sectional Questionnaire Study

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ABSTRACT

Background: Street children are usually termed as any child (either boy or girl), who habitates in street and earns their livelihood. A definite impact is borne on the general and dental health behaviour as well as knowledge of these children resulting from the lacuna of family support. These factors lead to development of diseases through adulthood with roots in earlier ages. Aim is to assess the knowledge, attitude and practices regarding dental status and oral health status of street children in Bhopal city, Central India.

Materials and Methods: The questionnaire included 9 variables assessing knowledge regarding oral health such as causes of dental caries and gingivitis, prevention of caries and gum disease, fluoride facts and questions about importance of oral health education. Attitude assessing variables were made of 6 assessors elaborating dental ailment occurrence and frequency and reasons for dental visit. Oral hygiene practices assessing variable include 6 assessors about frequency, material, in street cleaning.

Results: Half of the study population (39.3%) cleaned their teeth shows that brushing was not practiced in greater numbers in the street children. only 3.7% (58) of the children used tooth pastes. 36.4% of the participants felt that dental caries was caused by sugary food or sweets, followed by 33.9% thinking it was a certain worm. Gum bleeding cause was thought to be caused by a certain worm in 27.9% of the street children.

Conclusion: Study reveals that the street children of Bhopal has poor knowledge, attitude and oral hygiene practises about oral health and an oral health education programme is needed to improve their knowledge and oral health as well.

Keywords: Attitude, Knowledge, Oral health.

INTRODUCTION

Street children are usually termed as any child (either boy or girl), who habitates in street and earns their livelihood. They are not adequately supervised, protected or guided by adults. Literature evidence generally shows that the majority of children on streets are boys, though girls are included in the definition^{1, 2}. Several social

and institutional variables contribute to the existence of school children. Poverty, unemployment, migration of families from rural areas to urban in seeking better life, broken families, neglect, violence, disasters of both natural and manmade variants, depleting resources in rural sections, all result in their presence.³ A definite

Received: Jan. 13, 2021; Accepted: Mar. 6, 2021

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doi: <https://doi.org/10.53064/jrad.2021.12.2.15>

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impact is borne on the general and dental health behaviour as well as knowledge of these children resulting from the lacuna of family support. These factors lead to development of diseases through adulthood with roots in earlier ages.⁴

MATERIAL AND METHOD

To assess the knowledge, attitudes and oral hygiene practices of street children about oral health in street children of Bhopal Street children, of both genders and aged between 7 to 17 years were chosen. Permission to conduct the study was taken from Institutional Ethical Clearance, People's College of Dental Sciences, and Bhopal. Stratified, random sampling technique was employed for the sample selection because of difficulty in compiling the list of study population. Bhopal city was divided into 5 zones namely North, South, East, West and

Central. Areas under each zone were selected by lottery method. Children willing to participate and who were available on the day were included in the study.

The questionnaire included 9 variables assessing knowledge regarding oral health such as causes of dental caries and gingivitis, prevention of caries and gum disease, fluoride facts and questions about importance of oral health education. Attitude assessing variables were made of 6 assessors elaborating dental ailment occurrence and frequency and reasons for dental visit. Oral hygiene practices assessing variable include 6 assessors about frequency, material, in street cleaning.

RESULTS

The present study reported 930 males (59.6%) and 530 females (40.4%),

Table 1: Knowledge assessment among street children.

Knowledge variable	Options	N (%)
What causes dental caries	Not brushing teeth thoroughly with fluoride paste	122(7.4)
	A certain worm	558(33.9)
	Sugary food / sweets	599(36.4)
	Hereditary	129(7.8)
	I don't know	152(9.2)
	Ill health	0 (0)
	Others	0 (0)
What causes gum bleeding	Not brushing teeth thoroughly with fluoride paste	203(12.3)
	A certain worm	460(27.9)
	Sugary food / sweets	276(16.8)
	Hereditary	351(21.3)
	I don't know	115(7.0)
	Ill health	38(2.3)
	Others	115(7.0)
How can you prevent dental caries	By regular tooth brushing	258(15.7)
	By rising with water	351(21.3)
	Avoiding consumption of sugary food	422(25.5)
	By regular dental visits	222(13.5)
	I don't know	292(17.7)
	Others	15(.9)
How can you prevent gum bleeding	By regular tooth brushing	340(20.6)
	Avoiding consumption of sugar food\	224(13.6)
	By avoiding kissing	294(17.9)

	I don't know	254(15.4)
	Eating soft diet	337(20.5)
	Others (explain)	111(6.7)
Fluoride discolours teeth	Yes	22(1.3)
	No	23(1.4)
	I don't know	1515(92.0)
Fluoride prevents tooth decay	Yes	24(1.5)
	No	85(5.5)
	I don't know	1450(88.0)
Fluoride makes tooth stronger and healthier	Yes	17(1.0)
	No	22(1.3)
	I don't know	1521(94.7)
Have you ever received oral health education	Yes	134(8.1)
	No	1426(86.6)
If yes, then from whom	Not received	1426(86.6)
	Teacher	15(0.9)
	Parents	27(1.6)
	Older siblings	67(4.1)
	Friends	10(0.6)
	Others	15(0.9)

Table 2: Attitude related variables in study participants.

Attitude related variables	Options	N (%)
Have you suffered from dental problems	Yes	671(43.0)
	No	889(57.0)
Have you ever suffered with	No problems	772(49.5)
	Tooth pain	289(18.5)
	Bleeding gums	284(18.2)
	Bad breadth	211(13.5)
	Others	4(0.3)
How often do you visit the dentist	In every 2 years	0(0)
	Once a year	0(0)
	After every 6 months	0(0)
	When I have a toothache	6 (0.4)
	I don't go for check up	1554(99.6)
What is the reason for not visiting a dentist	Can't afford	668(42.8)
	No need when no pain	236(15.1)
	Dentist hurt	362(23.2)
	Afraid of dentist	77(4.9)
	I don't go for check up	217(13.9)
Reasons for dental visit	Don't visit	1553(99.6)
	Tooth extraction	1(0.1)
	Tooth filling	0(0)
	Cleaning	0(0)
	Check up	4(0.3)
	Medication for tooth pain	2(0.1)
	Any other reason	0(0)
Where do you seek dental treatment	Do not seek treatment	1541(98.8)

	Private clinic	0(0)
	Government clinic	19(1.2)
	Mission hospital	0(0)
	Any other	0(0)

Table 3: Oral hygiene practices of study population.

Oral health practice variables	Options	N (%)
Do you clean your teeth regularly	Yes	597 (38.3)
	No	963 (61.7)
Item used to clean teeth at home	Brush	551 (36)
	Neem stick	486 (31.2)
	Finger	485(31.1)
	Don't brush at all	28 (1.8)
Item used to clean teeth on streets	Brush	207(13.26)
	Neem stick	49(3.14)
	Finger	893(57.24)
	Don't brush at all	28(1.8)
What do you use to clean your teeth when at home	Toothpaste	58 (3.7)
	Toothpowder	251(16.1)
	Ashes	637(40.8)
	Salt	614(39.4)
	Charcoal	0(0)
What do you use to clean your teeth when on streets	Do not clean at all	1150(73.7)
	Toothpaste	65(4.2)
	Toothpowder	65(4.2)
	Ashes	174(11.2)
	Salt	6(0.4)
	Charcoal	100(6.4)
How often do you brush your teeth	Once daily	77 (4.9)
	Twice daily	0(0)
	Thrice daily	0(0)
	Once a week	859(55.7)
	Do not brush at all	614(39.4)

DISCUSSION

The present study reported about lesser than the half of the study population (39.3%) cleaned their teeth. The study of Srinivas R et al⁵ reported 66.7% of their study group brushed their teeth using a tooth brush while 33.3% used fingers to clean their teeth. This study shows that brushing was not practiced in greater numbers in the street children. This could be owed to the fact, they were all residing in streets, none were institutionalised, and no charity or NG organisations rendered their services to this sect. In the study of Kahabuka FK et al⁶, 92.4% of their children used toothpaste. It was

very discouraging to find that only 3.7% (58) of the children used tooth pastes which is contradictory to the study of Kahabuka et al⁶, wherein a good 92.4% of used dentrifice. This was due to the effect of health education protocols employed in their study. Our study population had no access to oral health promotional activities in any channels which was reflected in their oral health practices though they received oral health education through different dental colleges of Bhopal city but reinforcement and availability of the same was not there.

The study findings of Faizia Rahman⁷ showed favourable oral hygiene practices in their study

population. This was because their children attended evening tutorials managed by social activists. Those workers infused better oral hygiene measures and awareness among their subjects. Media exposure plays a significant role in oral health awareness. The population screened did not even have access to mass media and played no attention to advertising related to oral care products which showed in the results. 36.4% of the participants felt that dental caries was caused by sugary food or sweets, followed by 33.9% thinking it was a certain worm, hereditary in 7.8%, and not brushing with fluoride paste in 7.4% of the children. Gum bleeding cause was thought to be caused by a certain worm in 27.9% of the street children seconded by hereditary reasons, consumption of sugary food and not brushing teeth with fluoride. A quarter of children felt that avoiding consumption of sugary food could prevent dental caries, while only 20.6% felt regular tooth brushing could prevent gum bleeding. Unfortunately, 92% of them were unaware of fluoride discolouring teeth, and a greater no 88% were unaware of the role of fluoride in preventing tooth decay 94.7% had no idea regarding the presence of fluoride making teeth stronger and healthier A vast majority of the study population had not received any health education at all at 86.6%.

CONCLUSION

Study reveals that the street children of Bhopal has poor knowledge, attitude and oral hygiene practises about oral health and an oral health education programme is needed to improve their knowledge and oral health as well.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interest regarding this article

REFERENCES

1. Lusk MW. Street children of Rio de Janeiro. *Int Soc Work* 1992 35: 293-305.
2. Raffaelli M, Koller SH, Reppold CT et al. Gender differences in Brazilian street youth's family circumstances and experiences on the street. *Child Abuse Negl* 2000 24:1431-1441.
3. World Health Organization. Programme on Substance Abuse. July 1993.
4. https://en.wikipedia.org/wiki/Street_children/ accessed on 25 September 2020.
5. Srinivas R, Srinivas P, Viswanath V, Suresh S, Devaki T and Narayana V. Oral Health Status of Institutionalized Street Children Aged 5-15 Years In Guntur City, Andhra Pradesh, India. *International journal of scientific and technology research* 2012;1(11):19 – 22.
6. FK Kahabuka, HS Mbawalla. Oral health knowledge and practices among Dar es Salaam institutionalized Former Street children aged 7-16 years. *Int J Dent Hygiene* 2006; 4:174-178.
7. Faizia Rahman, PG Naveen Kumar, Atul Bhatnagar, Farhan Durrani, Sarita Parihar, Shivam Kesarwani. Oral Hygiene Practices and Dental Health Status of the Street Children of Varanasi, India: A Cross Sectional Descriptive Study. *Journal of Advanced Medical and Dental Sciences* 2018; 6(7):115-118.