

Dental Appearance- A Survey of Attitudes in Rural and Urban Children

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ABSTRACT

Objective: The aim of this study was to determine attitude of children towards their dental appearance and to compare same among rural and urban areas of Dakshina Kannada District, Karnataka, India.

Methods: A total population from 2 randomly selected schools (urban-522 and rural- 498) comprising of 1020 children between the age group of 8yrs – 14yrs were provided with questionnaire containing objective questions to be filled by them. Chi-square test was used to analyze the data. The level of significance was set at $P < 0.05$.

Results: Significant difference was noticed in the attitudes towards their dental appearance among rural and urban children of Dakshina Kannada district ($p = < 0.001$). Girls were more bothered about esthetics than boys both in rural and urban regions. A definite difference in the attitude was found between rural girls and boys and also between rural and urban boys.

Conclusion: Within the limitations of this study it can be concluded that attitudes of children towards their dental appearance differ in rural and urban areas in Dakshina Kannada district, Karnataka, India.

KEYWORDS: Dental appearance, Esthetics, Children

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INTRODUCTION

The appearance of face has an important social and psychological effect on human personality the features most commonly associated with facial appearance are eyes and mouth. The appearance of teeth is related to both cultural factors and individual preferences. Numerous parameters such as the colour, size and alignment of individual teeth in the dental arch are related to esthetics of teeth and individuals facial appearance. The oral region plays an important role when individual speaks or approaches another person. Poor oral hygiene and ugly teeth, for example noticed by others.

Current advertising and media in general emphasize the effect of a pleasant appearance because of its importance in everyday situations (1). Because of exposure of children to many such factors may influence their attitude towards appearance of their face and teeth. The purpose of this study was to determine attitude of children towards their dental appearance and to compare same among rural and urban areas of Dakshina Kannada District, Karnataka, India.

MATERIAL AND METHOD

A total population from 2 randomly selected schools (urban-522 and rural- 498) comprising of 1020 children between the age group of 8yrs – 14yrs

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were selected. In the study children were provided with a closed ended questionnaire containing objective questions to be filled by them in the local language. Before conducting the survey, permission was obtained from the head of the respective institutions. The basic data was collected using the modified questionnaire based on list of attitudinal statement from a survey by Vallittu *et al.* (1). Chi-square test was used to analyze the data. The level of significance was set at $P \leq 0.05$.

RESULTS

The number of participants in this

QUESTIONNAIRE

1. Do you think you look good when you smile showing your teeth?
Yes/ no
2. Did you feel shy to smile when you lost your front teeth?
Yes/no
3. Do you think your newly erupted teeth are big for your face than your milk teeth?
Yes/no
4. Do you mind yellow or black spot on your front teeth?
Yes /no
5. Is it essential to have regular teeth?
Yes/no
6. Does the teeth have great effect on a persons appearance?
Yes/no
7. Have you pleased with the appearance of your teeth?
Yes/no
8. When your front teeth discolours, or fractures or irregularly arranged or lost what u would do?
 - a. Go to a dentist as soon as it is noticed.
 - b. Go to dentist if it pains

Table 1: Comparison Between Rural And Urban Children

Questions	Choices	Rural	Urban	P value
Smile	Yes	369 74.1%	381 73.0%	0.688
	No	129 25.9%	141 27.0%	
Shy	Yes	347 69.7%	413 79.1%	0.001
	No	151 30.3%	109 20.9%	
Big teeth	Yes	393 78.9%	467 89.5%	<0.001
	No	105 21.1%	55 10.5%	
Black spot	Yes	274 55.0%	400 76.6%	<0.001
	No	224 45.0%	122 23.4%	
Regular teeth	Yes	421 84.5%	459 87.9%	0.115
	No	77 15.5%	63 12.1%	
Persons appearance	Yes	328 65.9%	430 82.4%	<0.001
	No	170 34.1%	92 17.6%	
Pleased with appearance	Yes	235 47.2%	72 13.8%	<0.001
	No	263 52.8%	450 86.2%	
Discoloured or ierrgular teeth	Go to dentist as soon as noticed	380 76.3%	455 87.2%	<0.001
	Go to dentist if it pains	118 23.7%	67 12.8%	

survey included 1020 school children, out of which 522 (51%) from urban school and 498 (49%) from rural school. Among urban school children 224 were girls and 298 boys. Among urban school children 213 were girls and 285 boys.

When comparing the rural and urban children regarding their attitude towards the dental appearance majority of the children felt they look good when they smile showing their teeth, no difference between urban and rural set of children. Urban children rela-

tively felt more shy to smile when they lost their front teeth ($p=0.001$) When asked about the teeth size compared to the size of the face, more of urban children felt that the teeth are larger for the small face compared to rural children and was statistically significant ($p < 0.001$). Regarding the presence of dark spots on teeth, significant number of urban children did not like the spot i.e. they were more conscious than rural children. $p < 0.001$. No statistical difference between urban and rural children about the awareness regarding importance to have regular teeth

$p=0.115$. More of urban children feel that teeth have great effect on persons appearances compared to rural children $p < 0.001$. Majority of urban children are not pleased with the appearance of their teeth. $p < 0.001$ Urban children go to dentist when they notice the changes in their front teeth, where as the rural children go only when it pains $p < 0.001$ (Table 1).

On comparing boys and girls except for the question regarding the shyness to smile when front tooth was lost, majority of girls said yes and they would

Table 2: Comparison between Boys and Girls

Questions	Choices	Boys	Girls	P value
smile	Yes	379 65.0%	371 84.9%	<0.001
	No	204 35.0%	66 15.1%	
Shy	Yes	430 73.8%	330 75.5%	0.524
	No	153 26.2%	107 24.5%	
Big teeth	Yes	462 79.2%	398 91.1%	<0.001
	No	121 20.8%	39 8.9%	
Black spot	Yes	354 60.7%	320 73.2%	<0.001
	No	229 39.3%	117 26.8%	
Regular teeth	Yes	466 79.9%	414 94.7%	<0.001
	No	117 20.1%	23 5.3%	
Persons appearance	Yes	365 62.6%	393 89.9%	<0.001
	No	218 37.4%	44 10.1%	
Pleased with appearance	Yes	233 40.0%	74 16.9%	<0.001
	No	350 60.0%	363 83.1%	
Discoloured or irrregular teeth	Go to dentist as soon as noticed	435 74.6%	400 91.5%	<0.001
	Go to dentist if it pains	148 25.4%	37 8.5%	

go to dentist as soon as they notice problem in their front teeth and the difference was statistically significant $p < 0.001$ (Table 2).

On comparing rural boys and girls, both boys and girls felt shy to smile on loosing the front teeth without any statistical difference $p = 0.78$. For all other questions more of girls said yes and difference was statistically significant $p < 0.001$ (Table 3).

When urban boys and girls were compared, more urban girls felt that they

look good with teeth shown smile. They also felt teeth have effect on persons appearance and would go to dentist as soon as the problem noticed in the teeth ($p < 0.001$). For other five questions boys and girls answered similarly without statistical difference (Table 4).

On comparing rural and urban boys, both the area boys felt shy to smile when tooth was lost and they felt smiling with teeth shown looks good without statistical difference. For other questions more of urban boys said yes

and they were not satisfied with the appearance of their teeth and would go to dentist as soon as the problem noticed and the difference was statistically significant ($p < 0.001$) (Table5).

When rural and urban girls were compared more urban girls felt shy to smile on loosing front teeth ($p = 0.002$). They also felt it is essential to regular teeth ($p < 0.001$) and teeth have influence on persons appearance ($p = 0.003$) compared to rural girls and was statistically significant. Other questions were answered similarly by rural and urban

Table 3: Comparison Of Rural Boys And Girls

Questions	Choices	Rural boys	Rural girls	P value
smile	Yes	189 66.3%	180 84.5%	<0.001
	No	96 33.7%	33 15.5%	
Shy	Yes	200 70.2%	147 69.0%	0.78
	No	85 29.8%	66 31.0%	
Big teeth	Yes	196 68.8%	197 92.5%	<0.001
	No	89 31.2%	16 7.5%	
Black spot	Yes	120 42.1%	154 72.3%	<0.001
	No	165 57.9%	59 27.7%	
Regular teeth	Yes	210 73.7%	211 99.1%	<0.001
	No	75 26.3%	2 0.9%	
Persons appearance	Yes	145 50.9%	183 85.9%	<0.001
	No	140 49.1%	30 14.1%	
Pleased with appearance	Yes	195 68.4%	40 18.8%	<0.001
	No	90 31.6%	173 81.2%	
Discoloured or ierrgular teeth	Go to dentist as soon as noticed	190 66.7%	190 89.2%	<0.001
	Go to dentist if it pains	95 33.3%	23 10.8%	

girls without any statistically significant difference (Table 6).

DISCUSSION

Physical appearance, including the dentition, is an important aspect of human activity, as one aims to be liked, respected or accepted by those around him/her. The uptake of dental esthetic treatment is influenced by the desire to look attractive, the self-perception of dental appearance, self-esteem, gender, age and peer group norms (2,3). Patients attitudes toward orthodontic treatment has been examined in several

studies (4,5). A study by Bos *et al.* (4) examined school children's attitude toward dental appearance. He concluded that although attractive teeth are highly valued in general children give priority to other issues in their lives. Studies examining Children's attitude toward their dental appearance are very few in India and there is a need to know the views of both rural and urban people because majority of population resides in rural areas in India.

The schools which formed the part of the survey were belonging to both

rural and urban area of Dakshina Kannada district. The age group 8-14 years was selected as they involve both preadolescents and adolescents. The urban school selected was located in the heart of the Mangalore city. Rural school was 30 km from the Mangalore city. The questionnaire was prepared with some basic questions which could test the attitude and knowledge of children towards dental appearance.

On asking about whether they look good with teeth shown smile majority of children say yes and no differ-

Table 4: Comparison of urban boys and girls

Questions	Choices	Rural girls	Urban girls	P value
Smile	Yes	190 63.8%	191 85.3%	<0.001
	No	108 36.2%	33 14.7%	
Shy	Yes	230 77.2%	183 81.7%	0.209
	No	68 22.8%	41 18.3%	
Big teeth	Yes	266 89.3%	201 89.7%	0.862
	No	32 10.7%	23 10.3%	
Black spot	Yes	234 78.5%	166 74.1%	0.238
	No	64 21.5%	58 25.9%	
Regular teeth	Yes	256 85.9%	203 90.6%	0.101
	No	42 14.1%	21 9.4%	
Persons appearance	Yes	220 73.8%	210 93.8%	<0.001
	No	78 26.2%	14 6.3%	
Pleased with appearance	Yes	38 12.8%	34 15.2%	0.426
	No	260 87.2%	190 84.8%	
Discoloured or irregular teeth	Go to dentist as soon as noticed	245 82.2%	210 93.8%	<0.001
	Go to dentist if it pains	53 17.8%	14 6.3%	

ence between urban and rural set of people. More urban children (79.1%) felt shy to smile when they lost their front teeth compared to rural children (69.7%). More urban children feel the new teeth are big for their face. Urban children don't like the yellow or black spot more than rural children, i.e. they are more conscious and is statistically significant. Both urban and rural children are aware that it is important to have regular teeth, no statistical difference between them. In a study by Emeria *et al* (6) in Tanzania most children (85%) recognized the importance

of well-aligned teeth for overall facial appearance. Urban children strongly feel that teeth influence the appearance of a person more than the rural children. Majority of Urban children were not satisfied with the appearance of their teeth and most of them would like to go to dentist as soon as they find any problem like color change, malalignment, fracture etc, whereas most of the rural children prefer going to dentist if only when tooth pains. There was statistical difference between the answers given by rural and urban children which reflect the comparative-

ly negative attitude of rural children toward dental appearance. This may be due lack of awareness programs in rural area both for children and their parents. In a study by Elham *et al.* (7) Rural and urban school children did not differ in the perception of their own dentition but more urban than rural students wanted to have their teeth straightened.

There was gender difference noticed about their attitude towards dental appearance and was statistically significant. Boys were comparatively less

Table 5: Comparison of rural and urban boys

Questions	Choices	Rural boys	Urban boys	P value
Smile	Yes	189 66.3%	190 63.8%	0.518
	No	96 33.7%	108 36.2%	
Shy	Yes	200 70.2%	230 77.2%	0.055
	No	85 29.8%	68 22.8%	
Big teeth	Yes	196 68.8%	266 89.3%	<0.001
	No	89 31.2%	32 10.7%	
Black spot	Yes	120 42.1%	234 78.5%	<0.001
	No	165 57.9%	64 21.5%	
Regular teeth	Yes	210 73.7%	256 85.9%	<0.001
	No	75 26.3%	42 14.1%	
Persons appearance	Yes	145 50.9%	220 73.8%	<0.001
	No	140 49.1%	78 26.2%	
Pleased with appearance	Yes	195 68.4%	38 12.8%	<0.001
	No	90 31.6%	260 87.2%	
Discoloured or irregular teeth	Go to dentist as soon as noticed	190 66.7%	245 82.2%	<0.001
	Go to dentist if it pains	95 33.3%	53 17.8%	

bothered regarding their teeth than girls and they were pleased with the appearance of teeth and less concerned about regular alignment of teeth and does not believe much that teeth have effect on persons appearance. Among the rural children also similar result obtained for boys and girls. A study by Elham *et al.* (7) concluded that there is gender difference in self perception of malocclusion and females are more willing to have orthodontic treatment. The difference in opinion about dental appearance between boys and girls may be due to inherent beauty conscious-

ness in girls.

When urban boys and girls were compared, their view was almost same about the dental appearance except that more of girls preferred smiling with teeth shown and felt that teeth do have effect on persons appearance. They also preferred to visit dentist as soon as the problem is noticed. The lack of gender variation for most of the questions may be due to awareness by media, school health education programs and parental attitude, which may be responsible for more awareness among boys. A

study conducted in Dutch school also showed no gender difference in attitude towards dental appearance (8).

The difference in rural boys and girls may be due to natural tendency of girls to think more about their facial esthetics and with lack of influence of parents. This is also reflected in attitudes of rural and urban boys; urban boys were more aware of importance of role of teeth in esthetics which may be due to parental influence and media influence.

Table 6: Comparison of rural and urban girls

Questions	Choices	Rural girls	Urban girls	P value
Smile	Yes	180 84.5%	191 85.3%	0.824
	No	33 15.5%	33 14.7%	
Shy	Yes	147 69.0%	183 81.7%	0.002
	No	66 31.0%	41 18.3%	
Big teeth	Yes	197 92.5%	201 89.7%	0.312
	No	16 7.5%	23 10.3%	
Black spot	Yes	154 72.3%	166 74.1%	0.670
	No	59 27.7%	58 25.9%	
Regular teeth	Yes	211 99.1%	203 90.6%	<0.001
	No	2 .9%	21 9.4%	
Persons appearance	Yes	183 85.9%	210 93.8%	0.003
	No	30 14.1%	14 6.3%	
Pleased with appearance	Yes	40 18.8%	34 15.2%	0.316
	No	173 81.2%	190 84.8%	
Discoloured or ierrgular teeth	Go to dentist as soon as noticed	190 89.2%	210 93.8%	0.088
	Go to dentist if it pains	23 10.8%	14 6.3%	

Involving parents in the survey would have been better to know what they think about their children dental appearance, also parents are the main decision makers to provide their children with good dental care as the parents opinion is important in Indian scenario. Recruiting of a larger sample size and open ended questionnaire would have made this survey more interesting.

CONCLUSION

Significant difference was noticed in the attitude of the children regarding their dental appearance among rural and urban region of Dakshina Kannada district. Role of both print and electronic media in creating this

awareness is tremendous in urban set up. Girls were more bothered about esthetics. A definite difference in the attitude was found between rural girls and boys, and rural and urban boys.

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