

## AWARENESS OF CHILDRENS' ORAL HEALTH AMONGST RURAL & URBAN SCHOOL TEACHERS OF VADODARA

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### ABSTRACT:

**Aim:** The aim of this study is to assess the awareness of the childrens' oral health amongst selected urban & rural school teachers of Vadodara district.

**Material and Methods:** 205 teachers from rural schools and 313 teachers from urban schools were selected for the study. Data was collected by means of 18 self administered close-ended questionnaires.

**Conclusion:** This study identified that school teachers are most important mediators in oral health communication. Rural school teachers are less aware of dental health programme.

**Key words:** awareness, school teachers, oral health, rural, urban.



### INTRODUCTION:

School children are considered to be an important target for health education with an underlying objective of inculcating lifestyle practices to last for a life time. Teachers are held responsible for incorporating some healthy practices and discipline among school children. Some teachers act as role models for their school children in their lifestyle for life time <sup>[1]</sup>.

Teaching a child is very difficult routinely. But the same teaching is done by the person who is employed for it, and then the child understands more efficiently. The school is an important environment for the development of healthy behaviour. Many school oral health programmes have been developed based on this, and were effective in improving the oral health awareness, behaviour and oral health status of children <sup>[2, 3]</sup>

The importance of schools in health promotion with teachers playing important roles since they exert considerable influence on pupils <sup>[4]</sup>. It has been shown that Indian children have lower level of oral health awareness and practice as compared to their western counterparts. This made us to think in terms of assessing level of oral health education at the school level <sup>[5]</sup>.

We reached to a conclusion that teacher's awareness towards oral health & dental care has a major impact to achieve good oral & general health in the school children.

As we found that there were no studies conducted in this pretext, we made an attempt to assess urban and rural teacher's awareness of children oral health.

## **MATERIALS AND METHODS:**

The present study was conducted by the Department of Pediatrics And Preventive Dentistry, K.M.Shah Dental College and Hospital, Vadodara. Consent for the participation of the school teachers was obtained from the head of the school. 205 teachers from rural schools and 313 teachers from urban schools were selected for the study. Data was collected by means of 18 self administrated close-ended questionnaires.

The questions were in local language Gujarati as well as in English . The questionnaire form includes 2 parts , part1 includes questions regarding the general information of teachers and part 2 includes questions regarding the oral awareness. Assessment was performed using a questionnaire designed to be filled by respective teachers regarding the awareness of the oral health.

## **RESULTS:**

Teachers were asked questions regarding their personal and school children oral health awareness.

Dental caries was highest observed dental problem; rural school children had more dental caries in comparison with urban school children as observed by the school teachers of respective place as observed in table and graph no.1. Increased caries in rural school children can be attributed to poor dental awareness and dental practices.

Majority of rural teachers were aware about importance of primary teeth in comparison with urban teachers as observed in table and graph no.2. It has an added significance in protecting development of the permanent dentition and preventing malocclusion.<sup>[6]</sup>

Both urban and rural school teachers suggested that primary teeth were essential for good-looks and chewing. Majority of urban teachers were also aware about importance of primary teeth for space management in permanent teeth as observed in table and graph no.3. This signifies that the amount of dental awareness in urban school teachers is more than that of the rural school teachers.

Urban and rural school teachers recommended strongly that nutrition is related to oral health. This highlights that both are aware about nutritional considerations as observed in table and graph no.4. There is very less amount of literature on educating school teachers regarding inter-relationship of nutrition and oral health. There is a need to do a widespread study on this topic.

Rural school teachers were more interested in participating for oral health care training program in school<sup>[1]</sup> as observed in table and graph no.5. This shows there is a need to increase the amount of dental awareness in rural areas. Dental programs in such areas would be more successful. There is very less amount of literature on success of school dental programs in urban and

rural school areas and there is a need to do a widespread study on this topic.

Urban and rural school teachers suggested that general health plays a role in oral health. But urban teachers strongly suggested general health and dental health are both interrelated as observed in table and graph no.6. This view was very similar to the study conducted by Paul Lang et al.<sup>[7]</sup>

This highlights that rural teachers are less aware about overall health education. There is a need to conduct regular general and dental health education programs in rural areas.

Urban and rural school teachers preferred Fluoridated tooth paste. Urban school teachers strongly recommended use of fluoridated tooth paste when compared to rural school teachers as observed in table and graph no.7. This knowledge was unknown to teachers in the H. D. Sgan-Cohen study <sup>[8]</sup>.

This signifies that preventive programs in urban schools were successful in making the school teachers to select the correct toothpaste for school children. There is a need to conduct efficient preventive programs in rural areas and highlight for use of fluoridated toothpaste.

When total awareness scores towards oral health by urban and rural school teachers was compared by t-test, statically the difference was significant. This implies that amount of oral health awareness was significantly less in rural

areas as observed in table and graph no.8.

To know different age groups of school teachers had any impact on their total awareness scores towards oral health, one way ANOVA or F test was employed. No significant difference was observed. As observed in table and graph no.9

## CONCLUSION:

This study identified that school teachers are most important mediators in oral health communication. Rural school teachers are less aware of dental health programme.

Some specific limitations should be noted:

- The data were collected from closed ended questionnaire with random samples of schools teachers.
- Schools that were selected in urban and rural areas were not equal in number.
- Further data sets and samples are required to refine our understanding of school teachers self-reported ratings of their and school children oral health-related quality of life.
- Additional study of school teachers from a wider and more representative sampling frame would assist generalization.
- Today's children are tomorrow's future; their motivation towards oral health is indirectly dependent on school teachers.

- It is recommended that both urban and rural schools should be embattled by the school based dental health programme (SBDP). Special consideration should be given for rural areas.

Following are some of the recommendations:

- Reinforcement of knowledge regarding oral health by incorporating in the form chapters on dental health is mandatory.
- Teachers training program can ensure continuity of reinforcement.
- Lecture technique and hands training in the form of brushing,

mouth wash drill and flossing would serve as motivational tool for children.

- Dental team should advocate restriction of cariogenic diet in school canteens.

**Acknowledgements:** My sincere thanks to my teachers and all school teachers for their uncomplaining co-operation given to me during this study.

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**TABLES:**

Table1: Distribution of study subjects according to location and common dental problem in children

Common dental problem in children	Rural	%	Urban	%	Total	%
Cavity	148	72.20	191	61.02	339	65.44
Gum problems	23	11.22	44	14.06	67	12.93
Trauma	14	6.83	19	6.07	33	6.37
Any Other	20	9.76	59	18.85	79	15.25
Total	205	100.00	313	100.00	518	100.00

Chi-square=9.9630      df=3      p=0.0189, S

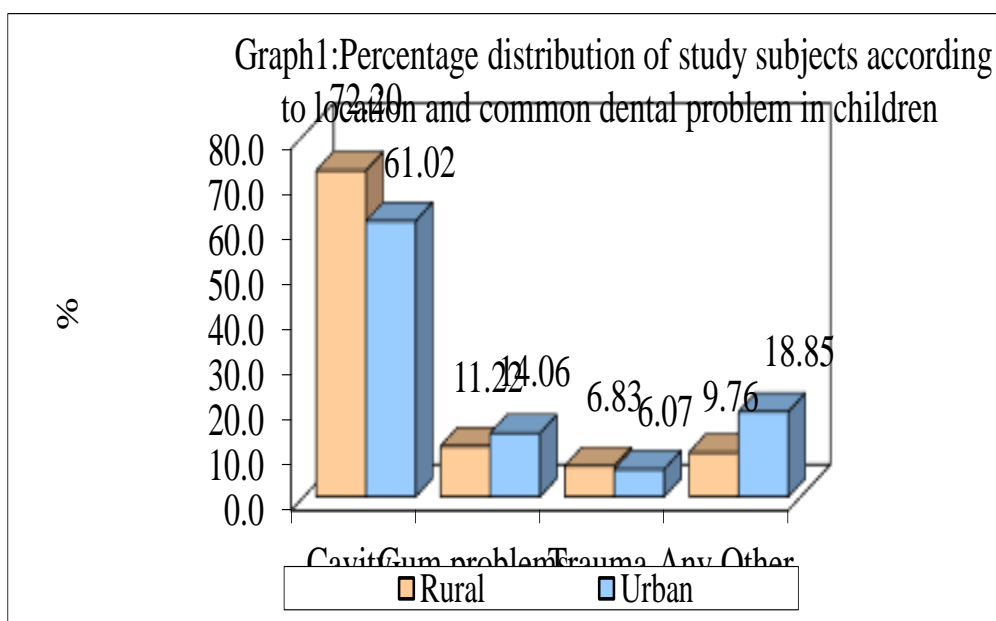


Table2: Distribution of study subjects according to location and primary or milk teeth are important

Primary or milk teeth are important	Rural	%	Urban	%	Total	%
Yes	195	95.12	254	81.15	449	86.68
No	10	4.88	59	18.85	69	13.32
Total	205	100.00	313	100.00	518	100.00

Chi-square=20.9430      df=1      p=0.0000, S

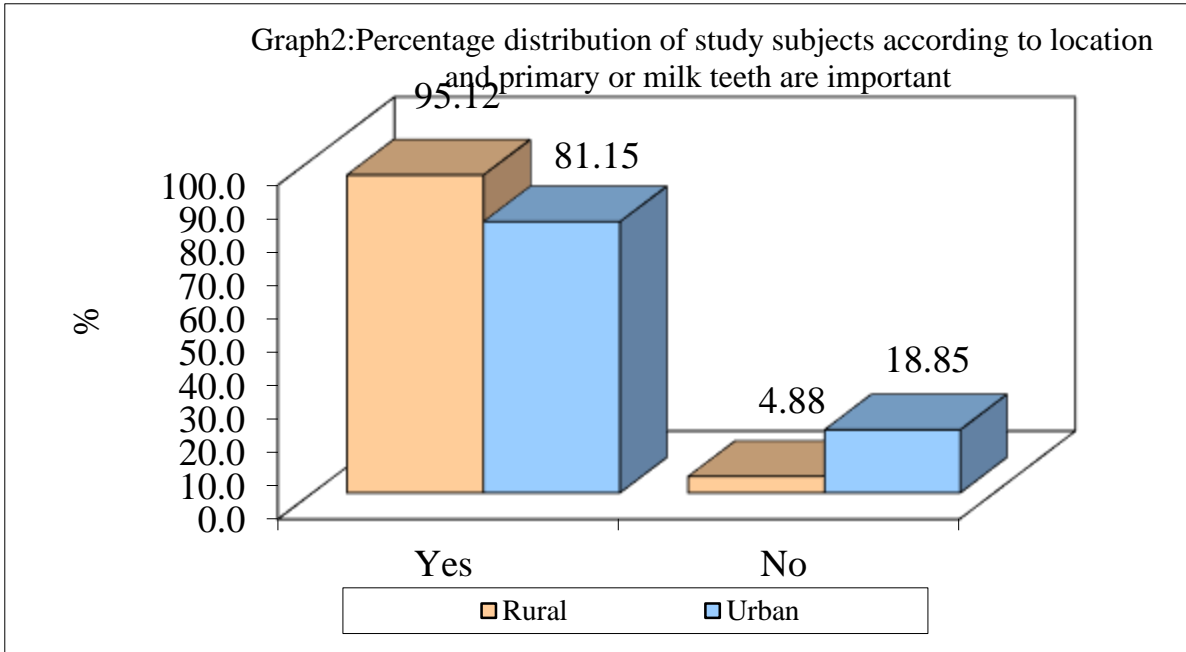


Table3: IF YES, what is their importance for Primary or milk teeth are important

Q. No	Rural	%	Urban	%	Total
Chewing	66	51.16	63	48.84	129
For good looks	8	44.44	10	55.56	18
Space for eruption of permanent teeth	107	38.21	173	61.79	280
Any other	14	63.64	8	36.36	22
Total	195	43.43	254	56.57	449

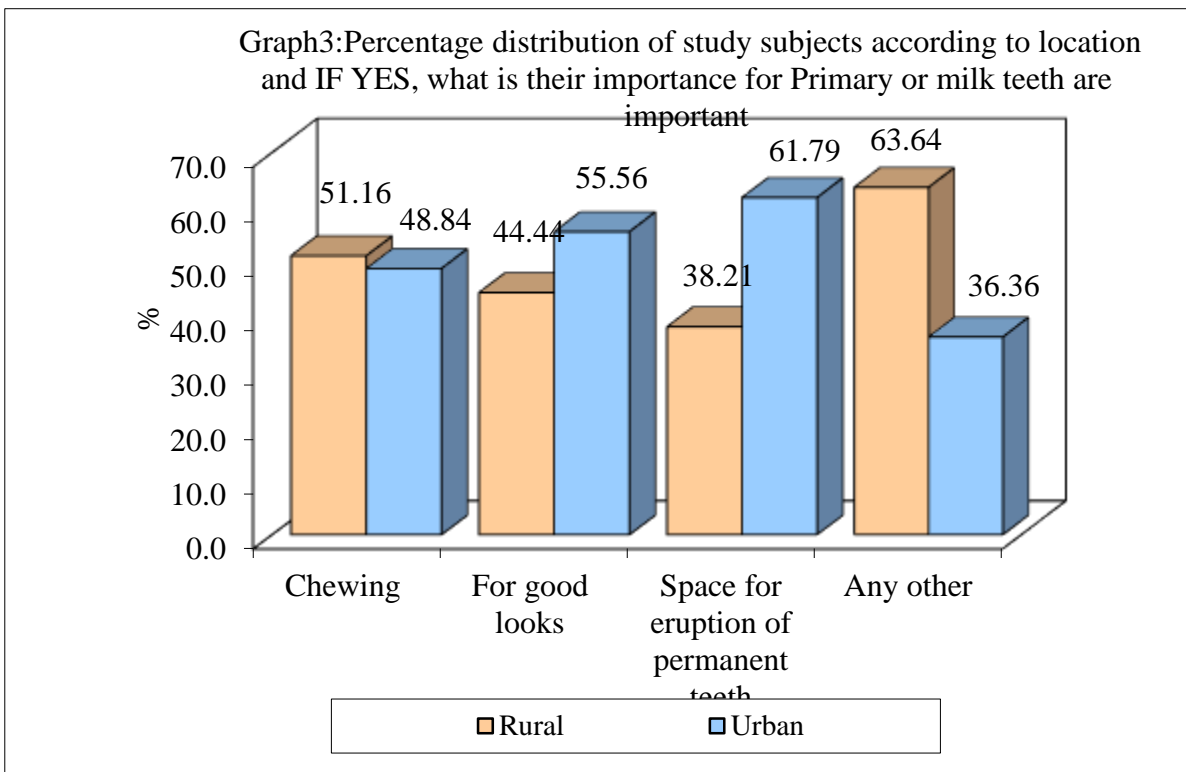


Table4: Distribution of study subjects according to location and nutrition related to oral health

Nutrition related to oral health	Rural	%	Urban	%	Total	%
Yes	200	97.56	304	97.12	504	97.30
No	5	2.44	9	2.88	14	2.70
Total	205	100.00	313	100.00	518	100.00

Chi-square=0.0901      df=1      p=0.7645, NS

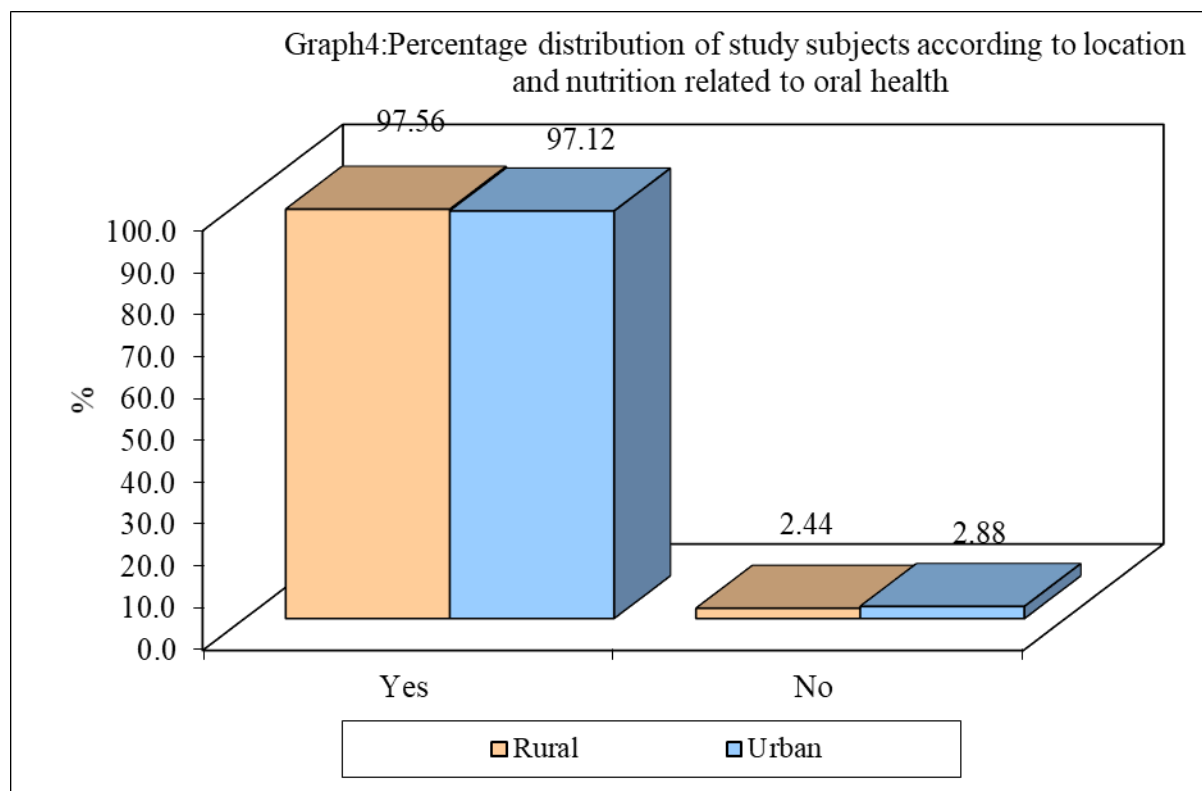


Table5: Distribution of study subjects according to location and prefer oral health care training in your school

Prefer oral health care training in your school	Rural	%	Urban	%	Total	%
Yes	196	95.61	288	92.01	484	93.44
No	9	4.39	25	7.99	34	6.56
Total	205	100.00	313	100.00	518	100.00

Chi-square=2.6131      df=1      p=0.1059, NS

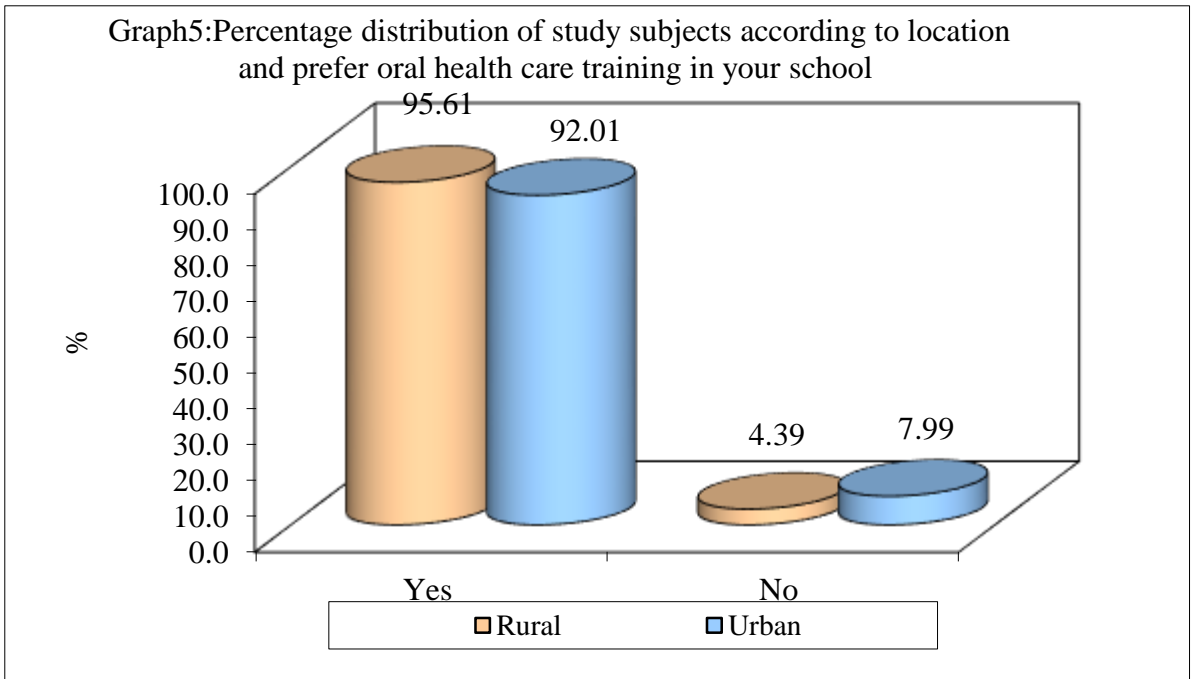


Table6: Distribution of study subjects according to location and oral health related to general health of the child

Oral health related to general health of the child	Rural	%	Urban	%	Total	%
Yes	118	57.56	280	89.46	398	76.83
No	87	42.44	33	10.54	120	23.17
Total	205	100.00	313	100.00	518	100.00

Chi-square=70.8001      df=1      p=0.0000, S

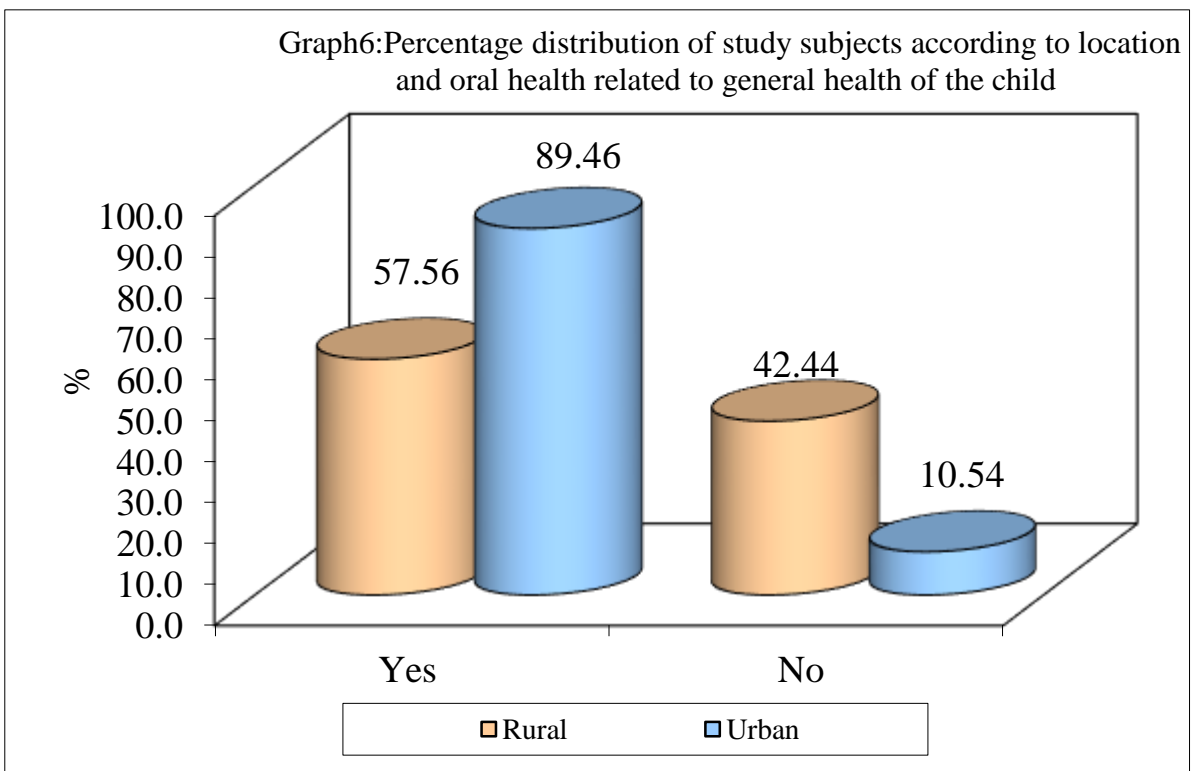




Table7: Distribution of study subjects according to location and fluoridated tooth paste is good for children

Fluoridated tooth paste is good for children	Rural	%	Urban	%	Total	%
Yes	118	57.56	256	81.79	374	72.20
No	87	42.44	57	18.21	144	27.80
Total	205	100.00	313	100.00	518	100.00

Chi-square=36.2271      df=1      p=0.0000, S

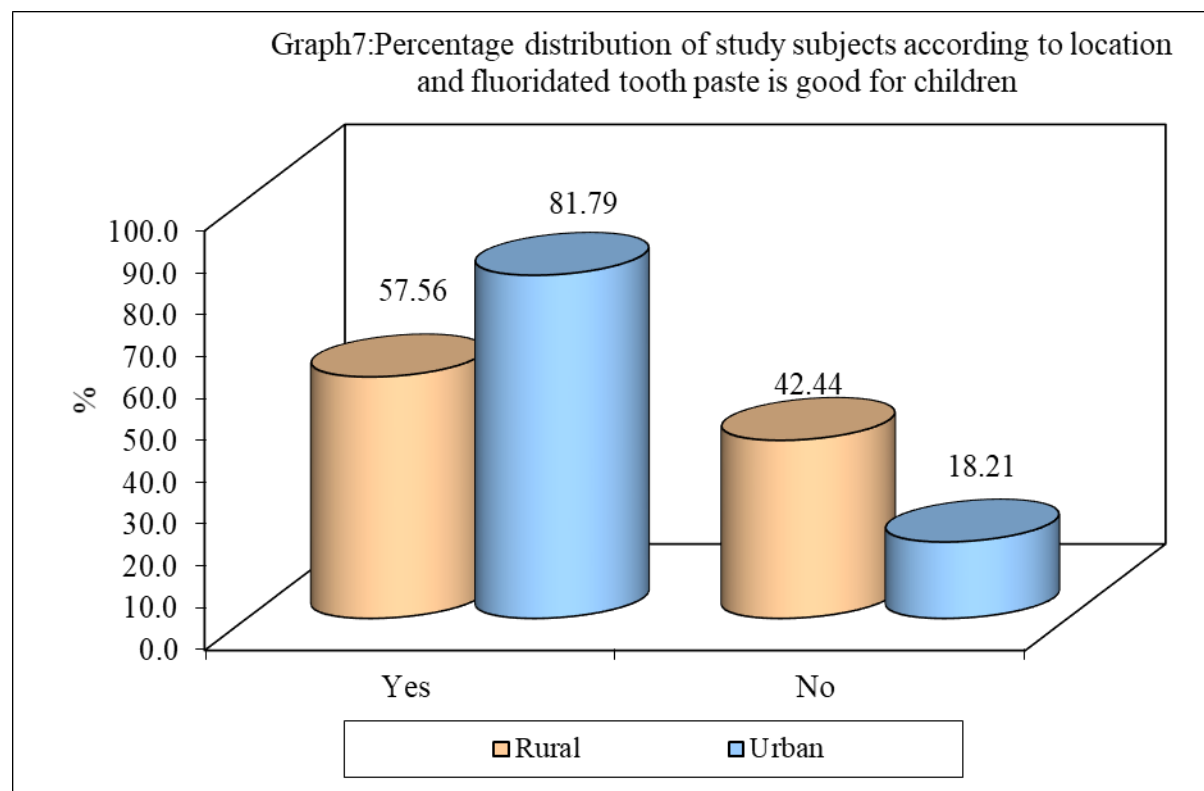


Table8: Comparison of urban and rural subjects with respect to their total awareness scores towards oral health by t-test

Location	n	Mean	SD	t-value	p-value
Urban	313	9.5463	1.8858	4.0410	0.0000*
Rural	205	8.9122	1.5088		

\*Significant at 5% level of significance (p<0.05)

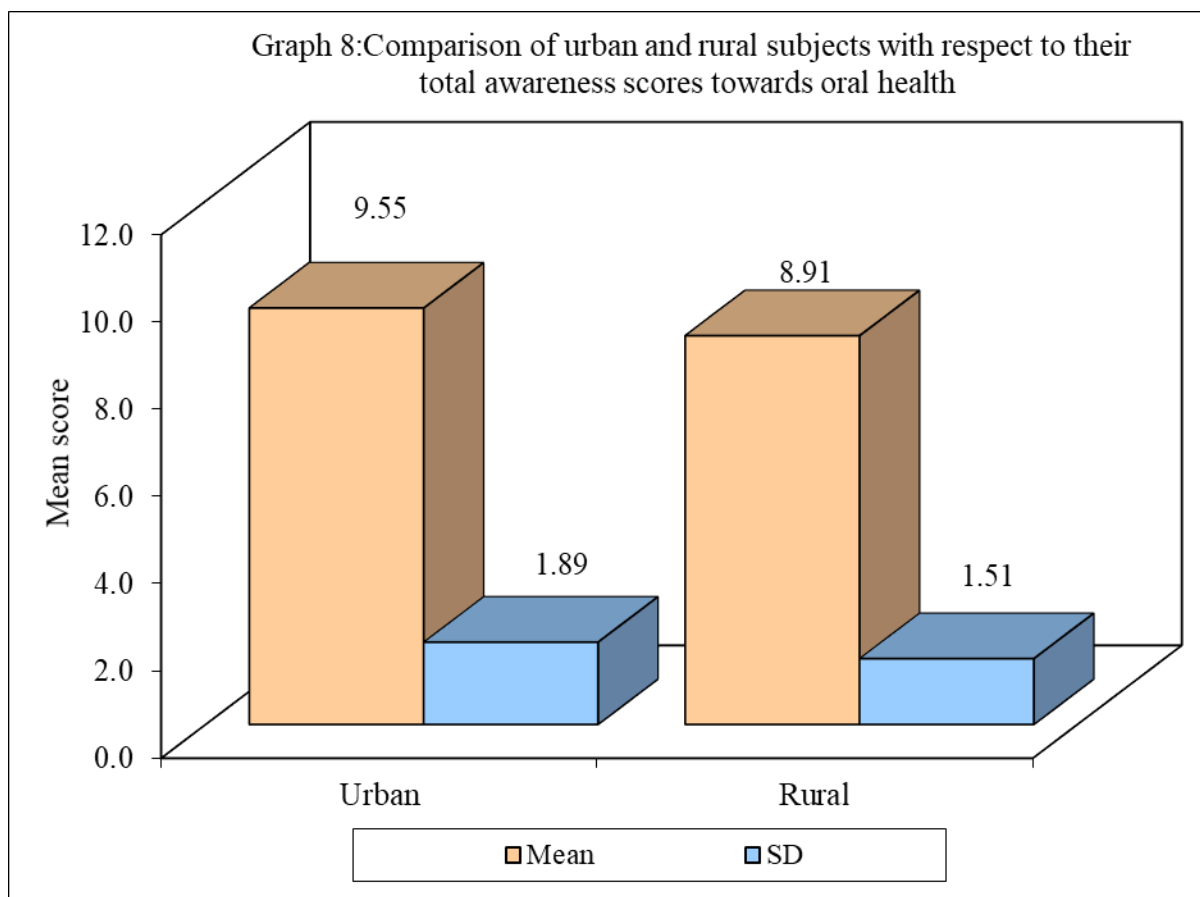


Table9: Comparison of different age groups of subjects with respect to their total awareness scores towards oral health (one way ANOVA or F test)

Age groups	Means	Std. Dev.
Below 30 years	9.3301	1.8374
32-40 years	9.2637	1.8408
43-50 years	9.3563	1.5773
>50 years	9.1250	1.5390
Total	9.2954	1.7722
F-test	0.2027	
p-value	0.8945	

