



Research Paper

## Assessment of Oral Health Status of School Going Adolescent Girls in Jodhpur City, Rajasthan

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### ABSTRACT:-

**Background:** - Few studies have investigated the oral health status of adolescent girls in past decades in Rajasthan. It is difficult to understand the pattern of oral health.

**Methods:** - A school-based survey was conducted in Jodhpur city, Rajasthan. Data was collected through interviews and clinical examination. DMFT was measured according to WHO criteria.

**Results and conclusion:** - High prevalence of dental caries and less number of filled teeth indicate lack of proper attention toward girl's oral health. Thirty four percent girls has habit of chewing areca nut which is considered as a major cause of oral sub mucous fibrosis, a pre cancerous condition, this can have longer-term consequences on public health.

**Keywords:** – Adolescent, Brushing, Caries, Gingivitis, Periodontitis

### I. INTRODUCTION

Oral health is an integral part of general health and is essential for quality of life. Children especially girls in developing countries lack of appropriate oral health care which leads to increase in health burden. A girl child is often deprived of basic necessities, lack of attention toward girl child is reflected by lack of proper oral hygiene and no treatment sought for dental problems (2). Oral health in female children encompasses a broad range of dental and oral disorders. In addition to dental caries and gingival disease, children suffer from malocclusion (poor bite) and birth defects such as cleft lip/palate (3).

Dental caries is the most prevalent dental affliction of adolescents. Despite credible scientific advances and the fact that caries is preventable, the disease continues to be a major public health problem (6). In developing countries changing lifestyle, dietary pattern and neglected oral care are markedly increasing the caries incident and gum diseases. Early tooth loss can result in failure to thrive, impaired speech development, absence from and inability to concentrate in school and reduced self-esteem. Prevalence of Pan masala, Gutka (a preparation of slaked lime and areca nut) and areca nut chewing habit is increasing among younger age group which further hampering the oral health (3).

Very few studies have been conducted in Jodhpur city to obtain valid estimate of oral health status of Adolescent girls. Hence this study was planned to assess the dental caries, oral hygiene, malocclusion and associated oral habits in the students of government girl's school located in the city.

### II. MATERIAL AND METHOD

We conducted dental health survey in two major Govt. girl's schools of Jodhpur city to obtain valid estimate of oral health status of female. Screenings of 544 students were carried out. Students examined were between age group of 13 to 18 years. Students were examined by dental surgeon and public health trainee, resources were provided by a Jodhpur School of Public Health, Jodhpur

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### III. RESULTS

Total 544 female students were examined.

**Table 1: Gingival assessment Green and Vermilion OHIS modified**

Table 1: 33.8 % were having good oral hygiene, 56.6% were having fair oral hygiene and 9.5% of girls were having poor oral hygiene

**Table 2: Caries assessment, DMFT Index**

Score	Grade	No. of students	Percentage
Score 1 [0.1 – 1.2]	Good	184	33.8
Score 2 [1.3 – 3.0]	Fair	308	56.6
Score 3 [3.1 – 6.0]	Poor	52	9.5
<b>Total</b>		<b>544</b>	<b>100</b>

  

	Score	Percentage
Decayed teeth	628	87.2
Missing teeth	60	4.4
Filled teeth	32	8.3
DMFT Mean	1.32	

Table2. The percentage of subjects having one or more decayed tooth were found to be 87.2%. Filled teeth (restored) were around 8.3% and missing teeth were around 4.4%

**Table 3: Prevalence of Malocclusion**

Malocclusion	No. Of Girls	Percentage
Crowding	112	20.5
Spacing	24	4.4
Maxillary Irregularities	64	11.6
Mandibular Irregularities	108	19.8
Normal Occlusion	236	42.9
<b>Total</b>	<b>544</b>	<b>100</b>

Table 3: Percentage of subjects suffering from crowding of teeth were 20.5%. Mandibular and Maxillary irregularities were 19.8% and 11.6% respectively. 4.4%.were having spacing.

**Table 4.1: Oral hygiene practice (Brushing method)**

Method	Score	Percentage
Tooth Brush	492	90.4
Finger	52	9.6
<b>Total</b>	<b>544</b>	<b>100</b>

Table 4.1 shows that 90.4% of girls use toothbrush while 9.6% girls were using finger for cleaning teeth

**Table 4.2: Oral hygiene practice (Frequency of brushing)**

Method	Score	Percentage
Irregular	33	6.8
Once Daily	402	73.2
Twice Daily	109	20
<b>Total</b>	<b>544</b>	<b>100</b>

Table 4.2 shows that only 20% of girl's brushed twice daily and 6.1% of girls were having irregular brushing habit.

**Table 5: Areca nut chewing**

Habit	No. of girls	Percentage
Yes	184	33.8
No	360	66.2
Total	544	100

Table 5 shows that significant number of 33.8% girls had habit of chewing areca nut.

#### IV. DISCUSSION

The present study was intended to provide information regarding oral health status of girls in Jodhpur city. This study was targeted to school going girls because of the ease of accessibility. As we enter the new millennium, the concept of oral health remained a distant dream, especially for adolescent girls who had always been neglected group of our society. The high prevalence of dental caries and less number of filled teeth indicate lack of proper attention toward girl's oral health. Brushing habits is found to be unsatisfactory, only 20% of girls brushes twice daily and many were using finger to brush their teeth. Prevalence of malocclusion is also high among this age group which has adverse physical and psychological impact. This survey shows significant number of girls i.e. around 34% had habit of chewing areca nut which is considered as a major cause of oral sub mucous fibrosis, a pre cancerous condition.

#### V. RECOMMENDATION

Oral Health is an integral component of general health. It has also become clear that causative and risk factors in oral diseases are often the same as those implicated in the major general diseases (WHO, 2003). The overall health, well being, education and development of children can be affected by oral health. Lack of attention toward girl child is reflected as lack of proper oral hygiene and no treatment sought for dental problems. Remembering that these girls will be future mothers, it is recommended to provide oral care to these girls for a healthy future.

#### REFERENCES

- [1]. World health organization, oral health survey, basic methods, 4th ed. Geneva: WHO; 99
- [2]. Damle S. G., J. Indian Soc Pedod Pre. Dent; Sept 2005
- [3]. Petersen PE. The World Oral Health Report 2003. Continuous Improvement Of Oral Health In The 21st Century and The Approach Of The World Health Organization Global Oral Health Programme Geneva, World Health Organization, 2003.
- [4]. Available From: [http://www.who.int/Oral\\_Health/Publications/Report03/En](http://www.who.int/Oral_Health/Publications/Report03/En) (Accessed April 2005).
- [5]. H.G.Raju, L.Nagesh, D.Deepa. Oral health promotion and intervention activities carried out in rural areas of davangere district. Bapuji dental college and general hospital, 2006-07
- [6]. JL Leake, F Goettler, B Stahl-Quinlan, H Stewart. Sample survey of the oral health of Toronto children aged 5, 7, and 13, Toronto Public Health Report, January 2001.
- [7]. Mahesh kumar P., Joseph T., Varma R.B., Jayanthi M. oral health status of 5 years and 12 years school going children in Chennai city-an epidemiological study. Indian journal of social and pedodontic and preventive dentistry, march 2005
- [8]. Children's policy agenda, November 2005, Children's Oral Health, New York (url <http://www.scaany.org>, assessed on april 1, 2009)
- [9]. The Health of Washington State, Washington State Department of Health, 2007 updated: 01/15/2008 ([www.doh.wa.gov/HWS/doc/GHS/GHS-ORAL2007.pdf](http://www.doh.wa.gov/HWS/doc/GHS/GHS-ORAL2007.pdf), assessed on April 1, 2009)