

Oral Health Awareness among the Patients Attending Nandigram Community Clinics of Jamalpur District

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Abstract:- This descriptive type of cross-sectional study was conducted to assess the oral health awareness among the patients in some selected community clinics with a sample size of 216. Oral diseases create a lot of health hazard and are common globally. Bangladesh is highly affected region in this regard, especially lack of awareness. A descriptive type of cross-sectional study was conducted with the main objective is to assess awareness of patients about oral health attending in some selected community clinics in Jamalpur district. Non randomized probable samplings were used to select 216 patient respondents. Semi-structured questionnaire was used for data collection through face-to-face interview and a checklist was also used for data collection. Data analysis was done using SPSS 21.0 software. In age group 60 years belongs 90.2% patients, 50.9% monthly family income is more than tk17000. Educational status of the respondents is 40.3% are illiterate and 25% are completed their primary education and 4.6% are Graduate. Do not take oral health care 48.3% respondents, 73.8% do not follow tooth brushing technique and 45.8% of respondents change their tooth brush more than 9 month interval. Observational findings reveals that 79.6% have calculus, 81.5% dental caries and 76.4 % have gum disease. Factor affecting oral health awareness 65.3% due to absence of doctor. Awareness level on oral health is poor (66.67%). So, to overcome in this situation, it needs to increase health promotion and health education program for now and then. CHCP and community health group can play a vital role for increase awareness in community level and by that after a certain period awareness level will be increase and primary health care could be ensure in each community.

Keywords:- Oral Health, Awareness, Patients, Community Clinics, Jamalpur District.

I. INTRODUCTION

➤ Background:

Oral Diseases are a major public health concern owing to their higher prevalence and their effects on the individual's

quality of life. The possible etiological factors leading to these oral diseases are genetic predispositions, developmental problems, poor oral hygiene and traumatic incidents. The management of these conditions is definitely dependant on the proper diagnosis and evaluation of their causative factors and treatment of their symptomatic defects. (Jeboda S. O., 2008).

Oral health is a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity. Risk factors for oral diseases include unhealthy diet, tobacco use, and harmful alcohol. An adult who has partial or full dentures should also maintain good oral hygiene. Bridges and dentures must be kept clean to prevent gum disease cavities.

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Researchers indicate that people with periodontal disease are almost twice as likely to suffer from coronary artery disease as those without periodontal disease. Bacteria form in the oral cavity can be aspirated into the lung to cause respiratory diseases such as pneumonia, especially in people with periodontal disease (American Academy of Periodontology, undated). Empirical evidence suggests that there is mild to moderate association between human periodontal disease and certain systemic disorders such as

diabetes mellitus, pneumonia, heart disease and pre-term birth (Locker D., 2000).

II. METHODS

The study was conducted of descriptive type of cross-sectional study and oral health awareness among the patients attending Nandi gram Community clinics of Jamalpur District, Bangladesh with 70 samples included with the inclusion criteria. Data were collected by face to face interviewed method.

➤ *Data Analysis*

Data was collected and verified daily for accuracy. Coding was done by giving a serial number for each answer. After that data was transferred to appropriate tables and analyzed and interpreted in appropriate statistical inferences.

All the data entered and analyzed by using Statistical packages for social science (SPSS) software version 16.0. Processed data was presented in the form of percentage, tables and chart. Further, it was analyzed significantly with the help of Mean, Standard Deviation, Chi-Square Test and P-value. Finally, the data is interpreted based on study findings.

III. RESULT AND DISCUSSION

A total of two hundred and sixteen (216) patients are studied from Nandigram Community clinics of Jamalpur District. Data are collected to find patients socio-demographic characteristics, knowledge about periodontal condition, oral cavity and gingival, attitude about oral health, practice of oral hygiene and factors affecting awareness of oral health. Tables and graphs are as follows:

Table 1 Distribution of Respondents in Different Community Clinics (n=216)

| Name of the Community Clinic | Frequency | Percent |
|------------------------------|------------|--------------|
| Digholkandi community clinic | 55 | 25.5 |
| Gonga para community clinic | 89 | 41.2 |
| Dagi community clinic | 72 | 33.3 |
| Total | 216 | 100.0 |

Table 1: Shows that 25.5% of the respondents are from Digholkandi Community Clinic (CC), 41.2% respondents are Gongapara CC & 33.3% respondents from Dagi C.

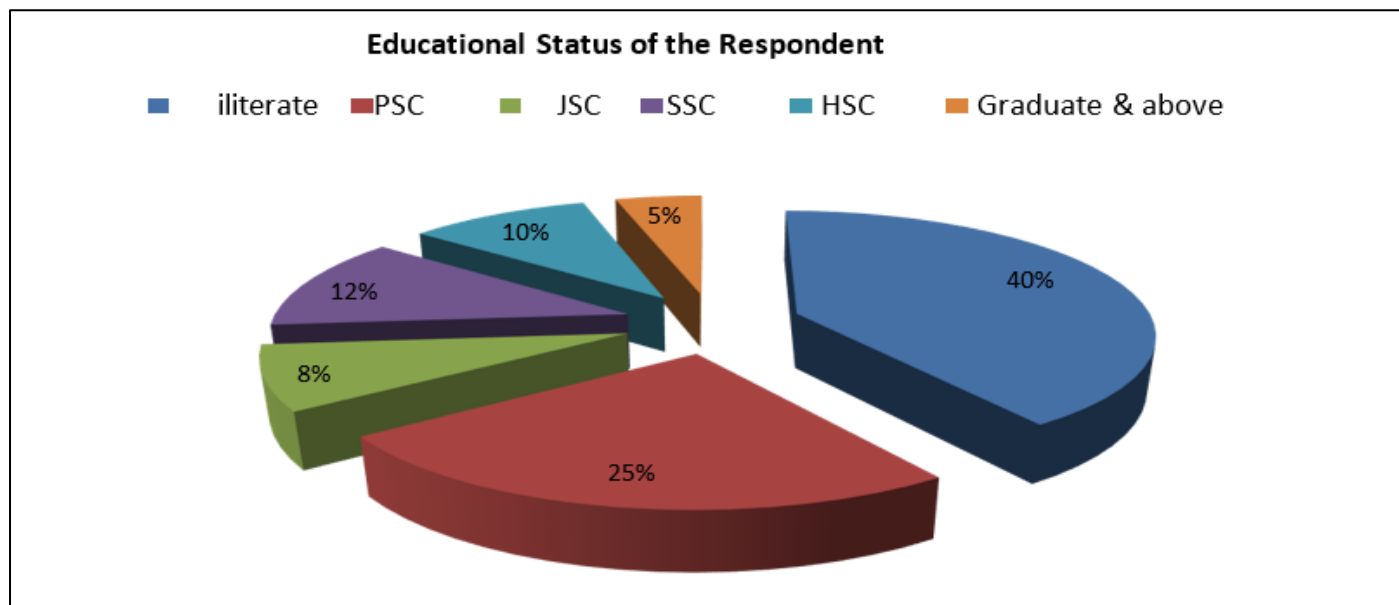


Fig 1 Distribution of respondents in Educational Status (n=216)

Figure 1: Shows that 40.3% of the respondents are Illiterate, 25% of the respondents have PSC level literacy, 8.3% have JSC level literacy, 12% have SSC level literacy, 9.7% have HSC level literacy and only 4.6% of the respondents are Graduate and above.

Table 2 Distribution of Respondents according to Occupational Status (n=216)

| Occupation of the respondent | Frequency | Percent |
|------------------------------|------------|--------------|
| Farmer | 26 | 12.0 |
| Employed in job | 14 | 6.5 |
| Business | 9 | 4.2 |
| Housewife | 148 | 68.5 |
| Student | 19 | 8.8 |
| Total | 216 | 100.0 |

Table 2: Shows 12% farmer, 6.5 % employed in job, 4.2% businessman, 68.5% housewife and 8.8% students among the total respondents.

Table 3 Statement of the Respondent’s Perception about oro -dental Hygiene (n=216)

| Perception about oro-dental hygiene | frequency | Percent |
|-------------------------------------|-----------|---------|
| Only regular tooth brushing | 197 | 91.1 |
| Only gurgling of mouth | 17 | 7.9 |
| Tooth pricking | 2 | 1 |
| Total | 216 | 100 |

Table 3: Shows the perception about oro-dental hygiene of the respondents. 91.2% believe only tooth cleaning is the way of oro-dental hygiene, 7.9% believe only gurgling is the way, 0.5% believe tooth picking is the way and 0.5% believe think others way for their oro-dental hygiene.

Table 4 Statement of the Respondent’s Knowledge about Gum Bleeding (n=216)

| Knowledge about gum bleeding | Frequency | Percent |
|------------------------------|-----------|---------|
| During tooth brushing | 76 | 35.2 |
| During chewing | 21 | 9.7 |
| Pressure by tongue | 9 | 4.2 |
| Did not notice | 110 | 50.9 |
| Total | 216 | 100 |

Table 4: shows that 35.2% respondents notice gum bleeding during tooth brushing, 9.7% notice gum bleeding during chewing, and 4.2% notice gum bleeding pressure by tongue and 50.9% didn’t notice about gum bleeding.

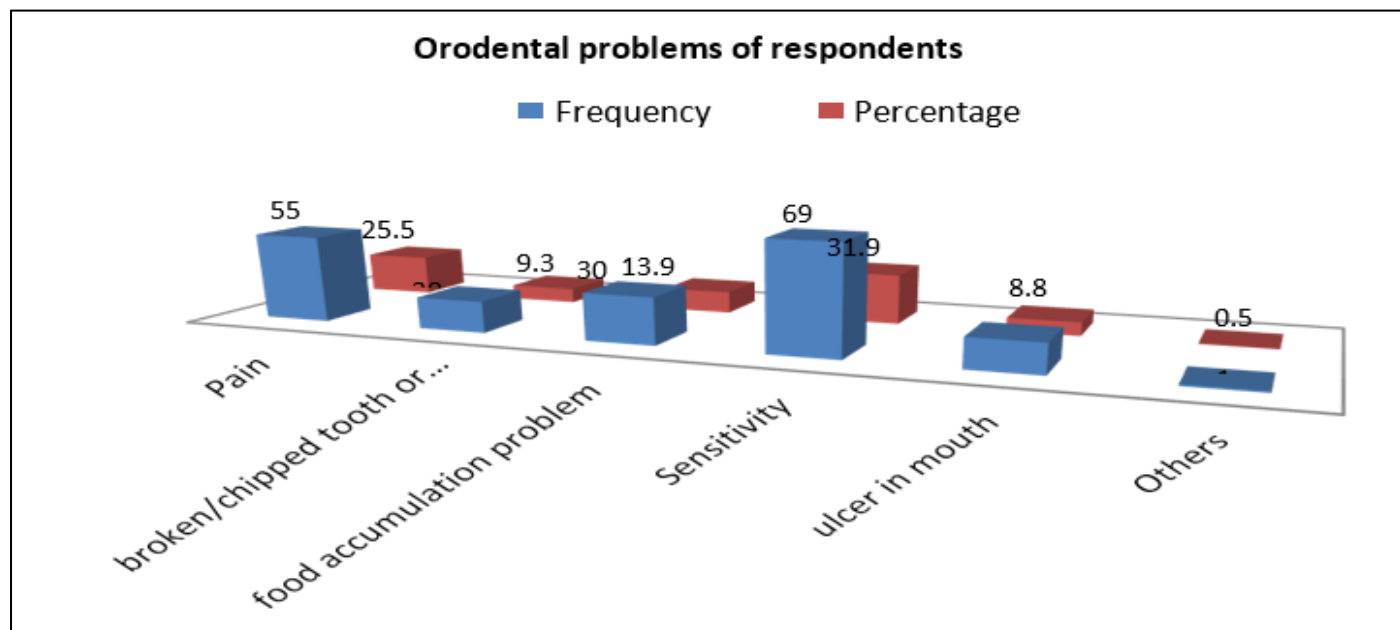


Fig 2 Statement of Respondents Knowledge about oro-dental Problems of Oralcavity (n=216)

Fig 3 shows that 28.5% respondents are suffering in dental pain, 10.3% suffering in broken/clipped teeth, 15.5% suffering from food accumulation problem, 35.6% suffering in sensitivity, 9.8% suffering in ulcer and 0.5% are suffering in others problem.

Table 5 Distribution of Respondents Statement for not using any Tooth Brushing Technique (n=103)

| Statement for not using any tooth brushing technique | Frequency | Percent |
|--|-----------|---------|
| Lack of knowledge | 76 | 73.8 |
| Unwillingness to practice | 6 | 5.8 |
| Lack of concentration | 21 | 20.4 |
| Total | 103 | 100 |

Table 5: Shows that 73.8% respondents have lack of knowledge for tooth brushing technique, 5.8 % have unwillingness and 20.4% have lack of concentration.

Table 6 Statement of the Respondents' Awareness of the Govt. Dental care Facility in Locality (n=216).

| Aware of Govt.dental care facility in locality | Frequency | Percent |
|--|------------|------------|
| Not aware | 202 | 93.5 |
| Aware | 14 | 6.5 |
| Total | 216 | 100 |

Table 6: Shows 93.5% of the respondents do not know that there has Govt. dental facility in locality but 6.5% aware about this.

Table 7 Statement of Respondents First Step takes to Solve their Dental Problems (n=216).

| First step by the respondents for dental health behavior | Frequency | Percent |
|--|------------|------------|
| Consulting dentist | 38 | 17.6 |
| Visiting pharmacy | 68 | 31.5 |
| Visiting community clinic | 89 | 41.2 |
| Self-medication | 21 | 9.7 |
| Total | 216 | 100 |

Table 7: Shows that 17.6% respondent's consults with the dentists while feeling any problem, 31.5% visiting pharmacy, 41.2% visiting community clinic, and 9.7% take their own medication.

Table 8 Distribution of Respondents Frequency of Cleaning Teeth (n=216)

| Frequency of cleaning teeth by respondents | Frequency | Percent |
|--|------------|------------|
| Once daily | 148 | 68.8 |
| Twice daily | 44 | 20.5 |
| More than 2 times | 20 | 9.3 |
| Others(2 times brush & 5 times meswake) | 4 | 1.4 |
| Total | 216 | 100 |

Table 8: Shows 68.8% of the respondents once daily clean their teeth, 20.5% are two times daily, 9.3% are more than 2 times and 1.4% are follow others for clean their teeth.

Table 9 Distribution of Respondents use of Instrument for Cleaning Teeth (n=216)

| Instruments use for cleaning teeth | Frequency | Percent |
|------------------------------------|------------|------------|
| Only tooth brush | 6 | 2.8 |
| Tooth brush with toothpaste | 87 | 40.3 |
| Tooth brush with powder | 53 | 24.5 |
| Neemsticks | 14 | 6.5 |
| Coal dust with finger | 22 | 10.2 |
| Tooth Powder with finger | 33 | 15.3 |
| Others (gul with finger) | 1 | 0.5 |
| Total | 216 | 100 |

Table 9: Shows 2.8% use only toothbrush, 40.3% use toothbrush and tooth paste, 25.5% use toothbrush with powder, 6.5% use Neemsticks, 10.2% use Coal dust with finger, 15.3% use tooth powder with finger and 0.5% use gul with finger for oro- dental clean.

Table 10 Statement of the Respondent's Practice of Brushing Method (n=146)

| Use of brushing method by respondents | Frequency | Percent |
|---------------------------------------|------------|------------|
| No | 94 | 64.4 |
| Yes | 52 | 35.6 |
| Total | 146 | 100 |

Table 10 Shows 64.4% use no brushing method and 35.6% follow brushing method while brushing.

Table 11 Distribution of the Respondents Time of Changing Tooth Brush (n=216)

| Time of changing tooth brush | Frequency | Percent |
|------------------------------|-----------|---------|
| ≤ 3months | | |
| 3 months – 5 months | 36 | 16.7 |
| 5 months - 9 months | 81 | 37.5 |
| > 9 months | 99 | 45.8 |

| | | |
|-------|-----|-------|
| Total | 216 | 100.0 |
|-------|-----|-------|

Table 11: shows that 45.8 % respondents change their tooth brush more than 9 months interval, 37.5% respondents change their tooth brush from 5 months to 9 months interval and only 16.7 % change tooth brush from 3 months to 5 months interval.

Table 12 Distribution of the Frequency of Visiting Dentist by Respondents (n=216)

| Frequency of visiting dentist by respondents | Frequency | Percent |
|--|------------|------------|
| Never | 132 | 61.1 |
| When feel problem | 79 | 36.6 |
| 6 months | 2 | 0.9 |
| 1 year & above | 3 | 1.4 |
| Total | 216 | 100 |

Table 12: Shows 61.1% of the respondents never visited dentist yet, 36.6% visited dentist when feel problem, 0.9 % visit a dentist after every 6 months interval, 1.4% visit after every 1 year.

Table 13 Observation of Oral Health Factors in Relation to Awareness of Respondents (n=216)

| Oral health factors | | Frequency | Percent | Total (n) |
|------------------------------|---------|-----------|---------|-----------|
| Broken down crown | Present | 119 | 55.1 | 216 |
| | Absent | 97 | 49.9 | |
| Broken down root | Present | 45 | 20.8 | 216 |
| | Absent | 171 | 79.2 | |
| Gingivitis | Present | 165 | 76.4 | 216 |
| | Absent | 51 | 23.6 | |
| Periodontitis | Present | 63 | 29.2 | 216 |
| | Absent | 153 | 70.8 | |
| Gingival recession | Present | 68 | 31.5 | 216 |
| | Absent | 148 | 68.5 | |
| Gingival hyperplasia | Present | | | 216 |
| | Absent | 216 | 100 | |
| Normal color of gum | Present | 42 | 19.4 | 216 |
| | Absent | 174 | 80.6 | |
| Blackish color of gum | Present | 6 | 2.8 | 216 |
| | Absent | 210 | 97.2 | |
| Red-swollen gum | Present | 167 | 77.3 | 216 |
| | Absent | 49 | 22.7 | |
| Angular chelitis | Present | 16 | 7.4 | 216 |
| | Absent | 200 | 92.6 | |
| Abscess | Present | 3 | 1.4 | 216 |
| | Absent | 213 | 98.6 | |

Table 13: shows that, in the total respondent, there is presence of gingivitis is 76.4% and absent 23.6% ,red-swollen gum 77.3% present and 22.7% absent , 55.1% Broken down crown present and 49.9% absent , gingival recession present 31.5% and absent 68.5%, Broken down root present 20.8% and 79.2% absent in the total respondent. In the same respondent, periodontitis present 29.2%, blackish color of gum 2.8%, angular chelitis 7.4%, abscess 1.4% and gingival hyperplasia is completely absent.

IV. CONCLUSION

Oral health problems are highly preventable and better oral hygiene has positive effects beyond just the teeth. However, a very high percentage of community people from the area of community clinics continue to suffer from poor oral hygiene and lack of dental health care. In spite of the long term a health consequences to untreated oral problem is likely to be ignored by the community people. Increasing awareness

of dental hygiene, coupled with other preventive and curative interventions is a comprehensive way to achieve better oral health. The level of awareness in oral health was poor in the patients of community clinics in Jamalpur district due to unavailability of dental facilities and lack of oral-health educational program for early detection and to give them information about dental health facility presence in each Upazila. community clinic is a one stop service for 6000 people for each area and each community clinic have one community group having 13 to 17 member in each group and one community health care provider who is concern for giving primary treatment for all. Different type of initiative should be taken in order to increase oral health awareness in a community by organizing seminar, workshop at least in a month or twice in a year and encouraging the people of the community to take part willingly in those activities which may help in developing oral health awareness among the people of the community.

REFERENCES

- [1]. Jeboda S. O. Implication of Low Dental Awareness in Nigeria. *Nig DentJ*. 2008; 16: 43-45.
- [2]. Agbelusi G. A., Sofola O. O., Jeboda S. O. Oral Health Knowledge, Attitude and Practices of Pregnant Women in the Lagos University Teaching Hospital. *Nig Qt J Hosp Med*. 1999; 9: 116-120
- [3]. Sofola O. O., Agbelusi G. A., Jeboda S. O. Oral Health Knowledge, Attitudes and Practices of Primary School Teacher in Lagos State. *Nig JMed*. 2002; 11: 73-76.
- [4]. Orenuga O. O., Sofola O. O. A Survey of the Knowledge, attitude and practice of antenatal mothers in Lagos, Nigeria about the primary teeth. *Afr J Med med Sci*. 2005; 34: 285-291.
- [5]. Sofola O. O., Uti O. G. Oral Pain Prevalence and Related Behaviors in Residents, Southwest Nigeria. *J Dent Res*. 2007; 86 (Spec Iss A). abstr No 2749. www.dentalresearch.org.
- [6]. Sofola O. O., Ayankogbe O. O. Nigerian family physicians knowledge of oral diseases and their attitudes to oral health care. *Nig Dent J*. 2009; 17(1): 12-15.
- [7]. Sofola O. O., Uti O. G., Emeka O. O. Access to oral health care for HIV patients in Nigeria: role of attending physicians. *African Journal of oral health*. 2004; 1(1) : 37-41
- [8]. Locker D., Deprivation and Oral Health: a review, *Community Dent Oral Epidemiol*, 28 (3):161 - 9, June 2000.