Euro Dental 2018: Oral health and dental status in rural areas of Sindh

Sarang Suresh, Priya Rani

Liaquat University of Medical and Health Sciences, Pakistan

The objective of this study was to find out the prevalence of dental caries and DMFT score, characterize the oral health status and related factors among the patients visiting Dental Clinic of Rural Health Center of Nasirabad and to Design a tool and strategy to collect oral health information in rural areas to provide baseline data for improving of Dental Health Program in rural areas of Pakistan.

Oral health is a highly personalized concept the awareness of which is very much affected by an individual's beliefs and socioeconomic status. The thought of people towards their own oral health, and attitudes of dentists who deliver dental care in government hospitals of rural areas, play an important role in shaping the oral health condition of the population.

Oral health, as defined by World Health Organization (WHO), is a state of being free from chronic Oro-facial ache, Oral Sores, Dental Caries and Tooth loss, periodontal diseases, or other factors that affect the health & function of the oral cavity.

The caries experience varies greatly among countries and even within small regions of countries. Oral health, affecting the whole body directly or indirectly, is one determinant factor for quality of life.

Oral diseases can destroy the hard tissues of the teeth and the supporting tissues around the teeth, thus impairing not only the functions of chewing, speech, and aesthetics, but also social interaction and psychological state. A close interrelationship has been established between oral and general health. Some microorganisms in the oral cavity may, over time, cause or exacerbate certain systemic diseases such as diabetes or coronary heart disease.

Oral health issues are more prevalent among rural areas of developing and developed countries. Nasirabad is constituency of District Qambar Shadadkot, Province Sindh, Pakistan. Population of this region according to census 2017 is 151,500. Inhabitants face a series of medical challenges including Tuberculosis, Hepatitis C Virus (HCV) infection along with high rates of Animal Bites cases particularly dog bites. This region contains only one Rural Health Center which is under management of Integrated Health Services. In countries such as Pakistan, healthcare in rural population is primarily focused on management of Tuberculosis, Polio, Maternal & Child Health, Trauma while little attention on dental care services or not at all in some areas. Although oral health is integral component of overall health and is essential to general wellbeing. Serious conditions such as Oral Cancer was shown to have associations with OH status such as poor oral hygiene, dentition status, and chronic periodontitis, tobacco consumption and other related behaviors.

Individuals with financial barriers to dental care are more likely to have poorer OH status and are less likely to visit a dentist. Investigators have consistently shown that social class and education are positively related to patients' assessments of overall health status: as social class increases more respondents rate health status as good or excellent. Scarrot reports that members of the lower class more often report that their teeth are in poor condition. Therefore, the same relationship is expected for this population: Although some public dental programs are available to certain underserved groups, coverage for services are often limited and barriers to dental care persist in talukas like Nasirabad. There is a dearth of data

concerning oral health and dental status of people in rural areas of Sindh, Pakistan. The overall goal of this study was to understand the OH of this population and to divert focus on Oral health along with other major health related conditions by health care providers of Pakistan.

Our objectives were:

1. Design a tool and strategy to collect oral health information in rural areas to provide baseline data for improving of Dental Health Program in rural areas of Pakistan.

2. To characterize the oral health status and related factors among the population of Nasirabad

Design:

This was descriptive cross-sectional study using convenience sampling conducted on patients visiting Dental Clinic of Rural Health Center (RHC) Nasirabad, District Qambar Shadadkot, Sindh, Pakistan. Patients were examined based on WHO 1997 guidelines. The study group comprised of 941 patients between patients 15 – 49 and 50+ Years. A single dentist did examination on all the subjects, gathering information on: decayed, missing or filled teeth, (DMFT).

Results: The results were arranged and statistically assessed. The results showed that there were 41% males and 59% females. The overall caries prevalence was 96% with 204 (22%) with low caries status, 250 (26%) with moderate caries status and 451 (48%) with high caries status. Mean DMFT score was 11.1424017 with Standard Deviation of 8.0937 with Significant Caries Index (SiC) based on DMFT Value & Number of Participants was 20.99363057.

Conclusion: It was determined that the frequency of dental caries and DMFT score is greater in the chosen study inhabitants so for prevention and control of dental caries dental health awareness programs and Preventive treatments accessibility should be given emphasis for rural population with low socio-economic status.

Key Words: Dental Caries Prevalence, Rural Areas, DMFT Index, Oral Health