CONCEPT NOTE

ORAL HEALTH EDUCATION

Introduction:

In 2012 the World Health Organization in Sudan aimed to assess the oral health status and risk factors for dental caries and periodontal disease among Sudanese adult residents aged ≥16 years in Khartoum State. The results proved Caries prevalence was high, with 87.7% of teeth examined having untreated decay. Periodontal disease increased in extent and severity with age. For 25.8% of adults, tooth wear was mild; 8.7% had moderate and 1% severe tooth wear. Multivariate analysis revealed that decay was less prevalent in older age groups but more prevalent in southern tribes and frequent problem based attenders; western tribes and people with dry mouths who presented with less than18 sound, untreated natural teeth. Older age groups were more likely to present with tooth wear; increasing age and gender were associated with having periodontal pocketing ≥4 mm. The prevalence of untreated caries and periodontal disease was high. There appeared to be some barriers to restorative dental care, with frequent use of dental extractions to treat caries and limited use of restorative dentistry. Implementation of population-based strategies tailored to the circumstances of Sudanese population is important to improve oral health status in Sudan.

In addition, with regards to children, Tooth decay remains one of the most common disease of childhood that is, 5 times as common as asthma. More Than half of children aged 5-9years have had at least one cavity or filling, 78% of 15year olds have experienced tooth decay. By 17 years, more than 7% have lost at least one permanent tooth to decay. Children and adolescents living in poverty suffer twice as much tooth decay as compared to their more affluent peers. It was noted that the major oral health problems in children include dental caries, periodontal disease, malocclusion and dental fluorosis. Studies Indicate that gingivitis of varying severity is nearly universal in children and adolescents though destructive periodontal disease are less common in young individuals compared to adults.88% Of This disease is moderate while 1% do not progress.

Oral disease can range from mild gingivitis to life-threatening oral cancer with many diseases in between. Oral disease research is even showing a relationship between oral disease with systemic conditions such as diabetes, cardiovascular disease, and pre-term, low birth weight infants. The most common forms of oral disease are gum disease (gingivitis or periodontitis) and dental caries (cavities). Other oral diseases include infections caused by bacteria, viruses and fungi, congenital defects such as cleft lip and palate, and also manifestations of systemic diseases. Unfortunately, even when there is good oral health care available, most people do not always consider oral disease an important problem. Many people are unaware that a “simple” problem in the mouth can lead to advanced, life-threatening infections that in rare instances can cause death.

Health promotion is a strategy for improving the health of a population by providing communities with tools to increase control over and improve their health and wellbeing. Health promotion moves beyond the traditional treatment of illness and injury by centering its efforts on the social, physical, economic and political factors that influence health. Health promotion has

the potential to be particularly effective in improving the oral health of a population, given the complex interplay of factors that underlie good oral health. Good oral health is achieved through a combination of optimal biological, social, behavioral and environmental factors. Oral health promotion is any planned effort to build public policies, create supportive environments, and strengthen community action. As well as, develop personal skills or reorient health services in ways that will influence these factors. Promoting healthy eating, teaching effective oral hygiene practices, facilitating early access to preventative dental services, promoting use of topical fluorides are all examples of effective oral health promotion.

Aim and Objectives:

1. To provide instruction and information for optimal oral health.
2. Identification of health determinants; to improve capacity to design and implement interventions that promote oral health.
3. Implementation of community and school-based demonstration projects for oral health promotion, with special reference to poor and disadvantaged population groups.
4. Building capacity in planning and evaluation of national programs for oral health promotion and evaluation of oral health promotion interventions in operation.
5. Development of methods and tools to analyze the processes and outcomes of oral health promotion interventions as part of national health programs.
6. Establishment of networks and alliances to strengthen national and international actions for oral health promotion.

Research objectives

The main objective of this concept note is to provide a proposal to assess and gather key data on all components of Oral Health in some selected schools and communities in Khartoum State, including;

1. Obtaining estimation of how much the dentition is affected by dental caries.
2. Full mouth recording of teeth by clinical examination.
3. Recording of decay due to presence of a carious cavity and confirming visual evidence of caries.
4. Recording missing teeth following extraction due to presence of caries.
5. Periodontal health assessment. Indicators include gingival bleeding, calculus, and periodontal pockets.
6. Examination of teeth for tooth wear.

Methods/Activities:

1. Study design
    - This includes a cross-sectional oral health survey to assess the functional and psychosocial impact of dental disease.
    - Recruitment of study participants among dental hospitals and health centers, distributed among the provinces in Khartoum State.
    - Calculation of sample size.
    - Written consent from all patients in hospitals and parents or legal guardians in schools.

2. Data collection
    - Socio-demographic variables include age, gender, ethnic group, and socioeconomic status (occupation, total monthly income, education).
    - Behavioral variables include frequency and reason for dental visits, if applicable number of teeth removed.
    - Data collection using a questionnaire and clinical examinations.

3. Documentation
    - Analyzing data obtained from the laboratories and questionnaires analytically and statistically.
    - All data should be recorded and entered into a spreadsheet for analysis.
    - Random checking should be undertaken to verify the accuracy of data entry.

4. Conducting a full/half day workshop to disseminate the findings of the survey.