

EFFECT OF VARIOUS PREVENTIVE MODALITIES ON ORAL HYGIENE AND PERIODONTAL DISEASE PROGRESSION IN INSTITUTIONALIZED ELDERLS

Hatem E. Amin,* Ahmed T. El-Olemy** and Samia N. Serag***

ABSTRACT

Background: Institutionalized elders might suffer from poor oral hygiene with higher periodontal disease risk. This may be attributed to unavailability of dentists, inadequate knowledge of elders and nursing staff about oral hygiene techniques and lack of dental insurance. Despite the current attention and concern to the oral health status of older adults, few oral health promotion and periodontal disease prevention studies have been conducted with geriatric. The purpose of this study was to test and compare the effectiveness of commonly applied and accepted modalities on oral hygiene and periodontal disease progression in institutionalized elders.

Subjects and Methods: one hundred dentate elders of two geriatric institutions in Tanta city who fulfilled the entry criteria were assigned equally into four groups. Control group (group I) included subjects who received emergency dental care. Group II, included subjects who received health education program for oral health promotion concerning home care, oral self examination, regular check-up and diet modification. Group III, received health education plus weekly rinsing with 0.12 chlorhexidine mouth wash. Group IV, the same as group III plus semiannual scaling and root planing throughout the two year study. At the start of the study, elders were categorized as high and low periodontal risk according to CPI and BANA tests. All subjects were assessed at six months, one and two years after onset using different indices. Bleeding on probing, gingival index and CPI index in addition to *P. gingivalis* counting.

Results: There was statistically insignificant difference between groups at base-line regarding knowledge and behavior of elders concerning oral health, BOP, GI, CPI and *P. gingivalis* counts. Group II, who received health education, showed improvement in periodontal disease progression up to six months of follow up then worsened to reach to nearly the base-line level at the end of the study. Group III experienced good results up to one year of follow up. Group IV had the best results up to two years of the study. Home care and oral self examination were positively influenced through health education throughout the two years study period in comparison to diet modification and regular check-up. Scaling and root planing had significant effect on mean *P. gingivalis* counts which was maintained throughout the study, that was not obtained through health education or chlorhexidine mouth wash. **Conclusion:** Health education is an important item for oral hygiene and prevention of periodontal diseases among institutionalized elders. Health education plus chlorhexidine mouthwash increased the benefit obtained for a longer period of time. For long term prevention, scaling and root planing must be added to the previous modalities.

* Lecturer of Pedodontics and Public Health Department, Faculty of Dentistry, Tanta University.

** Lecturer of Public Health and Preventive Medicine Department, Faculty of Medicine, Tanta University.

*** Assoc. Prof. of Oral Medicine, Periodontology, Oral Diagnosis and Radiology Department, Faculty of Dentistry, Tanta Univ.