

VALIDITY, RELIABILITY OF DENTAL COPING BELIEFS SCALE AND ITS RELATION TO ORAL HYGIENE AMONG ADOLESCENTS IN ALEXANDRIA, EGYPT

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ABSTRACT :

Several medical areas that require patient compliance have successfully used psychological interventions emphasizing cognitive behavioral components. Similarly, few research findings have shown promising results in the application of cognitive behavioral techniques for improving oral hygiene. In this study a recently developed questionnaire, the Dental Coping Beliefs Scale (DCBS), was used to test its applicability on the adolescent subgroup and to study the relationship between oral hygiene and dental beliefs. The DCBS was administered prior to clinical examination to 361 subjects who were randomly selected from the preparatory and secondary schools in the city of Alexandria. The mean age of study sample was 14.17 ± 1.67 years. The standard of oral hygiene was determined by the use of the Plaque Index (PI) scoring system. The rating dentist had an established test-retest reliability of 0.89 in estimating PI. Cluster analysis revealed three subscales of DCBS which were labeled internal, perceived barrier and external. The three subscales demonstrated internal consistency of 0.81, 0.62 and 0.73 respectively with test-retest stability of 0.50, 0.82 and 0.76 respectively. Discriminant validity eta coefficient was 0.86 for internal, 0.89 for perceived barriers and 0.81 for external dimensions. The mean PI for the studied sample was 0.83 ± 0.36 . Correlations were obtained between each of the DCBS's 44 items and PI scores. Twelve items were significantly correlated to PI with a correlation coefficient ranging from -0.11 to 0.22. Three of them were internal items and negatively correlated to PI, four were perceived barriers and were positively correlated to PI and the remaining five items were external and also positively correlated to PI. Thus, beliefs relating to increased external locus of control and perceived barriers were related to higher PI. Accordingly, it is recommended that a shorter version of the DCBS should be given to all patients to complete before implementing any preventive program. This will help to identify persons who are more likely to engage in dental hygiene behaviors.

INTRODUCTION:

Numerous longitudinal studies that centered on educational models for changing oral hygiene behavior demonstrated an immediate improvement

following the intervention. However, after few months the results proved that the patients have failed to show long-term compliance with the regimen. Much of these studies have focused on

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