AN ANALYSIS OF TOOTH CLEANING WITH AFFECTING FACTORS

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SUMMARY

The study was conducted at a school for Dental Health Hygiene, Quetta Pakistan, providing a source of patients attending specifically for periodontal care and where the format of hygiene instruction and treatment is largely standardized. A questioner was designed to assess: attitudes and beliefs, knowledge of the disease, and reported behavior.

Gingival health was measured using gingival index. The patients was stimulated to take action by a cue, bleeding gums. These findings confirm the predictions made in the health belief model. However, none of the factors in the health belief model were significantly associated with the gingival health. The status of the patients indicating other factors was important for patient to clean their teeth effectively.

INTRODUCTION

The major factors affecting dental health are related to life style changes and personnel behavior. Behavior also affect the outcome of treatment for the degree to which patients follow their dentists advice is obviously important, failure to carry out oral hygiene instructions means a considerable amount of time spent on health education is wasted.

The compliance with oral hygiene regimens in terms of frequency of brushing has been reported to be fairly good. The oral health, however, despite such encouraging figures of many Clinicians and public consider benefits from preventive measures.

Young reviewed the literature on dental health education stressed that there is communication gap between dentists and patients, while dentists describing the main problem to the patient there is a need for a better understanding of the factors which
effect compliance with dental health instructions.4

The formation of the health belief model to predict preventive behavior and its modification to predict compliance with professional's advice depends on research into factors affecting health and illness behavior. The present study on a group of patients who had periodontal treatment is an attempt to test some of the predictions of the health belief models.5,6

MATERIALS AND METHODS

The study was conducted at a School for Dental Hygienists Quetta, Pakistan. This school was chosen because it provided a source of patients specifically attending for periodontal care in which the oral hygiene regimen is largely standardized in technique and is given by a homogeneous group of Dental Professionals. They entry criterion were

1- Male of female patients aged 18-25 years who received at least one course of periodontal treatment consisting of oral hygiene instructions and scaling
2- The last course of treatment had been completed at least three months before the commencement of study.
3- Those who agreed to make an appointment for a recall visit.

Each patient was asked to complete a questioner on arrival at the clinic. The questioner consisted of two main parts:

i) To assess attitudes, beliefs and knowledge, and

ii) Reported behavior.

Patients were then examined in a dental chair by using a periodontal probe and dental mouth mirror. The plaque index and gingival index were used to assess oral cleanliness and gingivitis (Patients actual behavior). Four readings were noted7 on the six teeth (11, 12, 13, 21, 22, 23) as being representative of the mouth. This gingival index was chosen because it measures gingival changes only being a reversible index. The plaque index used simultaneously has direct statistical relationship to the gingival index.9

RESULTS

One hundred and seventy (170) were recruited in this study. Outs of there 110 patients (65%) were male and 60 patients (35%) were female. Male to female ratio being 1.8:1 (Fig-1). Among these 170 patient 59% had 1-10 dental visits to the clinic and 30% had 20 or more visits to see a clinician. Courses of treatment are given in Fig-2. 120 patients (70%) had attended between one and four courses of treatment, 37 patients (22%) had between five and nine courses and 13 patients (8%) had 10 ore more courses, indicating that they were regularly attending the clinic for a long period.

Majority of the patients (75%) gave positive answers to six of the attitudinal concepts, which were assessed. 89% of patients responded to the questions relating to their susceptibility to dental disease. The majorities of the patients (78%) were concerned about the severity of the disease and responded positively to the questions. They also considered that having dental disease like toothache was very serious problem. 78% thought dental treatment was important and can help to save their teeth for healthy

![Fig. 1. Sex Distribution](image)
life and 98% thought that dental treatment was important in keeping their teeth healthy, suggesting a strong belief on the benefits of treatment. Aesthetic concern ranked very high among the patients. 99% were concerned about the appearance of their teeth and thought teeth were important for general health. A high percentage (84%) considered that they are having bad teeth and gums because they did not clean their teeth regularly and had no belief on natural causes.

The patient knowledge about periodontal disease was fairly satisfactory. One hundred patients (59%) knew that incorrect brushing and plaque cause gum disease. Fig. 3 shows the results of responses to questions regarding 'Cues' to take action to seek periodontal care. Bleeding gums was the predominant Cue reported by 75% of the patients. The others were swollen gums, loose teeth and receding gums.

The pattern of responses to the attitudinal and belief questions indicated that the majority of patients were positive about most of the variables included in the health belief Model. Assessing the gingival status tested compliance. It was assumed that if patients were carrying out the instructions about oral hygiene, they would have low gingival index score.10

**DISCUSSION**

Kegeles stated that preventive dental health behavior involved one or more of the following, visits to the dentists on a routine basis, brushing at appropriate time and intervals, control of plaque through use of other mechanical procedures, maintenance of low cariogenic diet.11,12 According to these criteria all the patients in the present study were making preventively oriented visits to the School for Dental Hygiene at Quetta. The asked for an appointment after being told at the end of their last course of treatment to do so. The number of patients who did respond was generally very small and it can be assumed that those who did contact the school of dental hygiene for a recall were highly motivated. This was confirmed in the high percentage that gave positive responses to question relating to their desire to keep their teeth for life. This high positive response rate supports the prediction in the belief health model that, persons who consider themselves susceptible to a disease think the disease is serious for them and have a positive appraisal of the efficacy of treatment and likely to take preventive action.13 However, the attitudinal variables tested were unable to discriminate between those patients who would carry out oral hygiene procedure effectively and those who would not. Two further concept beliefs on dental health are, concern for teeth and belief in natural causation. They were added to the health belief model.14 Although the patients recognized the factors associated with dental diseases, 50% thought it was possible to get sudden trouble even if their mouths were healthy.

Many patients had noticed their problem themselves or their dentist had pointed
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...it out. Of the Cues sited bleeding was the most common. Nevertheless although a level of awareness had been reached to seek treatment, after treatment they were insufficiently motivated or informed to act in a positive manner to prevent a recurrence or to control the disease.

Many of the factors put forward were in compliance with medical care recommendations Model. (Backer and Marum) 1995 and the Rosen-stock model (1989) have been evaluated on the present study. They do not appear to account for differences in behavior between patients who were maintaining a high level of gingival health and those who were not. However before seeking other factors, which may affect patient behavior, further studies should be carried out on gingival health.

CONCLUSION

1. Learning of a behavior pattern cannot occur without a knowledge of the behavior pattern itself.

2. Changes in attitudes and beliefs are further enhanced following establishment of a new behavior pattern.

3. The educational and behavioral findings of this study should be considered and applied when attempting to change belief of health behavior.

REFERENCES


