Evaluation of oral health related quality of life in patient with mild periodontitis among young male population of Namakkal district

Natarajan Shanmuga Sundaram, Ramesh Narendar[1], Palanisamy Dineshkumar[1], Sadasiva Balakrishnan Ramesh, Subramanium Gokulanathan

Departments of Periodontics, [1]Oral Surgery, Vivekanandha Dental College for Women, Elayampalayam, Namakkal, Tamil Nadu, India

Address for correspondence:
Dr. Natarajan Shanmuga Sundaram,
E-mail: drshan74@yahoo.com

Received : 02-05-13
Review completed : 04-05-13
Accepted : 04-05-13

ABSTRACT

Aim: The aim of the study is to assess the impact of oral health related quality of life (QOL) on patients presenting for scaling and oral prophylaxis using a the oral health-related quality of life (OHRQL) questionnaire. **Materials and Methods:** This prospective study includes a total of 100 male patients of age group 25-35 years, who visited private clinic in Namakkal district, South India. They were assessed for their perceptions of oral health using OHRQL questionnaire before initial periodontal therapy including scaling and root planning. **Results:** A total of 100 patients (mean age:29 years) participated in the study and completed initial periodontal therapy. Before treatment 98% of the patients perceived that their oral health status impacted on their QOL in one or more ways. Bad breath was the most common complaint. Social well-being, personality and psychological function were identified as compromised OHRQL domains. More than 60% of the patients stated their overall general health is affected by periodontal disease. **Conclusion:** Periodontitis negatively affected QOL in this Namakkal district population of young male patients with mild periodontitis. Conventional non-surgical periodontal therapy and personality development counseling has a potential to ameliorate patient perceptions of oral health and improve their QOL.

KEY WORDS: Oral health, oral prophylaxis scaling, quality of life

Disease of periodontium is one of the most common oral disease. Though it ranks more than or equal to dental caries in prevalence, it distances itself as one of the least patient motivation for treatment seek. For decades, the importance of and need for periodontal care has largely been attributed to the high prevalence of periodontal disease in most societies. National clinical oral epidemiological studies[1] from developed countries have repeatedly estimated that over 90% of the general population have some form of periodontal disease. In recent times, the periodontal care has gained importance due to various studies focused on associations between periodontal health and general health status of the patient including cardiovascular disease, respiratory diseases, diabetes.

Access this article online

Quick Response Code:

Website: www.jpbsonline.org

DOI: 10.4103/0975-7406.113289

Periodontal care has been motivated and promoted in various general health schemes and dental care are being given more importance in various institutions and employments. Greater understanding of the consequences of periodontal disease and the effects of therapy[1] is important on many fronts: In understanding and embracing patient perceptions of the impact of their oral health on their lives, in planning periodontal care which addresses patient needs and key concerns, in evaluating outcomes from periodontal treatment from the patient's perspective and in drawing attention to the importance of periodontal care in society.

In modern times various studies about impact of medical and dental diseases on quality of life (QOL) has made drastic changes in sorting out treatment needs and has proved of valuable guide in treatment planning. According to the World Health Organization[2] (WHO 1948), evaluation of the health of subjects requires assessment of their physical, psychological, and emotional well-being, not merely confirmation of disease absence. Patient motivation and post treatment follow up and care holds important key to success of any treatment.

How to cite this article: Sundaram NS, Narendar R, Dineshkumar P, Ramesh SB, Gokulanathan S. Evaluation of oral health related quality of life in patient with mild periodontitis among young male population of Namakkal district. J Pharm Bioall Sci 2013;5:30-2.

Periodontal care is one such treatment whose success largely depends on post treatment care. Various parameters and questioners has been used to study impact of periodontal disease on QOL.

Oral health impact profile[3] is an most accurate and commonly used questionnaire. It was introduced by Gary Slade in 1994. The objective of this questionnaire is to present numerical data for various factors perceived by humans in various situations in terms of health and treatment consequences. Originally it consists of set of seven questions for each of the seven different dimensions, accounting for total of 49 questions. The seven dimensions are the following: Physical (pain), functional, psychological, physical disability, psychological, social and handicap. This questionnaire was modified by Slade and Spencer[3] in 1997, for a shorter version which contains 14 questions. This questionnaire is commonly called as OHIP-14 (Oral health impact profile-14). This OHIP-14 has been used widely across the world for various research purposes with modifications include language and regional concerns.

In periodontal treatment,[4] objective measures such as improvement in gingival inflammation and gains in attachment provide important information on the disease status or treatment outcome. However, those traditional surrogate measurements give little insight into the impact on a patient. Patient-centered assessments are especially important in periodontitis in which their concerns may differ from the traditional clinical endpoints (Ng and Leung[5] 2006, Jowett *et al*. 2009). Giddon considered the mouth to be essential in satisfying human biological and social needs in terms of survival, socialization and self-fulfillment, and recognized the mouth and its health as an integral part of the entire body and overall health.

Materials and Methods

Our study consists of 100 patients in age group 25-35 years who reported for treatment in four private dental clinic over a period of 8 months. They were randomly selected after considering their willingness to participate in the study. Patient seeking treatment for any the following chief complaints bleeding or swollen gums, bad breath, loosened teeth without any injury were included others were excluded from study. These patients were further subjected to Loe and Silness gingival index. Patient having scores above one and diagnosed of having moderate or severe gingival index are selected. They were further grouped and selected by using standard community periodontal index of treatment needs introduced by WHO/ Federation dentaire internationale (FDI) in 1982. Patient having treatment need index score of two requiring professional plaque control were selected. Higher scores indicating for surgical option were excluded in our study.

They were given the OHIP-14 questionnaire on the day of treatment and asked to fill.

OHIP-14 questionnaire rates the impact of their oral health on 14 key areas of oral health related QOL. OHIP-14 items are grouped into seven dimensions: Functional limitation (trouble pronouncing words and worsened taste), physical pain (aching in mouth and discomfort eating foods), psychological discomfort (feeling self-conscious and feeling tense), physical disability (interrupted meals and unsatisfactory diet), psychological disability (difficulty relaxing and embarrassment), social disability (irritability and difficulty in doing usual jobs) and handicap (life less satisfying and inability to function).The questions were framed in layman terms such as "what effect do your teeth have on speech?". Their response is asked to write in four point ordinal scale having grade as score 0 (never), 1 (sometimes), 2 (very often), 3 (always) and result is tabulated as in Table 1.

Results

The data analysis showed that mean score per patient was well above half, it was 1.8 indicating periodontitis affects QOL more often. Financial problems were least affected, while romantic relationship was greatly affected. Most of them believed that dental health affects general health in one or other ways. Appearance, social affair, and personality were the most common cause for seeking treatment. Eating difficulty and speech difficulties were less noticed by patients in our study.

Discussion

An interesting factor noticed was that discomfort and bad odor

Table 1: Questionnaire and answers received in each field

Q. no.	Data concern field	Score-0 (never)	Score-1 (sometimes)	Score-2 (often)	Score-3 (always)
1.	Comfort	15	25	41	19
2.	Breath odour	14	21	36	29
3.	Eating	43	38	9	10
4.	Appearance and smile	24	49	17	10
5.	General health	12	10	64	14
6.	Speech/pronouncing	41	43	11	5
7.	Relax/sleep	20	50	16	14
8.	Confidence	12	22	51	15
9.	Personality	15	23	50	12
10.	Social life and move out	16	26	47	11
11.	Finance	41	29	15	15
12.	Co-workers/office getting along	17	32	25	26
13.	Romantic relationship	10	12	44	34
14.	Mood (upset/embarrassing)	20	41	24	15

was the most common chief complaint of patient but patient wanted to undergo initial periodontal therapy for improvement in general health, personality and social move out. This conflicting data stresses the need for focus on oral hygiene care, home measures and instructions. In office treatment scaling and root planning may not be sufficient for satisfaction of young patients, rather more focus should be given for psychological and social perception of wellbeing. The impact of periodontal disease was well felt in romantic relationship embarrassment, more than 70% stated that bad odor and periodontal disease affects their romantic life.

Conclusion

Our survey has dethrone the myth that physical pain and discomfort is the commonest factor for which the patient seeks periodontal therapy. The younger group of patients seeks treatment for improvement of general health, personality, and social romantic life. A need for psychological counseling for personality improvement is enlightened in our study. One of the neglected part in periodontal treatment was personal care and oral hygiene instructions. Our study re-emphases that success of treatment success lies in addressing personality development along with home care oral hygiene instructions.

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Source of Support: Nil, **Conflict of Interest:** None declared.