

## ORIGINAL RESEARCH

### Analysis of periodontal status and oral health-related quality of life in patients with mild periodontitis

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#### ABSTRACT

**Background:** According to the World Health Organization, quality of life (QoL) is a subjective assessment of each individual's cultural, social, and environmental factors. Over 90% of the general population in developed countries has some kind of periodontal disease (PD), according to national clinical oral epidemiological studies. PD can also affect oral health-related quality of life (OHRQoL). So, the goal of this study was to see if there was a link between OHRQoL and periodontal health in patients with moderate periodontitis.

**Material and methods:** Our study included 250 subjects in age group 20-40 years who reported to the Department of Periodontology. The study was conducted for a time duration of 6 months. The study participants 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.

**Result:** According to findings of this study PD affect oral health-related quality of life (OHRQoL).

**Conclusion:** In patients with mild periodontitis, periodontitis had a negative impact on QOL. Nonsurgical periodontal therapy and personality development counselling have the potential to improve patient perceptions of dental health and quality of life.

**Keywords:** Quality of life, periodontal disease, oral health.

#### INTRODUCTION

According to the World Health Organization, quality of life (QoL) is a subjective assessment of each individual's cultural, social, and environmental factors. The labels 'health status,' 'lifestyle,' 'life satisfaction,' 'mental state,' or 'well-being' do not suffice to describe QoL; it is a multidimensional concept that encompasses an individual's view of a variety of various aspects of their life.<sup>1</sup> As a result, criteria other than symptom management, mortality, and changes in life expectancy must be included when evaluating health or health care treatments. The patient's perception of their QoL is one such parameter.<sup>2</sup>

The sixth most frequent noncommunicable disease is periodontal disease (PD). In adults worldwide, severe PD is the leading cause of tooth loss.<sup>3</sup> PD can also affect oral health-related quality of life (OHRQoL).<sup>4,5</sup> Clarifying, due to the existence of halitosis and/or tooth loss,<sup>5,6</sup> PD can negatively impact patients' connections with their social group, resulting in detrimental effects on aesthetics and self-esteem. Regardless, PD can produce pain and

physical impairment that interferes with daily activities such as chewing and eating, depending on the severity.<sup>7</sup>

Over 90% of the general population in developed countries has some kind of periodontal disease, according to national clinical oral epidemiological studies.<sup>8</sup> Periodontal care has gained prominence in recent years as a result of several research focusing on the relationship between periodontal health and the patient's overall health, including cardiovascular disease, respiratory disease, and diabetes.

Periodontal care has been encouraged and promoted in a variety of general health programmes, and dental care is being prioritised in a variety of organisations and workplaces. Understanding the consequences of periodontal disease and the effects of therapy is important on many levels: in understanding and accepting patient perceptions of the impact of their oral health on their lives, in planning periodontal care that addresses patient needs and key concerns, in evaluating periodontal treatment outcomes from the patient's perspective, and in bringing attention to the importance of periodontal care in society.<sup>8</sup> Patient motivation and post-treatment follow-up and care are critical components of any treatment's success.

The most accurate and widely used questionnaire is the oral health impact profile.<sup>9</sup> Gary Slade first presented it in 1994. The goal of this questionnaire is to provide numerical data on many elements that humans perceive in diverse scenarios in terms of health and treatment outcomes. It was originally composed of a series of seven questions for each of the seven dimensions, totaling 49 questions. Physical (pain), functional, psychological, physical disability, psychological, social, and handicap are the seven dimensions. Slade and Spencer revised this questionnaire in 1997 to make it shorter, with only 14 items. OHIP 14 is the popular name for this questionnaire (Oral health impact profile 14).<sup>9</sup> This OHIP 14 has been widely utilised around the world for numerous research goals, with language and regional considerations being modified.

The goal of this study was to see if there was a link between OHRQoL and periodontal health in patients with moderate periodontitis.

## **MATERIAL AND METHODS**

Our study included 250 subjects in age group 20-40 years who reported to the Department of Periodontology. The study was conducted for a time duration of 6 months. Subjects were randomly selected after considering their willingness to participate in the study. The subjects who were not ready to give their consent for study were excluded. Then the Loe and Silness gingival index was recorded of each study participants. The study comprised patients who scored above one and were identified with a moderate or severe gingival index. They were then categorised and chosen using the WHO/ Federation dentaireinternationale (FDI) standard community periodontal index of treatment needs, which was introduced in 1982. Patients with a treatment need index score of two and who needed professional plaque control were chosen. Higher scores indicating the need for surgery were disqualified. 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. Their response is asked to write in four point ordinal scale having grade as score 0 (never), 1 (sometimes), 2 (very often), 3 (always).

## **RESULT**

Table 1 describes the response of the patients who answered the OHIP-14. The data analysis revealed that the average score per patient was much above half, at 1.6, indicating that periodontitis had a greater impact on QOL. Financial issues and getting along co-workers or at office were the least affected, while social life were severely impacted. The majority of them stated that oral health has an impact on overall health in some way. The most popular

reasons for getting treatment were appearance, breath odour, and personality. In our study, patients were less aware of eating and communication issues.

Q. no.	Data concern field	Score-0 (never)	Score-1 (sometimes)	Score-2 (often)	Score-3 (always)
1.	Comfort	55	101	54	40
2.	Breath odour	20	29	67	134
3.	Eating	95	48	62	45
4.	Appearance and smile	26	44	56	124
5.	Speech pronouncing	90	77	58	25
6.	Relax/sleep	78	64	24	84
7.	Confidence	63	79	85	23
8.	Personality	45	40	67	98
9.	General health	28	46	60	116
10.	Social life and move out	24	39	78	109
11.	Finance	110	85	30	25
12.	Co-workers/office getting along	107	67	49	27
13.	Romantic relationship	29	24	41	156
14.	Mood (upset/embarrassing)	68	96	75	11

## DISCUSSION

The most common major complaint of the patient was discomfort and unpleasant odour, yet the patient desired to undertake early periodontal therapy for improved overall health, personality, and social mobility. This discrepancy highlights the importance of focusing on oral hygiene, home measures, and guidance. Scaling and root planning in the office may not be enough to satisfy young patients; instead, more emphasis should be placed on psychological and social well-being. Periodontal disease has a significant impact on romantic relationship embarrassment, with 62.4% stating that foul odour and periodontal disease have an impact on their love life.

## CONCLUSION

The idea that physical pain and discomfort is the most common reason for patients seeking periodontal therapy has been debunked by our survey. The younger patients seek treatment to improve their overall health, personality, and social and romantic relationships. Our research uncovered the requirement for psychological treatment for personality development. Personal care and oral hygiene recommendations were one of the most overlooked aspects of periodontal treatment. Our research emphasises the importance of addressing personality development as well as home care dental hygiene recommendations for treatment success.

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