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Original Article

Oral Health Related Quality of Life Among Completely Edentulous Patients

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ABSTRACT

Objectives: Age and tooth loss are expected to have a complex relationship with oral health-related quality of life so the purpose of this study was to assess the impact of tooth loss (Edentulous) on oral health-related quality of life, using the short form of Oral Health Impact Profile (OHIP-14) among completely edentulous patients in one dental institution in Benghazi, Libya.

Subjects and Methods: The study was performed at Faculty of Dentistry University of Benghazi, Libya. Patients attending dental clinics of prosthetic department. Those who needed dentures were interviewed using (OHIP-14), by one investigator. OHIP-14 assess perceived experiences of quality of life using 5 likert scale from 1 to 5 (1=never , 5=very often). The enrolment period was five months (January –May 2017). Socio demographic information were also collected. Only individuals who have been edentulous for the last three month were involved in the study. Data were analysed using descriptive statistics.

Results: A total of 48 edentulous patients were recruited for this study, (56.2 %) of them were females. About 52.1% of participants were illiterate, while only (8.3%) have been graduate from university. About (75%) of participants have been often unable to function due to loss of their teeth. On the other hand (79.2%) of them ever or hardly ever got difficulty doing usual jobs because loss of their teeth. In our study we conclude that less than half of participants never or hardly ever got trouble with pronouncing any word because loss of their teeth.

Conclusion: These findings suggest that teeth loss has significant impacts on quality of life. Further work is required to fully investigate these impacts and how we can intervene to improve the quality of life of these important group of patients.

Keywords: Oral Health, Quality of Life, Completely Edentulous Patients.

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INTRODUCTION

General health of the elderly gives an insight into their quality of life while the dental health also plays a very important role, as the dental problems interfere with the primary needs of life such as mastication of food, esthetics, speech etc. leading to irritability and loss of mental stability. At the same time, it gives rise to embarrassment when the appearance is affected. Quality of life is a dynamic Section and subjective blend of biological and psychosocial experiences influenced by our personal and sociocultural environments [(1)].

The impact of health on the quality of life has lately received increased attention in medicine and dentistry [(2, 3)]. Different diseases affect life in different ways, in particular oral diseases, that seriously impair the quality of life in a large number of individuals and may affect various aspects of life, including function ,appearance, interpersonal relationships and even career opportunities [(4)].

Oral health related quality of life (OHRQoL) is defined as "the impact of oral disease and disorders on aspects of everyday life that a patient or person values, that are of sufficient magnitude, in terms of frequency, severity or duration to affect their experience and perception of their life overall" [(5)]. Subjective evaluation of OHRQoL has become an integral part of clinical practice and research, which allows a multidimensional assessment of health that goes beyond the traditional physician centered approach of health care to a patient centered one that includes a person's social and emotional experience and physical functioning. Therefore, it enables a better understanding of

treatment needs and outcomes from the individual as well as population perspective [6].

SUBJECTS AND METHODS

The study was performed at Faculty of Dentistry University of Benghazi, Libya. Patients attending dental clinics of prosthetic department who needed a complete dentures were interviewed using

pretested Arabic version of OHIP-14 questionnaire scale, by one investigator. The questionnaire included questions concerning the respondents' socio demographic background (age, gender, education level , marital status), also a history of having a denture was taken . Oral health related quality of life OHRQoL was measured using the 14-item short version of the OHIP and items were scored on 5-point scales ranging from '1' - 'never' to '5' - 'very often'. Thus, higher scores indicate worse OHRQoL. The dimensions and the subjects of the questions were "functional limitation", trouble pronouncing words, worsened taste; "physical pain", ache in the mouth, discomfort eating food; "psychological discomfort", feeling self-conscious or feeling tense; "physical disability", interrupted meals or poor diet; "psychological disability", difficulty in relaxing, embarrassment; "social disability", irritability, difficulty in doing usual jobs; "handicap", lifeless satisfying, inability to function. Responses to the items were recorded in a five-point scale: 1, never; 2, hardly ever; 3,occasionally; 4, fairly often; 5, very often.

The enrolment period was five months (January – May 2017). Only individuals who have been edentulous for at least the last three month were involved in the study. Individuals with systemic diseases were excluded from the study .The informed consent of each patient was taken prior to recording oral health. The data collected were entered into spreadsheets and were subjected to statistical analysis by SPSS (statistical package social sciences), version 20. Data were analyzed using descriptive statistics.

RESULTS

A total of 48 edentulous patients were recruited for this study, (56.2 %) of them were females. About 54% of the participants were older than 65 years (elderly). About 52.1% of participants were illiterate, while only (8.3%) have been graduate from university (Table 1).

About half of the participants had a history of wearing a denture (52.1%), majority of them had a complete denture (80%) (Figure 1 and 2).

About (75%) of participants have been often unable to function due to loss of their teeth. On the other hand (79.2%) of them ever or hardly ever got difficulty doing usual jobs because of loss of their teeth. In our study we conclude that less than half of participants never or hardly ever got trouble with pronouncing any word because loss of their teeth. More than half of participants have been often unable to function due to loss of their teeth. on the other hand most of them never or hardly ever got difficulty doing usual jobs (Table 2).

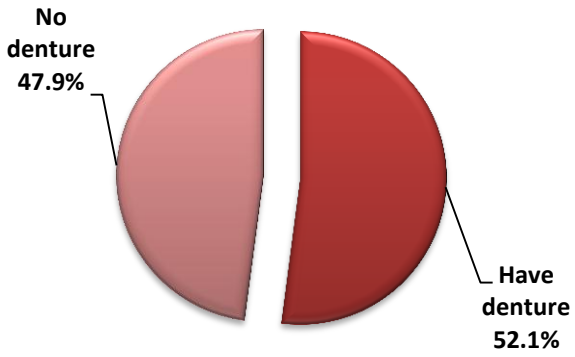

Figure 1: History of having a denture.

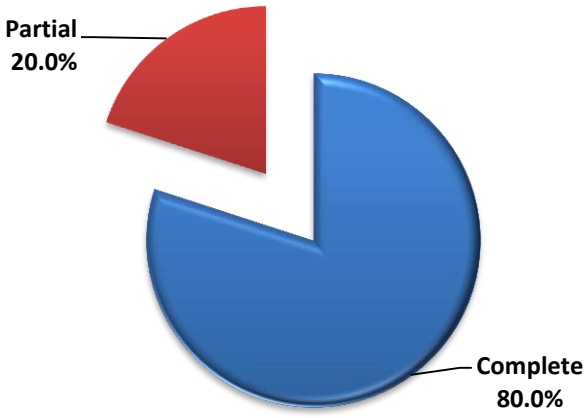

Figure 2: Type of the previous denture

Table 1: Demographic characteristics of study population

Demographic characteristic		Number	Rate%
Age	Middle aged	22	45.8
	Elderly	26	54.2
Gender	Male	27	56.3
	Female	21	43.8
Marital Status	Married	32	66.7
	Single	3	6.3
	Divorced	2	4.2
	Widow	11	22.9
Education	Illiterate	25	52.1
	Primary	11	22.9
	Secondary	8	16.7
	Graduate	4	8.3

Table 2: Distribution of responses to individual OHIP items**.**

OHIP14	Never	Hardly ever	Occasionally	Fairly often	Very often	Never/ Hardly ever
Trouble pronouncing words	27.1%	12.5%	18.8%	18.8%	22.9%	39.6%
Sense of taste	39.6%	27.1%	10.4%	6.3%	16.7%	66.7%
Pain in the mouth	39.6%	37.5%	10.4%	10.4%	2.1%	77.1%
Uncomfortable to eat	16.7%	10.4%	10.4%	35.4%	27.1%	27.1%
Self-conscious	25.0%	25.0%	4.2%	25.0%	20.8%	50.0%
Felt tense	31.3%	29.2%	18.8%	12.5%	8.3%	60.4%
Diet unsatisfactory	22.9%	10.4%	10.4%	16.7%	39.6%	**33.3%**
Interrupt meals	25.0%	43.8%	6.3%	12.5%	12.5%	**68.8%**
Difficult to relax	33.3%	14.6%	27.1%	12.5%	12.5%	47.9%
embarrassed	22.9%	27.1%	8.3%	27.1%	14.6%	50.0%
Irritable people	16.7%	35.4%	4.2%	35.4%	8.3%	52.1%
Difficulty doing your usual jobs	41.7%	37.5%	12.5%	6.3%	2.1%	**79.2%**
Was less satisfying	25.0%	14.6%	29.2%	25.0%	6.3%	**39.6%**
Totally unable to function	8.3%	8.3%	8.3%	33.3%	41.7%	**16.7%**

DISCUSSION

The Oral Health Impact Profile (OHIP) is considered the foremost comprehensive assessments for measuring the OHRQoL [7].

As it is patient-centered, provides a larger weight to both psychological and behavioral outcomes, it is better at measuring the psychosocial impacts, moreover, meets the main criteria for the measurement of OHRQoL. The most frequently reported health domains among respondents were physical disability and handicap which was inconsistent with the study of Locker et al. were "functional limitations" considered the most frequently reported items [8].

In a national survey conducted in Germany using the German version of the OHIP, wearing removable dentures was a stronger predictor of impaired OHQOL comparing to the demographic variables; were age and education level had almost no effects [9]. This is in a partial agreement with this study were age, gender and educational level had showed effect on quality of life and in an agreement with a Japanese study were age, gender and educational level were not significantly associated with OHIP scores among elderly Japanese) [10].

In the present study, patients with previous partial denture had better OHQOL than those with previous complete denture. This result was in accordance with many previous studies [11, 12]. where the number of remaining natural teeth was positively associated with OHRQoL; thus, the larger the number of remaining natural teeth, the lower the impact on the OHRQoL .The OHIP-14 showed a weak positive correlation between the number of missing teeth and OHQOL and also showed that denture-wearing and halitosis were significant predictors of OHIP score in residents over 60 years of age [12].

One of the limitation of the study is that the data were collected from convenience sample ,patients attending the prosthetic department, at Faculty of Dentistry requesting for a complete denture. which is why the sample was not representative for the entire population. Second, the present study is characterized by a cross-sectional design, and therefore, we cannot make inferences with respect to the direction of the observed association.

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