

## **Measures of oral health quality of life**

Alice Murariu, Ioan Danila, Carmen Hanganu, Lucia Barlean,  
Livia Mihailovici, Doina Azoicai  
Iasi, Romania

### **Summary**

The purpose of this paper is to assess the ability of the Oral Health Quality of Life Index in a pilot study in order to use it as a social instrument for population studies.

**Method:** The authors used the OHQoL Index version UK which is a 16-item instrument evaluating three different dimensions (physical, social and psychological) to assess the impact of oral health problems on social activities: 1. Eating; 2. Appearance; 3. Speaking; 4. General health; 5. Comfort; 6. Breath; 7. Social life; 8. Romantic life; 9. Smiling; 10. Working; 11. Financial status; 12. Confidence; 13. Lack of trouble; 14. Sleeping and relaxing; 15. Mood; 16. Personality. The possible answers are: no, little, moderate, great, extremely; the last two of them evaluate the negative impact. The group of study included 75 subjects of different ages and educational levels. DMFT index and number of missing teeth are also used to evaluate oral status.

**Results and discussions:** The responses suggested that the most negative impact was on the ability to eat (36% of the subjects, who missed more than 15 teeth or had dentures). The second negative impact was on the appearance and affected 33% of the subjects, who had frontal carious lesions.

25% of the persons had their speaking affected, especially the ones with dentures. The lowest effects were on psychological aspects: personality – 16%, mood – 14%, confidence – 15%, sleeping and relaxing – 16%.

**Conclusions:** the OHQoL-UK is a precious instrument, practical and easy to use, based on a theoretical model. Our results are similar to those of other scientists; the questions were clearly and concisely formulated and easy to understand. That is why we consider that this index can be used for population studies. We need to use the information obtained from these measures to educate the public, policy makers of the importance, extent and severity of oral health problems.

### **Introduction**

The modern approach of health has multiple dimensions. Health means not only life chances and absence of diseases, but also each individual's ability to fulfill his/her daily activities and to lead an optimal social life with an appropriate life quality.

The notion of "quality of life", with all its perspectives: medical, social, economic and political is now being reevaluated. Since 1970, many authors attempted to imagine indicators that should evaluate not only the oral health status, but also the social dimensions of an individual or of a population. Jago and Cohen sustained that the addition of a new dimension evaluating

social impact could substantially improve clinical oral health indicators.

For instance, total edentulous prevalence varies from 1% in Japan to 36% in New Zealand (Finbarr Allen, 2003). This suggests that tooth loss is influenced by cultural, economic and social factors. Therefore, clinical evaluation is not sufficient for the correct solution of a situation, and it needs a psychosocial dimension to be added.

These indicators have been continuously improved, and today there are 11 indicators to be used as life quality evaluation instruments [5]. Some of them evaluate mainly the subjective dimension of social life (DIDL – Dental Impact of Daily Living), while others are centered on the functional aspect (DFS – Dental Functional

**Table 1.** Studied group profile

	No. of subjects	%
Age - 20-25	25	33.33
- 35-44	30	40
- 65-74	20	26.66
Sex - Female	38	50.6
- Male	37	49.3
Social status		
- students	25	33.33
- intellectuals	12	16
- high school	12	16
- unemployed/primary school	6	8
- retired	20	26.66

Status) or on a certain population group (GOHAI – Geriatric Oral Health Index of Assessment). In the development of social indicators an important stage was marked with the formulation of the indicators assessing dysfunctions and handicap (Slade and Spencer, 1994) – OHIP.

An indicator offering a global view over life quality is today much in use: OHQoL – Oral Health Quality of Life – first formulated and validated in the U.K., and then translated and successfully used in: Brazil, Australia, Denmark, U.S.A. [2].

## Objectives

This paper aims to test OHQoL U.K. abilities in a pilot-study, in order to subsequently use it as an instrument for population social life assessment.

## Material and method

The OHQoL-U.K. indicator is used to assess oral health status effects and impact on life quality

and consists of a 16 items questionnaire, concerning three main aspects: physical, social and psychological.

“Do you consider that your actual oral health status has an impact on the next life aspects?”

1 – eating; 2 – appearance; 3 – speech; 4 – general health status; 5 – sleep and ability to relax; 6 – social life; 7 – romantic relationships; 8 – smiling; 9 – confidence; 10 – carefree manner; 11 – mood; 12 – work; 13 – finances; 14 – personality; 15 – comfort; 16 – breath.

Responses evaluated positive or negative impact on life quality with: no, little, moderate (positive impact), high and extremely (negative impact).

The studied group included different ages and social status subjects (*Table 1*).

Oral health status was evaluated with clinical internationally used indicators: DMFT and the number of functional remaining teeth (more than 20 teeth, 10-19 teeth, less than 10 teeth) – *Table 2*.

**Table 2.** Clinical indicators of oral health status

Clinical indicators	Age					
	20-25 ys		35-44 ys		65-74 ys	
	No. of pers.	%	No. of pers.	%	No. of pers.	%
>20 teeth	25	100	11	36.66	2	10
10-19 teeth	0	0	17	56.6	10	50
<10 teeth	0	0	2	6.66	8	40
DMFT	8		12			

## Results and discussions

Previous studies revealed significant correlations between clinical and social variables, describing clinical and social aspects of a person.

This study evaluated that the most negative influence on life was eating, with respect to enjoying aliments of a certain consistency. 36% of the subjects answered with "high" and "extremely". The correlation with their oral health status showed that they were untreated or incorrectly treated edentulous, causing chewing disabilities. All the patients with less than 10 functional teeth responded affirmatively (6.66% of those aged 35-44 and 40% of those aged over 65 years).

Esthetic dissatisfaction was the second negative impact, observed in 33% of the subjects and was correlated to decayed teeth, change of color or incorrect fillings in anterior upper teeth. These subjects had a high FT index.

As to the social aspects, the highest negative impact was on smiling, in 33% of the subjects.

Positive impact was in the psychological area: personality (16%), mood (14%), trust (15%), sleeping and relaxing (16%).

All the answers are shown in *Table 3*.

## Conclusions

1. OHQoL questionnaire is a valuable, practical and easy to use instrument (containing only 16 items) requiring a short time (5 minutes). Questions are clearly formulated, with no erroneous interpretations, easy to understand by subjects of different ages and educational levels. The validity, reliability and sensibility of this type of questionnaire were previously tested by the authors.

2. The results of the study are similar to the ones revealed by other scientists – 67% of the questioned subjects experienced a negative impact on life quality in U.K., 69% - in Brazil and 76% of the subjects in the present study.

3. If common oral diseases, such as dental caries and partial or total loss of teeth may have a negative impact on life quality, the use of this questionnaire could be targeted to social and economic deprived groups or to subjects suffering from chronic, handicapping diseases.

4. Moreover, social indicators should be used by political authorities to evaluate the efficiency of dental care, population oral health needs and planning of oral health programs.

**Table 3.** Results of OHQoL questionnaire (% subjects)

Answers	No	Little	Moderate	High	Extremely
Eating	17	29	8	24	12
Appearance	35	16	16	23	10
Speech	46	21	8	17	8
General health	45	19	11	17	6
Comfort	57	13	12	10	8
Breath	46	12	16	11	15
Social life	61	14	10	10	5
Romantic relationship	70	11	5	9	5
Smiling	38	13	17	21	12
Work	67	12	7	9	6
Finances	54	17	13	10	6
Confidence	52	21	12	9	6
Carefree manner	56	12	10	14	8
Sleep and ability to relax	61	18	5	10	6
Mood	65	11	10	8	6
Personality	68	11	5	11	5

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Correspondence to: Dr. Alice Murariu, Oral Health Discipline, Faculty of Dentistry, „Gr.T. Popa“ University of Medicine and Pharmacy, Iași. Address: Bd. Independenței, nr. 25, Iași, România.