ORIGINAL RESEARC

Association of oral health related quality of life with dental anxiety and depression along with general health among people of Bhopal district, Madhya Pradesh

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ABSTRACT

Background: To associate oral health related quality of life with dental anxiety and depression along with general health among people of Bhopal district, Madhya Pradesh.

Materials & Methods: A cross sectional questionnaires based survey was conducted among the subjects of Bhopal district, Madhya Pradesh. The survey was carried among 101 subjects aging from 20-40 years. Subjects under investigation were belonging to various occupations. They were assigned a questionnaire. Questionnaire consisted of four parts, first part consists of socio-demographic data along with dental visiting habits, second part has OHqOL-questionnaire, third part has general health (sf-12) and fourth part has hospital anxiety and depression questionnaire. Questionnaire was used for assessment of OHqOL. It consists of 16 questions which takes into account both effect and impact of oral health on quality of life. Dental anxiety and depression was measured by Hospital Anxiety and Depression Scale. Each question was provided with four options and numbering ranging from 0-3. For general health consideration sf-12 v2 was being used, which calculates two values PCS and MCS giving result in percentage.

Results: A large proportion of respondent perceived oral health as having an enhanced effect on their quality of life in all three aspects that is general health, social and psychological. This is in stark contrast to other studies, where only physical aspects of oral health were more frequently considered to have the greatest overall impact of life quality compared with items relating to social, psychological and general health aspects.

Conclusion: Gender variations were not apparent in the study. Both genders were likely to perceive oral health as it is impacting strongly on their quality of life. No significant gender variations are seen. But both have specific oral health needs and are most likely to utilize dental services which may be the key in understanding oral health behavior, including dental attendance patterns.

Key Words: Dental anxiety and depression, general health, hospital anxiety and depression scale, OHqOL.

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Introduction

In 1948, the World Health Organization (WHO) defined health as being "complete physical, mental and social well-being, and not merely the absence of diseases or illnesses".

Measures of oral health-related quality of life (OHqOL) are increasingly being used in descriptive population-based research as a means of capturing nonclinical aspects of oral health that patients deem most relevant to their overall health and well-being.[1] When OHqOL measures are used alongside traditional clinical methods of measuring oral health status, a more comprehensive assessment of the impact of oral diseases on the several dimensions of subjective well-being becomes possible.[2] These dimensions include functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability, and handicap[3] it has also been suggested that sex and socioeconomic status (SES) can have a moderating role on OHqOL. When overall oral health is considered, there are few or no differences between men and women, but sex differences are quite apparent when the utilization of dental care services, treatment outcomes, or OHqOL are examined.[4] Oral health affects people physically and psychologically and influences how they grow, enjoy life, look, speak, chew, taste food and socialize, as well as their feelings of social well-being.[5] Contemporary concepts of health suggest that oral health should be defined in general physical, psychological and social well-being terms in relation to oral status.[6]

Research on health-related behaviors and their correlations is of interest to public health for several reasons. First, implementation of successful health promotion programmes depends on both information about the prevalence of such behaviors and an understanding of their determinants. Secondly, research may highlight interactions between health related behaviors which may bring about synergistic effects on health status. Thirdly, information about patterns of health related behaviors can provide important data for adjustment of health education interventions within the context of health promotion programmes. We can relate hospital dental anxiety to general health, as various studies are done by using HADS to measure out anxiety level and its direct and indirect consequences on general health. To date most anxiety scales have received limited attention to their theoretical underpinnings. Dental anxiety is not unitary and has been typically conceived under three connected approaches: behavioral, cognitive, and physiological. Self report methods primarily assess the cognitive component which can be split into at least 2 valid constructs.

So present study was conducted to associate oral health related quality of life with dental anxiety and depression along with general health among people of Bhopal district, Madhya Pradesh.

Materials and Methods

A cross sectional questionnaires based survey was conducted among the subjects of Bhopal. The survey was carried among 101 subjects aging from 20-40 years. Subjects under investigation were belonging to various occupations. They were assigned a questionnaire. This study was done between the time period of november 2012 to february 2013. The sample taken into account was a select sample which was considered as a sample of convenience and feasibility.

Survey thus undertaken was a questionnaire survey in which a specially designed questionnaire was used. Questionnaire consisted of four parts, first part consist of socio-demographic data along with dental visiting habits, second part has OHqOL-questionnaire, third part has general health (sf-12) and fourth part has hospital anxiety and depression questionnaire. The questionnaire was distributed among the individuals and were tried to make understand each and every question. The questionnaire was constructed in English as well as in Hindi. OHqOL questionnaire was used for assessment of OHqOL.[7] It consists of 16 questions which takes into account both effect and impact of oral health on quality of life.[8] The effect of oral health on quality of life has three domains - physical containing 6 items and social and psychological consisting of five items each. All the respondents were made to understand each question along with the effect and impact related to the questions and each of the proposed 16 items were scored first on “effect” (with responses ranging from bad to good effect on quality of

life) and later on the "impact" of each "effect". The impact of each effect was recorded under five categories that is No, Little, Moderate, Great and Extreme. The score for each effect was ranging from 1 to 9 with score 1 being bad effect having extreme impact, score 5 representing no effect with no impact and 9 being good effect having extreme impact. The sum of individual item responses were added together to generate an overall score with possible values ranging from 16 to 144.[8] All the data collected was entered into the spreadsheets.

Dental anxiety and depression was measured by Hospital Anxiety and Depression Scale. Each question was provided with four options and numbering ranging from 0-3. This is a self screening questionnaire for depression and anxiety.[1] The patient should be instructed not to take too long over their replies: their immediate reaction to each item will probably be more accurate than a long thought-out response. It consists of 14 questions, seven for anxiety and seven for depression. Although it was designed for hospital General Medical Outpatients, it has been extensively used in Primary Care.[2] For general health consideration sf-12 v2 was being used, which calculates two values PCS and MCS giving result in percentage. All responses to questions in SF-12v2 are printed in a horizontal (left-to-right) format, There is considerable empirical evidence that the SF-12v2 five-choice response categories substantially improve the two SF-12 role. Advantage of the SF-12v2 form over the original v1 form is the provision for estimating the eight-

Table 1: Distribution of response to OHqOL - Effects & Impacts (MALES)

Responses(physical aspect)	Bad effect of extreme empect	Bad effect of great impact	Bad effect of moderate impact	Bad effect of little impact	None	Great effect of little impact	Great effect of moderate impact	Great effect of great impact	Great effect of extreme impact
Eating	0	0	0	0	11(10.9)	18(17.8)	5(5.0)	12(11.9)	3(3.0)
Appearance	0	0	0	0	3(3.0)	10(9.9)	15(14.9)	14(13.9)	7(6.9)
Speech	0	0	0	0	6(5.9)	11(10.9)	14(13.9)	16(15.8)	2(2.0)
General Health	0	1 (1.0)	0	0	9(8.9)	12(11.9)	11(10.9)	10(9.9)	6(5.9)
Breath odor	0	1 (1.0)	1 (1.0)	0	5(5.0)	14(13.9)	11(10.9)	11(10.9)	6(5.9)
Comfort	0	0	0	0	7(6.9)	5(5.0)	17(16.8)	15(14.9)	5(5.0)
Sleep(psychological aspect)	0	0	0	1 (1.0)	6(6.0)	7(7.0)	14(14.0)	18(18.0)	3(3.0)
Confidence	0	0	1 (1.0)	1 (1.0)	6(5.9)	4(4.0)	18(17.8)	11(10.9)	8(7.9)
Worky	0	0	0	0	8(7.9)	11(10.9)	14(13.9)	14(13.9)	2(2.0)
Mood	0	0	1 (1.0)	0	6(5.9)	10(9.9)	8(7.9)	16(15.8)	8(7.9)
Personality	0	0	1 (1.0)	1 (1.0)	8(7.9)	8(7.9)	13(12.9)	11(10.9)	7(6.9)
Social life	0	0	1 (1.0)	0	4(4.0)	6(5.9)	12(11.9)	13(12.9)	13(12.9)
Romantic relation	0	0	0	0	12(11.9)	5(5.0)	10(9.9)	13(12.9)	9(8.9)
Smiling	0	0	1 (1.0)	0	10(9.9)	7(6.9)	10(9.9)	16(15.8)	5(5.0)
Work	0	0	0	0	10(9.9)	8(7.9)	13(12.9)	11(10.9)	7(6.9)
Finance	0	0	0	1 (1.0)	8(7.9)	11(10.9)	17(16.8)	6(5.9)	6(5.9)