

## Scaling Life Events – And Impact of Psychosocial Factors on Oral Health in Helping Hand Women Welfare Society.

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**Abstract:** The awareness regarding the women's health has increased nowadays. A study was conducted in helping hand society BHEL to assess the oral conditions of widow women who worked there to earn their livelihood. All the subjects present on the day of examination were included in the study (100). Subjects were assessed for stress with the help of a scale i.e. perceived stress scale. The results indicated high stress in most of the subjects. Subjects were found to have attrition (95%). TMJ disorder and oral mucosal lesions were found to be statistically significant. Other disorders found were psoriasis and lichen planus.

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### I. Introduction

During the last decades there has been an increased recognition of the need to have a national response to issues that focus on women's health which involves all the sectors i.e. government, scientific communities, clinicians and the public. There has been an awareness of the insufficient attention given to gender differences, to the barriers in accessing health care services, to inadequate funding and lack of focus on women's health issues in public health arena. This has also led to the increased focus on the broader scope of health i.e. psychosocial factors and especially their effect on women.

Good health is a major resource for social, economic and personal development. Political, economic, social, cultural, environmental, behavioral and biological factors can enhance or impair health. The life-style situations have been concerned as correlates of oral diseases.<sup>1</sup> The literature relating life events and stress,<sup>2</sup> especially death of the spouse appears to be most crucial for women. Widowhood is regarded as one of the most painful of all life events. It has a strong impact on social and personal adjustment, health and life satisfaction of a person.

Widowhood may compel women to acquire new positions involving major change in a women's role both in family and society. She has to enact all the roles of her better half, like role of a wage earner or the role of leading a frugal life or so forth. In the scenario of present day India with the advent of modernization and technological advancement, the problems of widows still remain the same and thus can lead to intense frustration amongst them, resulting in depression and other forms of adaptive behaviour.<sup>3</sup> Profuse studies have demonstrated that the health of individuals from the lower end of the socioeconomic scale is markedly worse than that of individuals from the upper end. This relationship exists across a broad range of health indicators, including dental health. While a number of explanations of the link between social status and health have been suggested, the Black Report (1, 2), a comprehensive and widely cited assessment of the evidence, ascribed these inequalities to differences in standards of living. Emotional stress is found to be a more effective stimulus on the health of the organism than physical stress. Psychosocial factors are important in maintenance of health, in the origin of disease, and assessing care and also in relation to the response to treatment, satisfaction with treatment, and the treatment outcome. Thus the present study aims to analyse the association of perceived stress with oral health and to assess the oral health status of the workers of helping hand women welfare society B.H.E.L Bhopal.

**Materials and Method** The study was conducted in helping hand women welfare society, BHEL, Bhopal. The society is run by the B.H.E.L (Bharat Heavy Electricals Limited) and the work is also assigned by them. All the workers of the society were included in the study which made up to sample size of 100 women. The workers of the society were widow women who were working in 2 shifts. Informed consent was taken from the subjects.

WHO dentition status and Tooth wear Index given by Smith and Knight was recorded along with the perceived stress scale. The *Perceived Stress Scale* (PSS) is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. It was designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes a number of direct queries about current levels of experienced stress.

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

All the subjects were asked above questions considering how often they felt or thought that way over the past month (Never, Almost Never, Sometimes, Fairly Often, or Very Often) <sup>6</sup>

## II. Results

The mean age of the participants was 46 yrs. The prevalence of attrition in the study population was 98% which was alarmingly high [Table 1]. The mean DMFT score was 3.39. Stress was found to be associated with oral mucosal lesions and tmj disorders(P<0.001).

**Table:2 Tooth wear index(Smith and Night) scores of the subjects**

Scores	No. Of. Subjects Affected	Percentage Of Affected Subjects
0	2	98%
1	28	
2	31	
3	21	
4	18	

**Table:3 Distribution of subjects according to the total scores of the scale for perceived stress.**

Total Score	Perceived Stress Level is:	Health Concern Level	No.of subjects
0-7	Much Lower than Average	Very Low	0
8-11	Slightly Lower than Average	Low	0
12-15	Average	Average	18
16-20	Slightly Higher than Average	High	29
21 andover	Much Higher than Average	Very High	53

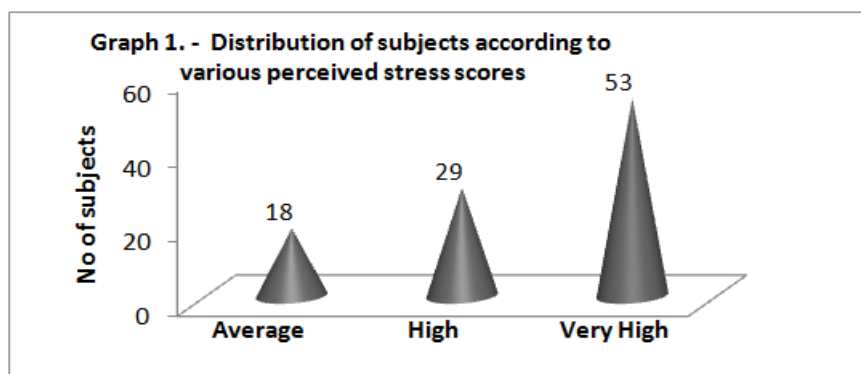
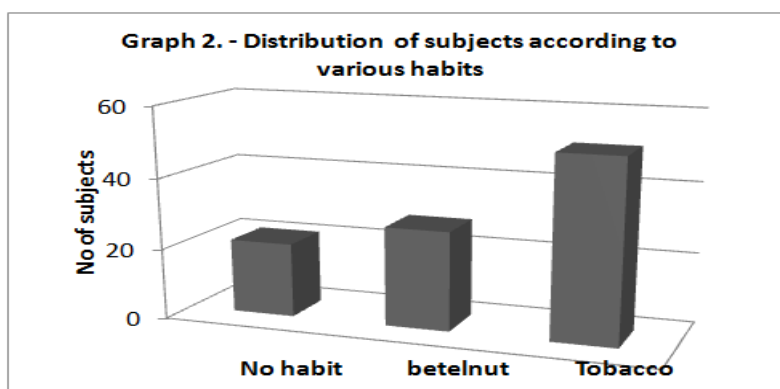


Table: 3 and graph:1 shows the distribution of subjects according to the various scores .results showed that 18% of the subjects answered =sometimes, 29% answered = fairly often and 53% answered =very often which shows that 53% of the subjects were under stress very often.



Most of the workers had the habit of chewing either betel nut, or tobacco or both. This may be attributed as the way to divert their minds and release their stress. Graph 2. Shows that 28% of the workers had the habit of chewing betel nut and 51% chewed tobacco with or without betel nut out. Some of the subjects (27) were also found to have psoriasis and lichen planus which are also considered to to stress induced.

### III. Discussion

In the present study stress was found to be associated with the oral mucosal lesions and the TMJ disorders. According to the scale recorded for the stress all the subjects had the scores indicating stress level to be average, high and very high. Attrition was recorded in 98% of the workers which can be attributed to the chewing habits prevalent among the workers. Stress has also been considered in relation to bruxism.

A study conducted by Westrup et al investigated the relation between arousability as measured by the Arousal predisposition scale and bruxism in undergraduates. The results indicated significant differences for the women bruxers and non-bruxers. The data did reinforce the need to consider gender when attempting to identify psychologic variables.<sup>7</sup> A cross sectional study conducted by Carvalho et al aimed to assess the prevalence of bruxism and emotional stress in Brazilian police officers, due to exposure to stressful situations, and to assess the relationship between the type of work done by a police officer and the presence of emotional stress. The results showed a prevalence of emotional stress of 45.7% which was 100% in the present study.<sup>8</sup> A study conducted by da Silva AM et al<sup>9</sup> investigated putative relationships between psychosocial factors and tooth wear, comparing 45 patients exhibiting tooth wear with a significant component of attrition to 45 controls. Subjects completed the Modified and Perceived Stress Scale and the State-Trait Anxiety Inventory. The results indicated that the two groups did not differ significantly on the combined psychosocial factors but a univariate F-test showed that tooth-wear patients presented significantly more trait anxiety than controls which was also found in the present study.<sup>9</sup> Emotional factors (e.g., anxiety, fear, frustration, and anger) play a significant role in the etiology of TMJ disorders, in that they elicit muscular tension and oral habits. Although it would appear unlikely that emotionally induced muscle activity is a "necessary" factor, it is probable that it will be found a "sufficient" cause for TMJ disorders. Learning principles, should not be considered as an alternative etiological position but should be viewed as a framework upon which any psychological theory of etiology must be based.<sup>10</sup>

Elevated emotional stress has been associated with TMJ dysfunction-pain syndrome. Research on sex differences in response to emotional stress in all mammals indicates that the male animal is much more sensitive to stress than the female animal. The reason why more men do not have TMJ dysfunction, although they have higher stress levels, is that they have more non oral tension-relieving mechanisms available to them than women have in our society. Bruxism causes longer and more powerful contact of teeth than chewing, and malocclusion can trigger bruxism in its simplest form or can cause more complicated condylar displacements.<sup>11</sup>

### IV. Conclusion

The present study indicates that there is a strong relationship of psychosocial issues and oral health. However, many life events are so stressful that they effect the oral health of the person and should be considered important by the oral health professional. Widows should be encouraged and given opportunities in the society through which they can earn their livelihood and withstand their family responsibilities. Their should be intervention programs specially designed for them and provide such environment by the family members and society where they do not repress much.

Although the role of psychosocial issues have not been defined fully, the evidence seems compelling that a better understanding of these aspects will add an important dimension to total patient care, particularly for dental patients who are women.

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