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# Incidence of Stress Associated Bruxism among Females at BUITEMS $_{\tt Khan NT^{\star}}$

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#### Abstract

Bruxism is a habit of grinding or crunching of the teeth causing irreversible damage to the teeth periodontium masticatory muscles and temporo-mandibular joint. Pain, tooth wear, increased tooth sensitivity are some of its clinical signs. Factors such as work related stress, anxiety, depression and personality traits have been found to increase its progression.

### Keywords: Stress; BUITEMS; Bruxism

# Introduction

Bruxism is defined as the grating or scrunching of the teeth in the time of sleep less frequently during the day [1]. It was reported that bruxism is persistent trait with genetic effect in both childhood and adult ages as according to a study it was revealed that genetic bruxism in childhood was 64% in females and for adults 53% among females [2]. This disorder may be adopted by the other family members because it has its own types of influence on the family members such as the disturbance and irritation and it is hard to sleep near beloved one due to the irritating noise produced by the excessive teeth grinding. The anecdotal evidence concludes that teeth grinding and clinching is inherent and this disorder is found in more than one family member [3]. Bruxism is a common state and the majority of the people at some point in their life will grind or clench their teeth. This state decreases with age and it is detected as a neutral spreading. In most cases is known when the patient goes for the first time to the dentist. One of its most clinical signs is the abnormal tooth wear initiated by teeth grinding and clenching. This is not a key sign for bruxism because tooth wear can occur when eating acidic foods or by incorrect tooth brushing. Other clinical symbols are teeth fractures and fillings root fracture, tooth mobility pain hypertrophied facial muscles and compact capability to open the mouth upon awaking every day, headaches basically in the temporal muscle region [4,5]. Bruxism is mostly associated with stress thus raise concerns about the future of these individuals. Therefore efforts should be done to raise awareness regarding this dental issue which is mostly ignored and is not recognized as a dental problem [6,7]. The purpose of this study was to find out the incidence of bruxism among undergraduate females at BUITEMS.

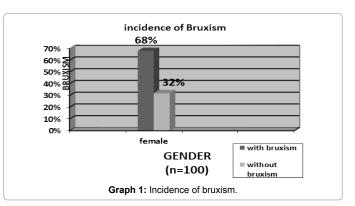
## Materials and Methods

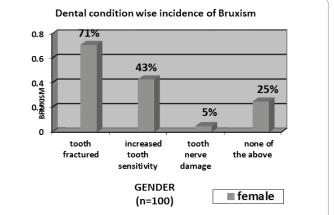
This study was conducted among the undergraduate female students currently enrolled in different departments at Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS) selected at keeping the sample size 100. Study was conducted with the help of a questionnaire designed to find correlation between emotional stress and bruxism. Data was statistical analysed using Microsoft excel.

## Results

Graph 1 depicts the incidence of bruxism among the undergraduates females indicating higher incidence rate (68%) in females undergraduates out of the total n=100.

It was found that the female undergraduates that had prominent fractured or cracked tooth mainly suffers from Bruxism as indicated in Graph 2.





Graph 2: Dental condition wise incidence of bruxism among the female students.

Graph 3 depicts the incidence of stress among the female undergraduates and it was found to have higher incidence rate (66%) out of the total n=100.

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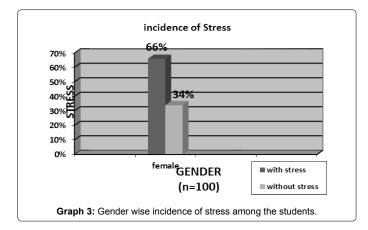
Graph 4 shows the association of bruxism with stress among the female undergraduates. As 68% females that were identified with symptoms of bruxism also suffered from stress.

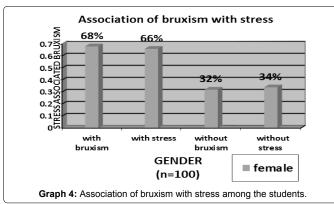
## Discussion

Etiology of bruxism is may be due to a lot of psychological and medical reasons but stress was found to be one of the most crucial contributing factors in provoking bruxism in females. Obtained result suggested that 68% of females diagnosed with bruxism were also suffering from stress. Numerous reasons were highlighted causing increased level of stress among the studied females such as work load; academics, social factors etc. were associated with bruxism [8]. The study of bruxism was commonly based on the presence of common signs and symptoms such as tooth wear which was found in 71% of the females. However maximum natural cause of bruxism that leads a person to pursue health or dental guidance is being informed by sleeping partner of cold grinding noises during sleep or the surrounding people if bruxism occurs during the day time. The analysis of bruxism in terms of stress revealed that a correlation exist between them and responsible for their progression [9]. However there were a number of limitations in this study such as medical history of the patients were not included, other sociocultural issues of the studied females were not known etc. Therefore it is recommended that a detailed clinical analysis should be carried out, probably electroencephalography if an attack disorder is doubted. However, self-reporting is an accepted mode of evaluation as it will help to establish effective preventative measures or treatments.

## Conclusion

Bruxism was found to be prevalent among females that were under stress. Therefore consideration should be given to this dental





issue otherwise may lead to numerous disorders such as facial pain, neurological diseases and obstructive sleep apnoea.

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