Prevalence of Bruxism among Pregnant Patients of Lahore

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Abstract

The study aimed to explore the prevalence of bruxism in pregnant patients in public dental hospital of Lahore. This survey research was conducted in Public sector dental hospital by collecting data from 75 pregnant patients. Percentages were calculated to explore the prevalence of bruxism among pregnant patients. From data analysis, it was revealed that patients coming to the public dental hospital who had the history of bruxism before pregnancy were 50.7% whereas it rose to 67% who experience bruxism during pregnancy. In conclusion, this showed that pregnancy changes also elevate the bruxism experiences.

Key words: Pregnancy, Bruxism, Teeth grinding, Masticatory system.

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INTRODUCTION

There are two types of masticatory system activities. One type is called functional type which includes mastication, phonation, whereas the second type is called parafunctional type which comprises of teeth clenching or grinding (known as bruxism). Parafunctional activity may include hyperactivity of muscle [1]. Bruxism is deliberated as pathological being if linked with unintentional mandibular movement (sliding). Clenching of teeth or teeth grinding up to the level of causing harm to the stomatognathic system is habitual practice in bruxism [2]. In temporomandibular joints, severe sliding motions, gross attrition on the edges of incisors as well as on the posterior teeth cusps, involuntary contraction of pterygoid muscles and teeth grinding sound during night sleep [3, 4].

Bruxism prevails in young individuals with an age ranges from 18 to 29 years was 13% [5]. In Brazil, this percentage of bruxism was found as 31.6% among undergraduate students [6]. Numerous studies have found a correlation between temporomandibular disorders and bruxism as they work in vice versa conditions in terms of triggers [7, 8]. In Pakistan, according to the Khan et al., 58.3% patients who visited dental hospital in Peshawar reported bruxism [9].

No literature was cited related to the prevalence of bruxism among pregnant patients in Lahore. Thus, the study aimed to explore the prevalence of bruxism in pregnant patients in public dental hospital of Lahore.

METHODOLOGY

Research design: Descriptive Survey research
Sampling technique: Convenient sampling
Sample Size: 75 pregnant patients were taken as the sample of the study.

Procedure

After taking the permission from the Medical superintendent of the hospital, data was collected from the patients. Before collecting data from the pregnant patients, information about the research was briefed and then consent form was got signed from each participant. Questions were asked about whether they had ever experience night grinding or not as mentioned by other family members and whether they are experience night grinding or not during pregnancy as mentioned by other family members.

DATA ANALYSIS

Data was analyzed using SPSS version 20.0. Descriptive statistics (Percentages) were used to explore the prevalence of bruxism among pregnant patients.

RESULTS

As demographic variable, age of the pregnant females was taken to make two groups. Pregnant patients in group A had an age ranges from 18-27 which
were 46.7% whereas 53.3% of sample was from group B with an age ranges from 28-37.

From data analysis, it was revealed that patients coming to the public dental hospital who had the history of bruxism before pregnancy were 50.7% whereas it rose to 67% who experience bruxism during pregnancy.

### Table-1: Percentage of bruxism experience before and during pregnancy

|                                   | No      | Yes     |
|-----------------------------------|---------|---------|
| History of Bruxism before pregnancy | 37(49.3%) | 38(50.7%) |
| Bruxism experience During Pregnancy      | 18(24%)  | 57(76%) |

### DISCUSSION

This study aimed to explore the prevalence of bruxism in pregnant patients. The finding of this study explored that if a female has the history of bruxism before pregnancy, there is more change of experiencing bruxism during pregnancy. In this study, the pregnant patients with history of bruxism were 50.7% which raised to 76% who were experiencing bruxism during pregnancy. In a previous study conducted in Brazil showed that 31.6% students with age ranging from 18-29 years [6] which was quite high among pregnant patients 76%.

In Pakistan, according to the Khan et al. [9], 58.3% patients who visited dental hospital in Peshawar reported bruxism which was lower than the patients reported history of bruxism in present study 50.7% whereas among pregnant patients it was quite higher during pregnancy, i.e., 76%.

In conclusion, this showed that pregnancy changes also elevate the bruxism experiences.

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