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Research Article

KNOWLEDGE AND AWARENESS AMONG MIDDLE AGED ADULTS REGARDING BRUXISM

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ABSTRACT

Aim: The aim of this review is to discuss the effects of bruxism and its therapeutic approaches for treating bruxism.

Objective: The objective here is to underline the effects of bruxism on various structures including the dentition and peri oral structures. This review attempts to provide various treatments for bruxism as well as managing its effects as it is one of the most prevalent diseases and estimated to be present in about 65% of the individuals.

Materials And Methodology: The present study is a cross sectional survey where a questionnaire consisting of 14 questions were distributed to 100 individuals of age group 25-40 and the results were further evaluated. **Background:** Bruxism is the clenching and grinding of the teeth. It is the commonest of the many parafunctional activities of the masticatory system. The etiology is not fully known but that it is probably multifactorial or due to repressed aggression, emotional tension, anger, fear, and frustration. Bruxism can lead to dental wear, jaw muscle pain and fatigue, and temporal headaches, and in some severe forms can compromise oral functions such as chewing, speaking, and swallowing.

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INTRODUCTION

Bruxism is an oral movement disorder that is characterised by grinding or clenching of the teeth. The disorder may occur during sleep as well as during wakefulness, and has an estimated prevalence in the general adult population of approximately 8–10% (1). Activities of the masticatory system can be divided into two types: Functional, which includes chewing, speaking, and parafunctional, which includes clenching or grinding of the teeth (referred to as bruxism). Parafunctional activity is also known as muscle hyperactivity. The functional activities are very controlled muscle activities, which allow the masticatory system to perform necessary functions with minimum damage to the structures of this system. However, some interfering tooth contacts have inhibitory effects on functional muscle activity. Therefore, functional activities are considered to be directly influenced by the occlusion (2). Bruxism can lead to dental wear, jaw muscle pain and fatigue, and temporal headaches, and in some severe forms can compromise oral functions such as chewing, speaking, and swallowing (3). However, no direct relationship has been observed between the type of bruxism, the severity, and the presence of additional clinical signs and symptoms. In fact, it has been reported that patients with frequent sleep bruxism are less prone to complain about fatigue and pain in the

masticatory muscles than the patients with fewer masticatory events per night (4).

MATERIALS AND METHODS

The present study is a cross sectional survey where a questionnaire consisting of 14 questions were distributed to 100 individuals of age group 25-40 and the results were further evaluated.

Classification of Bruxism

Bruxism may be classified according to several criteria:

By when it occurs: (5)

Awake Bruxism: This is presented when the individual is awake.

Sleep Bruxism: This is presented when the individual is asleep.

Combined Bruxism: This is present in both situations.

By etiology:(5)

PRIMARY BRUXISM: For which no apparent cause is known.
SECONDARY BRUXISM: Secondary to diseases (coma, icterus, cerebral palsy). Medicinal products (e.g. antipsychotic medication, cardioactive medication) Drugs (e.g. amphetamines, cocaine, ecstasy).

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By motor activity type

TONIC: Muscular contraction sustained for more than 2 s
 PHASIC: Brief, repeated contractions of the masticatory musculature with three or more consecutive bursts of electromyographic activity that last between 0.25 and 2 s apiece
 COMBINED: Alternating appearance of tonic and phasic episodes.

By severity: (6)

MILD as occurring less than nightly, with no damage to teeth or psychosocial impairment
 MODERATE as occurring nightly, with mild impairment of psychosocial functioning; and
 SEVERE as occurring nightly, and with damage to the teeth, temporomandibular disorders and other physical injuries, and severe psychosocial impairment.

Epidemiology

The ICSD-R states that 65-70% of the general population grind their teeth to a degree at some point during their life, although only 5% will develop a clinical condition (7). Studies have reported that awake bruxism (AB) affects females more commonly than males (8), while in sleep bruxism (SB), males are as equally affected as females.(7,9)

A 2013 systematic review of the epidemiologic reports of bruxism concluded a prevalence of about 22.1–31% for AB, 9.7- 15.9% for SB, and an overall prevalence of about 8–31.4% of bruxism generally.

The review overall concludes that bruxism affects males and females equally and affects elderly people less commonly (10).

RESULTS

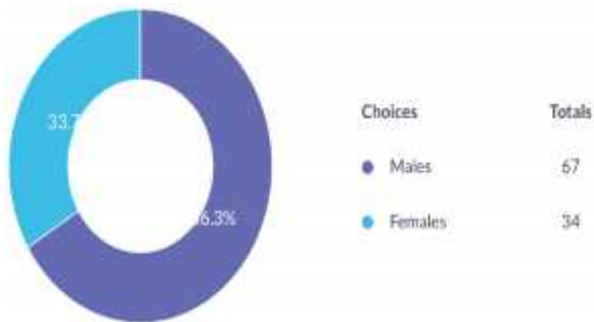


Fig1 Prevalence of bruxism

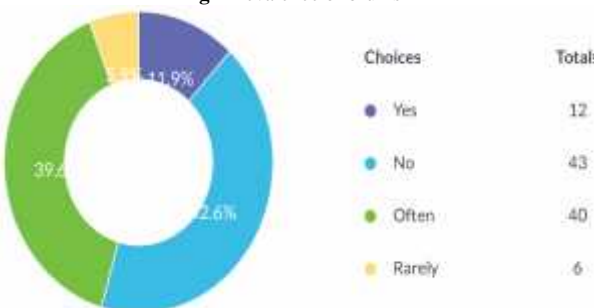


Fig 2 Number of people grinding teeth while sleeping



DISCUSSION

The results of present study concluded that majority of the responses were aware of Bruxism. According to the survey the statistical analysis showed that 86% of the people are aware of Bruxism. Males have more prevalence to Bruxism than females. 40% of the individuals grind their teeth while sleeping and 36% of the individuals grind their teeth in anger. Thus, studies should use methodological criteria that qualify the evidence, including tools such as randomisation, sample size calculation, calibration, blind- ing and control of involved factors (11). The prognosis for bruxism is variable depending on the severity and duration of the factors producing arousals during sleep (12).

CONCLUSION

Dentistry has been increasingly inserted into a context based on scientific evidence. In addition, epidemiological studies on sleep bruxism should use standardized and validated diagnostic criteria. However there is a need to create awareness on behavioural modifications and relaxation techniques for holistic management of Bruxism. Bruxism should not be considered as an isolated, anatomic dental problem. Instead, it may be more accurately categorized as a sleep-related disorder with dental and masticatory muscle implications.

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