

Prevalence Of Temporomandibular Disorder

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Abstract

Aim :-The aim of the present study was to determine the prevalence of Temporomandibular disorders (TMD) among students of RCDS & RC Bhopal (M.P.)

Material&Methods:-Data was collected through a specifically designed questionnaire and then the collected data was analysed using SPSS software

Results:-The results of the study concluded that the overall prevalence of both TMJ sign and symptoms in the student population was 12.2% while the remaining 87.8% Students were asymptomatic.

Conclusion - Prevalence of TMD's was not very high in among the student population of RCDS&RC. But the most common symptom given by the population was unilateral clicking sound ,further investigations to identify risk factors associated with TMD in order to establish measures for prevention and treatment is required

Date of Submission:01-08-2024

Date of Acceptance: 10-08-2024

I. Introduction:-

Temporomandibular joint disorder (TMD) represents a common health problem [1].The disorders discrepant group of musculoskeletal and neuromuscular condition which affects the temporomandibular joints complex and the muscles and bony structures that surrounding it [2]. TMD can affect any patients regardless of age including children or gender with varying signs and symptoms. However, due to the variation in symptoms among different patients and in the same patient at different times, the diagnosis of this clinical entity may be difficult [3, 4]. According to Ali H. Alrizqi et. Al study following are the causes for the TMJ disorder [5]:

1. Oral parafunctions and Temporomandibular disorders (TMD) are common issues in contemporary society. The muscles, occlusion, and periodontium are associated with the etiopathology of the TMJ.
 - 2.The psycho- emotional element is shown to have a considerable influence in the literature, associated with the effects of other physical health-related variables such as systemic disorders, malocclusions, tooth loss, traumas, and microtrauma
 3. Stress, exhaustion, anxiety, despair, trouble sleeping, and a fast-paced lifestyle have a negative impact on the human psyche.
 4. The age of this group is another characteristic that predisposes to the development of masticatory system problems in students since symptoms peak between the ages of 20 and 40. Women of breeding age are the majority of TMD sufferers.
 5. Women experience the signs of masticatory system abnormalities more often than men. This might be brought on by hormonal changes in biology and psychological variables.
- The OPPERA (Orofacial Pain: Prospective Evaluation and Risk Assessment (OPPERA)) investigations.This investigation says that Crossbite, maximal intercuspal instability, and Class II malocclusion have all been linked to increased probabilities of TMD [6 , 7].

II. Methods And Materials :-

We perform one survey using a specific questionnaire to evaluate the the prevalence of TMJ disorder in the student of Rishiraj college of Dental Science and Research Center,Bhopal M.P.

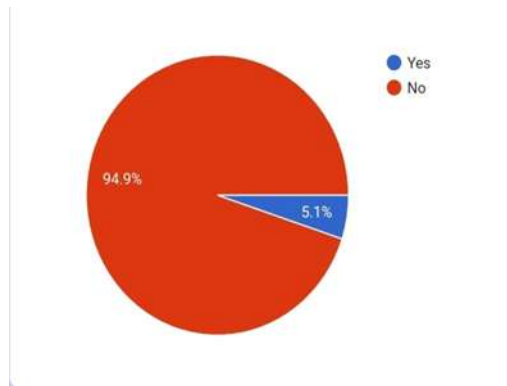
A total number of 237 students were asked to fill a questionnaire [69 male and 168 female, the range of age is 17 Year to 29 year.] Were selected, and answer the questionnaire.

Procedure:-

The questionnaire consisted of 9 questions. The volunteers were informed that the 9 questions should be answered with “yes”, “no” and “sometimes” and that only one answer should be marked for each question. There was no time limit for completion. That way, there would be no reasons for the subjects to give induced answers.

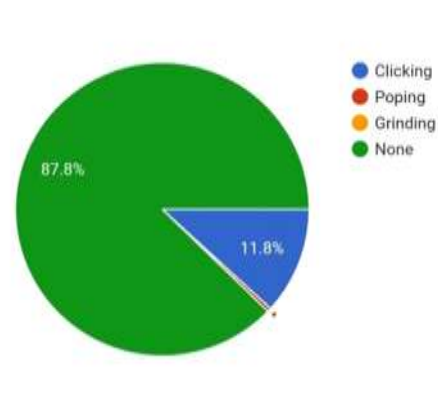
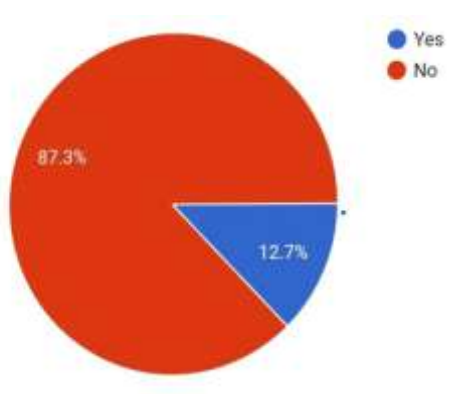
III. Data Analysis AndResult

About 94.9% of the students were Asymptomatic and only 5.1% Student had joint pain. Majority of the patient were asymptomatic

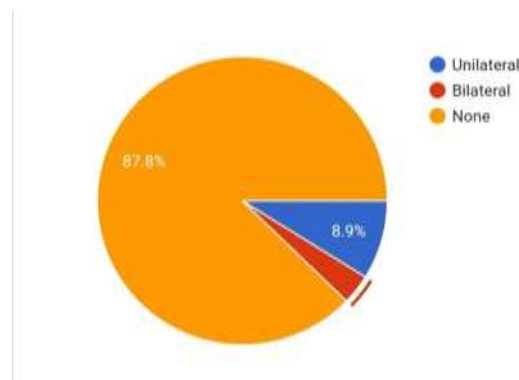


Only 12.7 % Students experience tmj noise whereas 87.3% not experience tmj noise.

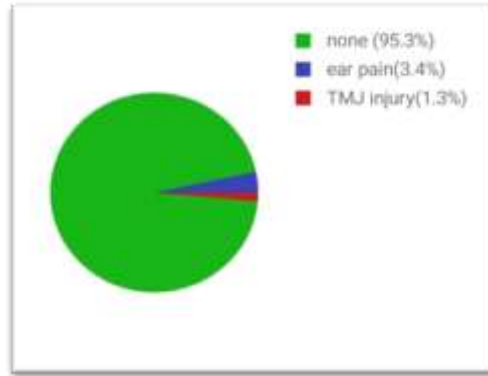
11.8% Students experience clicking sound and 0.4 % Students experience popping sound and none of the students grinding sound. About 87.8% individuals do not experience any type of noise. Thus indicating that most of the students experienced clicking sound.



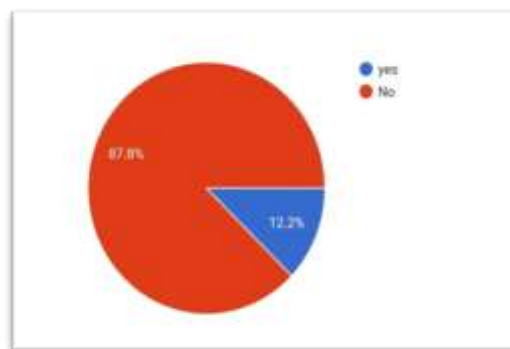
About 87.8% Students do not experience pain and noise and only 8.9% Students have unilateral and 3.4% Students have pain and noise.



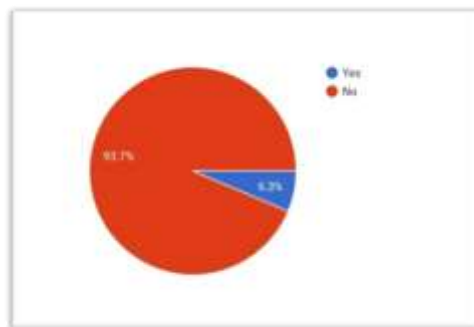
That means unilateral pain and noise is more common than bilateral noise and pain. About 95.3% Students have no history of TMJ disorder whereas 3.4% Students have a history of ear pain and only 1.3% Students have history of TMJ injury. Thus indicating that most of the tmj disorder are idiopathic in origin.



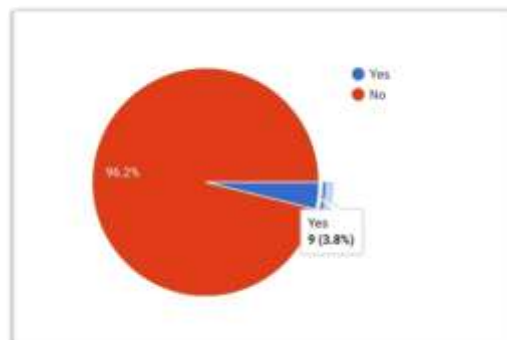
87.8 % Students had no history of clenching/ grinding their teeth and only 12.2% Students clenching / grinding their teeth.



93.7% Students have no history of any other joint pain of the body and only 6.3% Students experience other joint pain of the body.



About 96.2% Students do not feel any difficulty in opening the mouth in the morning as 3.8% Students experience difficulty in opening the mouth when they wake up in the morning.



IV. Discussion

This study aimed to assess the prevalence of TMD in the student population of RCDS&RC. According to the previous studies, the prevalence of TMD ranged from 30%-50%. However, some studies found prevalence out of this range, either higher or lower, in our study also only 12.2% of the population was symptomatic. A Brazilian study that evaluated TMD prevalence among preparatory school students showed a very high prevalence (89.8%) of TMD. This high percentage might have been due to the habits of the participants recruited for the study, as most (95.4%) had parafunctional habits [8]. Another study in India assessed TMD prevalence among health and science students, finding the disease in 97% of the study sample; this is a very high rate compared with our and other studies evaluating TMD prevalence [9]. This high prevalence of TMD might have been due to stress among college students, which may lead to an increase in the incidence of TMD. Generally, females exhibit a greater prevalence of TMD than males. The exact reason behind this remains unknown. The same was observed in our study as well. However, United Arab Emirates studies have indicated that males have a higher TMD prevalence than females, which might indicate that ethnicity influences TMD prevalence [10].

A Spanish study mentioned that the rural population had a higher TMD prevalence than urban residents, which is the opposite of what a Norwegian study concluded. Urban life can be stressful and busy due to multiple factors, such as hectic road traffic and exhausting work, which lead to distress. On the other hand, rural life is often peaceful, relaxed, and non-stressful, which contributes to decreasing the incidence of TMD [11-13].

V. Conclusion

Prevalence of TMD's was not very high in among the student population of RCDS&RC. This finding was not in accordance to the studies done previously. The most common symptom given by our study population was mild pain and unilateral clicking sound, further investigations to identify risk factors associated with TMD in order to establish measures for prevention and treatment is required. Also we intend on continuing our survey by increasing the number of participants as we feel that our sample size was not adequate, and then again analyse the results.

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