

Analysis of Different Symptoms Associated with Temporomandibular Joint Complaints

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Abstract

Objective: To determine the frequency of symptoms of patients who have TMJ discomfort. **Materials and Methods:** An electronic questionnaire in the Google platform and distributed to people with temporomandibular joint disease. **Results:** 420 responses were obtained. 312 people indicated they were tense or nervous and 219 people answered they had headache, and 207 indicated having a problem in the joints. 183 people answered they heard noises in their TMJ while chewing or opening their mouth. 78 patients followed up their symptoms for further investigation and treatment. **Conclusion:** A high frequency of individuals experiences TMD symptoms.

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Introduction

The Temporomandibular Joint (TMJ) is amongst most complex, fragile and frequently used joints in the body, connecting the jaw to the skull via muscles, ligaments and tendons. The temporomandibular joint is very susceptible to abnormalities or disorders due to its unique anatomical and functional relationship with the masticatory muscles and ligaments. The term "temporomandibular disorders" (TMD) refers to a variety of medical conditions that affect the oral muscles and/or joints and tissues. TMD is more frequently occur in female than male and occurs most often in adults between the ages of 20 and 40. TMD shares symptoms with many other chronic conditions. Problems with the functioning of the activity of this system explain complexity of the system itself. Although many treatments are recommended, a multidisciplinary team is still necessary because TMD is a complex disease.

Temporomandibular disorders (TMD) typically manifest through a wide range of symptoms, such as pain, limited jaw movement, abnormal joint sounds, and functional difficulties including problems with chewing and speaking. These are frequently associated with psychological disturbances.

The most prevalent types of temporomandibular disorders have complicated and mainly unresolved etiologies. Although psychogenic factors have been mentioned, they are frequently viewed as aggravating rather than causative factors for temporomandibular disorders, like trauma and malocclusion. As a result, it has been hypothesized that only a subset of patients who are predisposed to temporomandibular disorders will experience pain and dysfunction after an aggravating event like a recent physical or psychological trauma. This raises the possibility of an underlying genetic predisposition to TMD, though this remains a mystery [1-3].

Patients with temporomandibular disorders frequently report a variety of nonspecific symptoms, including headaches, earaches, tinnitus, neck, and shoulder pains; however, since these symptoms are not thought to be specifically diagnostic for temporomandibular disorders, other causes should be looked for and ruled out [4,5].

TMD treatment depends on a proper diagnosis, which in turn needs the patient's medical history, a clinical examination, and the right investigations to add to the information needed to confirm the diagnosis [1].

Orofacial pain, joint noises, limited mouth opening, or a mix of these, along with other less specific issues like headache and tinnitus, may be the main complaint. It is important to consider how the pain interacts with other characteristics like joint noise and limited mandibular movements. Pain should be carefully assessed in terms of its onset, nature, intensity, site, duration, aggravating and relieving factors, and more. Additionally,

during the consultation, it is necessary to confirm any underlying factors like stress, anxiety, depression, or a major life event to develop a better picture of the psychogenic basis of the temporomandibular disorder. In general, the likelihood that a patient will react favorably to additional treatment decreases with the length of the symptoms and the number of treatments, particularly "failed treatments," unless a psychogenic cause can be identified [5,6]. TMD classification can be generally divided into two categories: extra-articular (affecting the surrounding tissues) and intra-articular (occurring within the joint) [7].

The patients with TMDs often have onset of their symptoms during periods of psychological stress (i.e., anxiety) and exacerbation of symptoms during periods of stressful situations. Myofascial pain is a symptom usually precipitated by stress and is usually noticed aggravated during the exams period among the University students [8].

Temporomandibular joint (TMJ) clicking was the most common indication and symptom of TMJ dysfunction 73.6%, followed by TMJ pain 71.8%, Headache 59.4%, Bruxism 51.3%, Deviation 29.1%, Trismus 22.6% and the least one is Dislocation 12.3% however, no significant difference between females and males, while there was significant difference with deviation and highly significant difference with headache between females and males [9].

Materials and Methods

An electronic questionnaire was conducted on the Google platform. The questionnaire was circulated on 21/2/2024. All people spoke Arabic.

420 responses were obtained and participants ranged from 20 to 60 years of age.

Results

Table 1 summarizes the frequency of answers.

312 people answered they were tense or nervous. 219 people answered yes for headache and 207 had problem in the joints. 183 people said yes for noise in their TMJ while chewing or opening their mouth. 78 patients chose to follow up for further investigation and treatment.

Discussion

We found the biggest number of patients considered themselves nervous and this agrees with previous work [10].

When TMD and headache occur together [11], the treatment of one may have a beneficial therapeutic effect on the other as well. From the 78 patients who came to teaching clinic for follow up, 42 patients had headaches, and 3 patients had been diagnosed previously with migraines and were under medication. Malocclusion is also associated with TMD [12]. 60% of the respondents visited the clinic for orthodontic treatment.

We found that 39.3 of responders had pain and previous work showed that 59.09% of patients have pain [13]. Neck pain was found in 38.3% of the responders in this study and previous work [14] showed a higher frequency (70%).

Ethical Approval

Scientific research ethics committee of Al-Bayan Dentistry College 2023-0S003/21/9/2023.

Conflict of Interest

None.

Data Availability

The raw data collected by the researcher from which the statistical analysis obtained was saved completely and can be forward at any time under your request.

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Table 1. Questionnaire used.

Questionnaire questions	No (%)	Yes (%)
Do you have difficulty in opening your mouth wide?	78.6	21.4
Do you have difficulty moving your jaws to the sides?	85.6	14.4
Do you feel tired/ have muscle pain when you chew?	60.7	39.3
Do you have frequent headaches?	47.8	52.1
Do you have neck pain / stiff neck?	61.2	38.3
Do you have earaches or pain in that area (TMJ)?	68.8	31.2
Have you ever noticed any noise in your TMJ while chewing or opening your mouth?	56.4	43.6
Do you have any habits such as clenching/grinding your teeth?	66.4	33.6
Do you feel that your teeth do not articulate well?	50.7	49.28
Do you consider yourself a tense (nervous person)?	25.7	74.2