

## A multidisciplinary approach to temporomandibular disorders (TMD): The role of physical therapy

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Sir,

The temporomandibular joint (TMJ) serves as a crucial component of the musculoskeletal system, enabling essential functions like chewing, speaking, and swallowing.(1) Temporomandibular disorders (TMD) are a musculoskeletal conditions that affect the TMJ, masticatory muscles, and associated structures.(1) These conditions represent the most prevalent chronic orofacial pain ailments, affecting a significant portion of the population in Pakistan, with a prevalence rate of 44.3%.(2) Consequently, TMD lead to discomfort and a reduced quality of life.(1) Common TMD symptoms include pain in TMJ and muscles of mastication, limited mouth movements, joint sounds, and headaches.(1) To effectively manage TMDs, a multidisciplinary approach is vital, and physical therapy (PT) stands out as a non-invasive, highly effective treatment. PTs possess the ability to identify the musculoskeletal factors contributing to TMD symptoms and administer manual therapy, jaw exercises, and postural re-education. Systematic reviews have consistently shown the effectiveness of these treatments in alleviating TMD pain and enhancing mobility and function.(3-5) However, studies suggest that dentists may not have a comprehensive awareness of the potential benefits of incorporating physical therapy in the management of TMDs.(1)

Another systematic review from 2020 determined the medium- and long-term effectiveness of manual therapy for TMDs. It concluded that manual therapy has a significant positive effect on alleviating pain and improving mouth opening, although the effect may diminish over time.(3) However, when combined with therapeutic exercises, the benefits can be maintained in

the long term.(3) In a recent 2022 systematic review and meta-analysis that scrutinized patients with muscle-related TMDs, the study focused on the impact of rehabilitative approaches for pain reduction. The findings showed the substantial efficacy of rehabilitative approaches in alleviating pain, with laser therapy emerging as the most frequently approach used.(4) In another systematic review published in 2022, the objective was to evaluate the effectiveness of manual therapy for craniomandibular conditions in treating TMDs. The results indicated a significant improvement in both pain reduction and maximum mouth opening.(5) Unfortunately, not all dentists have a complete awareness of the critical significance of physical therapy in the management of TMDs. Therefore, there is a need for enhanced collaboration between dental professionals and physical therapists.(1)

**Keywords:** Craniomandibular manual therapy, Orofacial pain, Temporomandibular disorders, Temporomandibular joint.

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### References:

1. Gadotti IC, Hulse C, Vlassov J, Sanders D, Biasotto-Gonzalez DA. Dentists' awareness of physical therapy in the treatment of temporomandibular disorders: a preliminary study. *Pain Research and Management*. 2018;2018.
2. Wahid A, Mian FI, Razzaq A, Hussain Bokhari Sa, Kaukab T, Iftikhar A, Et Al. Prevalence and severity of temporomandibular disorders (TMD) in undergraduate medical students using Fonseca's questionnaire. *Pakistan Oral & Dental Journal*. 2014;34(1).
3. Herrera-Valencia A, Ruiz-Muñoz M, Martin-Martin J, Cuesta-Vargas A, González-Sánchez M. Efficacy of manual therapy in temporomandibular joint disorders and its medium-and long-term effects on pain and maximum mouth opening: a systematic review and meta-analysis. *Journal of clinical medicine*. 2020;9(11):3404.

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4. Ferrillo M, Ammendolia A, Paduano S, Calafiore D, Marotta N, Migliario M, et al. Efficacy of rehabilitation on reducing pain in muscle-related temporomandibular disorders: A systematic review and meta-analysis of randomized controlled trials. *Journal of back and musculoskeletal rehabilitation*. 2022;35(5):921-36.
  5. Asquini G, Pitance L, Michelotti A, Falla D. Effectiveness of manual therapy applied to craniomandibular structures in temporomandibular disorders: A systematic review. *Journal of oral rehabilitation*. 2022;49(4):442-55.
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