

Disseminating Knowledge About Orofacial Pain— A Huge and Important Challenge

In recent years, the classification of orofacial pain has made great steps forward, starting with the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) in 2014,¹ a publication that describes validated criteria for the most common TMDs. At the same time, a working group published the so-called Expanded Taxonomy,² adding to the DC/TMD with operational criteria for some other orofacial pains to be used in further research. And this spring, the International Classification of Orofacial Pain (ICOP) was published,³ with an even broader focus on diagnosing orofacial pain patients that will be used for research.

The DC/TMD has had a great impact. To date, it has been translated into 17 different languages and spread worldwide. It is used tremendously in research, and some journals, including the *Journal of Oral & Facial Pain and Headache*, even state that these criteria, the International Classification of Orofacial Pain (ICOP), or the International Classification of Headache Disorders (ICHD) should be used in studies submitted for publication. This is excellent, since by using the same criteria we can compare patient cohorts between countries knowing that we are describing the same condition and can also combine data from different cohorts in research.

However, the DC/TMD, as the name implies, is also meant to be used in the clinical setting. A qualified guess is that the majority of specialist clinics for orofacial pain worldwide have now adopted these criteria when diagnosing TMD patients and that these specialists are comfortable using them. This is of course a great achievement—but how is it with general practicing dentists? Do they at all identify and treat patients with orofacial pain in their practice, and do they use the DC/TMD? Some do, of course, and whether they do or not probably depends on many factors, such as their interest and knowledge.

But there is still a great undertreatment of patients with TMDs and other orofacial pains. The prevalence of frequent TMD pain in the population is around 10% and increasing,⁴ while the treatment need has been estimated to be at least 5%. However, we know that many patients with TMD go undetected, and even if detected do not receive adequate treatment. Then, the obvious question to address is: Why is this so?

As specialists, we are well trained in the management of orofacial pain patients, even if this sometimes may also be challenging for us. But—at least in Sweden—the management of orofacial pain patients

seems to be a great difficulty for general dentists who feel insecure in decision-making and may therefore refrain from diagnosing and treating the patient.⁵ This may seem remarkable, given that orofacial pain and jaw function are already taught at dental school; ie, the dental students in Sweden (under supervision) examine, diagnose, and manage orofacial pain patients who are referred for specialist care. But then, do we suppose that dentists in other countries where orofacial pain is taught only in postgraduate programs feel secure in managing patients with orofacial pain? Thus, it seems that we have a huge problem in disseminating this knowledge to general practicing dentists.

There are many ways of spreading and disseminating knowledge that are recommended. So, which is the best way to go? This is, of course, an open question that depends on the circumstances. However, I believe it is important that we are active and do not rely solely on the diffusion of knowledge into the community. Instead, we must actively disseminate this knowledge via communication so that the receivers may truly adopt a change and finally implement it into their routine.

This issue has been recently discussed in a paper by Costa et al.⁶ Teaching TMDs and orofacial pain in dental education is already essential, and we must strive toward implementing orofacial pain into the undergraduate dental curriculum at universities worldwide. After all, orofacial pain is as prevalent as severe caries and periodontitis, so it is surprising that it seems so difficult to make it accepted as a standard in education programs. Personally, I don't think a standardized orofacial pain curriculum is needed, but students should at least learn about the most common orofacial pain conditions and the biopsychosocial view of chronic pain. With time, this should increase our knowledge about how to diagnose and manage orofacial pain.

For reaching out to already-practicing dentists, one could, for example, take use of practice-based networks. By educating groups of dentists, these dentists can then serve as “ambassadors” to disseminate the knowledge to their neighboring colleagues. Naturally, there are many other ways of disseminating knowledge, and the best way to tailor the implementation of new knowledge is not known. Additionally, what suits dentists in one country may not suit dentists in another. So, we need to be creative and try different methods.

One way could be to simplify the message and the methods. Several attempts have been made in this direction—for example, by recommending the use of a validated screener to identify patients with orofacial pain/TMDs in general practice. In Sweden, the 3Q/TMD⁷ is frequently used for this purpose. It consists of three validated questions to screen for TMD, two for TMD pain and one for TMD dysfunction. These questions have been incorporated into some journal record systems to facilitate their use by dentists. In some Swedish regions, they have even been made mandatory as part of the health declaration. If the patient has a positive answer to one of the questions on the 3Q/TMD, it is recommended that the dentist perform a clinical examination according to the DC/TMD. There are also other screeners that can be used by the general practicing dentist, such as the TMD screener.⁸

Screeners can be combined with a few other instruments; for example, the Graded Chronic Pain Scale (GCPS) or the short form of the Patient History Questionnaire (PHQ-4) to identify patients who can be managed in general practice and patients who should be referred to specialists (if available). It has been suggested that if a patient has a disability grade of I or II on the GCPS, they can be managed in general practice, but if a higher disability is present, the dentist should consider referral. Likewise, for patients with moderate to severe distress (> 6 points on the PHQ-4), the dentist should consider referral. In general practice, the burden on the patient, who is used to completing short health surveys, is only minorly increased with these instruments.

An attempt has also been made to simplify the DC/TMD examination by excluding the commands, which show promising results regarding the validity of diagnostics.⁹ But more research is needed before this can be recommended. In my opinion, simplifying the DC/TMD examination is necessary to spread it to general practicing dentists, at least in Sweden.

In Sweden, we have also developed national guidelines for general and specialist practice in many areas, including orofacial pain and dysfunction.¹⁰ For these guidelines, the literature has been reviewed by a group of specialists to find the best available treatment of a condition based on evidence from systematic reviews with meta-analyses and randomized controlled trials. Depending on the severity of the disorder and the evidence for effect, the treatments receive a score in a hierarchical manner, where a low score indicates the treatment with the best evidence. These guidelines were first published in 2011 and have since been updated three times. It is recommended that undergraduate dental students and practicing dentists use the guidelines to work in an evidence-based manner.

Finally, simplified care programs can also be developed to guide dentists in managing patients with orofacial pain.

Hopefully these initiatives will increase the awareness of orofacial pain among general practicing dentists and facilitate decision-making and management for the better sake of our patients in the future.

Malin Ernberg
Associate Editor

References

1. Schiffman E, Ohrbach R, Truelove E, et al. Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) for Clinical and Research Applications: Recommendations of the International RDC/TMD Consortium Network and Orofacial Pain Special Interest Group. *J Oral Facial Pain Headache* 2014;28:6–27.
2. Peck CC, Goulet JP, Lobbezoo F, et al. Expanding the taxonomy of the Diagnostic Criteria for Temporomandibular Disorders. *J Oral Rehabil* 2014;41:2–23.
3. International Classification of Orofacial Pain, ed 1 (ICOP). *Cephalalgia* 2020;40:129–221.
4. Häggman-Henrikson B, Liv P, Ilgunas A, et al. Increasing gender differences in the prevalence and chronification of orofacial pain in the population. *Pain* 2020;161:1768–1775.
5. Lövgren A, Karlsson Wirebring L, Häggman-Henrikson B, Wänman A. Decision-making in dentistry related to temporomandibular disorders: A 5-yr follow-up study. *Eur J Oral Sci* 2018;126:493–499.
6. Costa YM, De Koninck BP, Elsaraj SM, et al. Orofacial pain education in dentistry: A path to improving patient care and reducing the population burden of chronic pain. *J Dent Educ* 2020. Epub ahead of print Oct 23.
7. Lövgren A, Visscher CM, Häggman-Henrikson B, Lobbezoo F, Marklund S, Wänman A. Validity of three screening questions (3Q/TMD) in relation to the DC/TMD. *J Oral Rehabil* 2016;43:729–736.
8. Gonzalez YM, Schiffman E, Gordon G, et al. Development of a brief and effective temporomandibular disorder pain screening questionnaire: Reliability and validity. *J Am Dent Assoc* 2011;142:1183–1191.
9. Österlund C, Berglund H, Åkerman M, et al. Diagnostic criteria for temporomandibular disorders: Diagnostic accuracy for general dentistry procedure without mandatory commands regarding myalgia, arthralgia and headache attributed to temporomandibular disorder. *J Oral Rehabil* 2018;45:497–503.
10. Socialstyrelsen. National Guidelines for Adult Dental Care [in Swedish]. The National Board of Health and Welfare, updated 2013. <https://www.socialstyrelsen.se/regler-och-riktlinjer/nationella-riktlinjer/information-till-patienter/om-publicerade-riktlinjer/tandvard/>. Accessed 18 January, 2021.