

Specialists' perception and opinion about self-medication of patients with temporomandibular disorders and orofacial pain

Percepção e opinião de especialistas sobre a automedicação realizada por pacientes com disfunções temporomandibulares e dor orofacial

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ABSTRACT

BACKGROUND AND OBJECTIVES: Temporomandibular disorders are considered the primary cause of chronic orofacial pain. Many patients consider self-medication a fast and adequate means to solve the pain problem and do not look for professional assistance. In spite of the considerable clinical implication of self-medication for temporomandibular disorders, the subject is poorly discussed in the literature. This study aimed at evaluating, by means of focus group, the opinion and perception of temporomandibular disorders/orofacial pain specialists about self-medication associated to temporomandibular disorders.

METHODS: Focal group is a qualitative methodology technique which, by means of participants interaction, aims at collecting data as from a discussion focused on specific topics. By means of speech, subjects freely express their knowledge, beliefs, attitudes and perceptions contributing to deepen the knowledge about a core subject. Participated in the study five temporomandibular disorders/orofacial pain specialists and a moderator who led the discussion. The following topics were addressed: temporomandibular disorders, orofacial pain, used drugs, opinions/attitudes with regard to self-medication, assistance/management of temporomandibular disorders. Speeches were recorded in audio and video for further data analysis.

RESULTS: Self-medication associated to temporomandibular disorders was pointed by specialists as extremely frequent and noxious to the disease, being highlighted excessive analgesic consumption and more frequent self-medication for muscular presentations.

CONCLUSION: The clinical impact of self-medication to treat temporomandibular disorders was emphasized, highlighting the influence of the practice in worsening and even chronicity of the disorder.

Keywords: Focus group, Self-medication, Temporomandibular disorders.

RESUMO

JUSTIFICATIVA E OBJETIVOS: As disfunções temporomandibulares são consideradas a principal causa de dor crônica na região orofacial. Muitos pacientes consideram a automedicação um meio rápido e suficiente para resolver o problema da dor e não procuram um profissional. Apesar da considerável implicação clínica da prática da automedicação em disfunções temporomandibulares, o assunto é pouco discutido na literatura da área. O objetivo deste estudo foi avaliar por meio da técnica do grupo focal, a opinião e percepção de especialistas em disfunções temporomandibulares/dor orofacial sobre a automedicação associada às disfunções temporomandibulares.

MÉTODOS: O grupo focal é uma técnica de metodologia qualitativa que, por meio da interação entre participantes, objetiva colher dados a partir de uma discussão focada em tópicos específicos. Por intermédio da fala, os sujeitos expressam seus conhecimentos, crenças, atitudes e percepções de forma livre, contribuindo para o entendimento aprofundado a respeito de um tema central. Participaram da dinâmica cinco especialistas em disfunções temporomandibulares/dor orofacial e um moderador que conduziu a discussão. Os seguintes tópicos foram abordados: disfunções temporomandibulares, dor orofacial, fármacos utilizados, opinião/attitudes com relação à automedicação, atendimento/tratamento das disfunções temporomandibulares. As falas foram registradas através da gravação de áudio e vídeo para que posteriormente pudesse ser feita a análise dos dados.

RESULTADOS: A automedicação associada às disfunções temporomandibulares foi apontada pelos especialistas como extremamente frequente e prejudicial ao quadro, sendo destacado o consumo excessivo de analgésicos e maior ocorrência da prática nos quadros musculares.

CONCLUSÃO: Enfatizou-se o impacto clínico da automedicação no tratamento das disfunções temporomandibulares, destacando-se a influência da prática no agravamento e até mesmo na cronificação do distúrbio.

Descritores: Automedicação, Disfunções temporomandibulares, Grupo focal.

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INTRODUCTION

The collective term temporomandibular disorders (TMD) defines a set of clinical manifestations which may affect the masticatory system, causing pain and/or dysfunction of its muscle and/or joint structures^{1,2}. TMD are the primary cause of chronic facial pain^{1,3}.

Many TMD-associated diagnoses have pain as major complaint^{4,5}, and quality of life (QL) of TMD patients may be related to orofacial pain control⁶.

According to the World Health Organization (WHO) self-medication is defined as obtaining and consuming drugs without professional orientation. For most TMD patients, this practice may be justified by constant pain which may impair important functions such as chewing and speaking, thus worsening quality of life of patients with the disease^{7,8}. According to a systematic review to evaluate the prevalence of self-medication among Brazilian adults, its prevalence in three studies with recall period of 15 days (from a total of five studies with high methodological quality) was 35%⁹.

A study by Dias et al.¹⁰ evaluating self-medication associated to TMD has shown that from 115 interviewed patients being treated for TMD, 71.3% had already consumed drugs without prescription, for pain or function limitation. Headache was major complaint associated to self-medication, being pointed by 39.53% of patients, and most consumed drugs were analgesics, being used by 58.13% of patients who self-medicated¹⁰.

Patients with TMD pain, especially chronic pain, have history of further looking for healthcare, continuous use of drugs and different therapies. Many TMD symptoms are periodic or cyclic, which may lead patients to drug abuse, with consequent physical or psychological dependence due to lack of dose control. Incorrect and abusive use of drugs is a concern with regard to TMD pharmacological treatment^{6,7}. According to Hersh, Balasubramaniam & Pinto¹¹, pharmacological therapy for TMD should only be used in strictly necessary cases.

Notwithstanding considerable clinical implication of the practice of self-medication in TMD, the subject is poorly

discussed in the literature. Because evaluation methods of its excessive consumption by TMD patients are poorly explored, this study aimed at evaluating by means of a focus group the opinion and perception of TMD/OFP specialists about the subject, to establish and check issues still no explained by the literature.

METHODS

The objective was, through the focus group technique, to discuss and evaluate the opinion of TMD/OFP specialists about the practice of self-medication by patients diagnosed with TMD.

Qualitative research has several methodological possibilities which allow data collection and analysis. Among these possibilities, focus groups represent a group collection technique promoting broad discussions on a specific subject or focus¹². Focus group is a qualitative methodology technique aiming at collecting data as from discussion focused on specific and directive topics by means of the interaction among participants. Speaking, participants express themselves freely, contributing to the deep understanding of a central subject and to develop hypotheses for further studies¹³⁻¹⁶. Its objective is to focus the survey and formulate more precise questions; add more information on knowledge unique to a group with regard to beliefs, attitudes and perceptions, or develop hypotheses for further studies¹⁵.

An extensive literature review was carried out to develop the focus group, and from this stage topics regarding the studied subject were generated to be discussed as from four dimensions (Table 1).

To make up the focus group, it is necessary that participants have at least one major common characteristic and that selection criteria are determined by the objective of the study, characterizing as an intentional sample. It is suggested that the number of participants be from six to 15. When the aim is to generate the highest possible number of ideas, it is better to choose a larger group; when the intention is to reach the expression depth of each participant, a small group would be more indicated¹².

Table 1. Topics discussed on focus group according to dimensions

TMD/OFP	Drugs/types of drugs	Opinion/attitudes with regard to self-medication	Assistance/treatment of TMD
Clinical TMD situations which may trigger self-medication	Drugs used by TMD patients	Perception/opinion of TMD patient with regard to self-medication	Understanding of TMD/OFP specialty by health professionals
History reported by TMD patients who self-medicate	Improved symptoms with the use of drugs	Knowledge of TMD (characteristics, diagnoses)	Understanding of TMD/OFP specialty by patients
Difference between muscle/joint TMD with regard to self-medication	Drug effects/use (dose, frequency)	Confidence on self-medication/ confidence on knowledge of the situation/drug	Treatment by other professionals
Relationship of self-medication and acute or chronic TMD cases	Adverse effects	Media influence on self-medication	Relationship of self-medication and access to professionals (public and private)

TMD/OFP = temporomandibular disorder, orofacial pain.

Following described requirements, in our study the focus group was made up of 5 TMD/OFP specialists and a participant called moderator, with experience in this type of dynamics and graduated in the Education area, who was in charge of conducting the group.

The moderator asks several open questions about the subject according to topics belonging to described dimensions (Table 1) to conduct the discussion, and has the function of providing a favorable atmosphere. To obtain reliable data, investigators just watch the dynamic and cannot interfere with the speech to avoid influencing participants and prevent dynamics to be conducted based on their already established opinion on the subjects¹⁵.

Dynamics was recorded in audio and video to be then integrally and literally transcribed, aiming at maintaining most possible fidelity of expressions, terms and contents expressed by participants¹⁶. Investigators have to be qualified for active and neutral listening about the interpretation task, which should be done with a distant eye, without allowing the interference of personal beliefs and pre-judgments which might impair reliability of investigation results¹⁷.

Our qualitative study was approved by the Ethics and Research with Human Beings Committee, Universidade Federal de Juiz de Fora opinion 202/771 (2013).

RESULTS

After focus group dynamics, recording content was analyzed by the chief investigator by means of audio and video resources to evaluate the opinion of participants about self-medication practiced by TMD patients. Speeches were integrally and literally transcribed to get reliable data.

To present results, speeches answering survey questions were selected. To maintain anonymity of participants, they were identified by the letter P and numbers from 1 to 5. Example: Participant 1 = P1.

Since this is a qualitative survey, focus group results are presented in the format of discussion, carried out according to the four dimensions topics (Table 1) which have oriented the dynamic, comparing them with literature findings.

TMD/OFP specialists quotations were described according to the order of the four dimensions: TMD/OFP, drugs/types of drugs, opinion/attitude with regard to self-medication, TMD assistance/treatment, and according to the context of the discussion and of the topics of each dimension.

DISCUSSION

In the first focus group moment, the first dimension was discussed, regarding TMD symptoms associated to self-medication. Headaches and muscle TMD were classified as major symptoms involved with drug consumption on their own, being some aspects stressed by participants:

P5: "... headache is one of clinical situations more likely to self-medication..."

P2: "...the fact that headache is a common, prevalent symptom makes self-medication more frequent for this cause".

P2: "... muscle pain and tension headache are major causes leading TMD patients to self-medicate".

According to some studies, headache is one of the most frequently reported symptoms by TMD patients¹⁷⁻²². Figueiredo et al.²³, studying the prevalence of signs and symptoms in TMD patients, have observed that joint noise (95%), arthralgia (82.5%) and headache (77.5) were the most common. Lauriti et al.²⁰ have observed that headache is a symptom more closely associated to TMD. It has been suggested that TMD and headache may be associated, acting reciprocally as aggravating or perpetuating factors²⁴.

It is known that muscle TMD are clinical conditions related to pain in masticatory muscles, often found in the clinical practice, even in association with other diagnoses such as headache and arthralgia⁷. Literature points that muscle TMD are the most prevalent, which might be associated to higher drug consumption in this type of diagnosis, as reported by participants²⁵. It was also possible to observe in different studies that increased masseter muscle tension is directly related to daily stress, which may contribute for higher occurrence of muscle presentations²⁶.

Temporomandibular arthralgia was the second major symptom, reported by 16.3% of the sample. Joint noises were most reported symptoms, by 23.7% of participants¹⁸. Masticatory muscles pain was reported by 15.4% of participants. With regard to other clinical TMD situations which could be associated to self-medication, functional incapacities and locking were considered by some specialists as poorly associated to self-medication:

P5: "... mandibular locking makes patients believe that their disease has worsened, thus with the need for professional intervention, for such, it is not related to self-medication, as exclusively painful presentations".

P3: "...when patients lock, they believe they are worse and go to physician or dentist, then we have less reports of self-medication because patients are scared".

For P5, however, some patients have reported trying to first solve functional incapacity without looking for a professional.

P5: "... there are people trying to solve alone, even with function limitation".

Acute and chronic TMD stages were also discussed in the first dimension, with regard to TMD-associated symptoms.

P1: "... both acute and chronic cases may lead patients to self-medication..."

P2: "... in acute cases, there is virtually always self-medication, in general with analgesics, and in chronic cases it may occur when pain is not effectively treated and patients continuously self-medicate to relieve pain. TMD may become chronic due to self-medication and prescription of drugs which are not indicated".

According to the literature and as pointed by specialists, TMD with acute symptoms may evolve to chronic symptoms if not early treated or if treatment fails, being self-medication a practice which may favor this evolution. So,

persistent TMD pain may become chronic pain with most characteristics of chronicity of other disorders, further central nervous system involvement and difficulties to treat^{6,8,27}. The second dimension addressed by the focus group was consumption and type of drugs used by patients who self-medicate for TMD pain.

P2: "...the history of analgesic consumption is more frequent with regard to self-medication, history of wrong drug is larger, list of drugs..."

P5: "... patients start feeling pain, take analgesics and end up choosing those making them feel better".

P5: "... the fact that symptoms do not improve with self-medication makes patients increase consumption and even drug dose".

P2: "... media is focused on analgesics..."

Johansson, Cahlin, Samuelsson & Dahlström²⁸ have found higher use of drugs (51%) in this group of patients with diagnoses associated to TMD as compared to control group (36%). Studies have shown that analgesics are taken once a week or more by 22% to 25% of adolescents, and one out of four are absent from school once a month due to TMD pain^{29,30}. Most commonly used in abuse by patients are analgesics and tranquilizers. Their continuous use tends to lead to more frequent pain cycles and less efficacy. In addition, no drug alone may be efficient for the whole TMD spectrum and their incorrect and abusive use is a concern for the pharmacological TMD treatment^{6,31}. Analgesics, in general underestimated by population with regard to risks inherent to their uncontrolled administration, may generate dependence, digestive bleeding and even mask the baseline disease which, in turn, may progress³².

In a qualitative study on approaches related to self-medication of adults, by means of focus group technique, respondents have reported using by their own, especially analgesic drugs³³.

When asked about the effect of self-medication reported by patients, most specialists have highlighted that patients have no significant improvement with self-medication, being this opinion represented by the speech of P4.

P4: "... patients report that most of the times self-medication is not enough to relieve TMD pain..."

Other aspect discussed in the second dimension was the use of old prescriptions.

P2: "... patients take the drug again by recurrence and not necessarily look for a professional..."

P1: "... patients remain with the same prescription for two or three years..."

Corrêa, Galato & Alano³² have stressed the issue of reusing old prescriptions. According to the authors, even if at first it may be a more economic option, it may generate the irrational use of drugs.

According to the specialists, due to multiple TMD diagnoses, at a first moment patients may present a certain diagnosis and in a second situation this diagnosis might be different, which directly influences the choice and efficacy of the drug.

In the third dimension, perception of specialists about patients' opinion with regard to confidence and knowledge about self-medication was discussed.

P3: "... in some cases, patients rely more on pharmacists than on physicians or dentists".

P2: "... people feel safe because they have the feeling that they know the pain they feel, but they do not necessarily know. This idea is motivation for self-medication".

P2: "... there are patients who believe they are self-sufficient, have the false knowledge that they know everything about the drug or are afraid of looking for a professional by fear of diagnosis..."

P2: "... major self-medication problem is feeling safe and end up going beyond limits..."

According to Ferraz, Grunewald & Rocha³³, it is worrying the confidence population has on self-medication. For Nascimento³⁴, drugs advertisement by mass communication means is a frequent stimulus for self-medication. According to Corrêa, Galato & Alano³², in a study on self-medication, practice was abandoned by individuals only after generating unsatisfactory results

The influence of communication media on knowledge and confidence on self-medication was also discussed in this dimension:

P5: "... media contributes for people looking for the drug..."

P1: "... Internet may give the false sensation of understanding pain and the drug..."

For Corrêa, Galato & Alano³², communication media have influenced respondents with regard to self-medication. However, for some, information is not sufficient to justify the choice of drugs to be used for any health disorder.

Vitor et al.³⁵ have also observed that most respondents about self-medication were not influenced by communication media, showing mistrust on received information. As opposed, Lyra et al.³⁶ have observed that elderly consume drugs influenced by advertising and do not take into consideration risks associated to pharmacological therapy.

According to Santos³⁷, massive advertising and easy access to drugs in pharmacies give the impression that products are risk-free and this way there may be undesirable results, such as adverse effects.

At the final focus group moment, the fourth dimension regarding assistance and treatment of patients with TMD was discussed. Specialists have stressed the following aspects involved with the fourth dimension, which were compared to the literature.

P2: "... TMD patients, by lack of orientation, end up first looking for orthodontist or bucomaxillofacial surgeon. The fact that TMD/OFP be a recent specialty may contribute for this situation..."

P3: "... dentists themselves often do not refer patients to TMD specialists, either for lack of knowledge, for believing that clinician dentists may solve the problem or by fear of losing the patient".

P2: "... some patients take antibiotics for tension headache..."

P4: "... the fact that the specialty is new and that the public sector has no professionals of the area, certainly increases the practice of self-medication..."

Bove, Guimarães & Smith⁶ have pointed out that most TMD patients evaluated in the study by the authors have reported experience with other diseases and self-medication. Many of them lived with pain for many years and when looking for medical or dental assistance, what they got was one more analgesic prescription and referral to other specialties.

Due to the complexity associated to chronic pain presentations, including the use of large amounts of different drugs, professionals should be very careful when treatment TMD patients. Professionals who routinely treat acute conditions from dental origin, should be careful when dealing with individuals with complex TMD presentations, being necessary the referral to health professionals with further knowledge of complaints presented by this population³⁸.

For the dentist to rationalize drug prescription, it is necessary to understand its importance and the real role of drugs in the process, prevention and treatment, as well as to know recommendations about correct selection, indication, pharmacological interactions, noxious effects and drugs control³⁹.

According to Okeson⁴, since many TMD symptoms are periodic or cyclic, there is the trend to prescribe drugs on "as needed" basis, being that this type of control encourages patients to abuse and may lead to physical or psychological dependence. Because there are many drugs not requiring medical prescription, people tend to use them in the dose and hour they believe convenient.

For TMD, drugs should be prescribed in regular intervals for a specific period. At the end of this period, it is expected that treatment has promoted symptoms relief, not being necessary to extend the use of the drug. Pharmacological TMD treatment should be based on the same clinical principles applied to other conditions and requires deep knowledge of the etiology of the problem⁴⁰.

With regard to socioeconomic factors, the following issue was highlighted:

P4: "... low or high income patients consume drugs by their own, the practice is not related to this issue. Maybe low income patients consume more due to the difficulty to access treatment..."

For Souza, Silva e Silva Neto⁴¹, among causes of indiscriminate drug use by the population is the difficult access of low income population to healthcare services.

Sartoretto, Bella Bona e Dal Bello⁴² have reported that in some studies, the relationship between TMD and economic factors was not found. This may suggest that self-medication is also present regardless of socioeconomic factors, as pointed by the dynamics and the literature.

For being increasingly frequent the presence of TMD patients in the daily clinic, professional requirements increase not only by the knowledge of the disease and its implications, but also by the adequate management of such individuals, which should be done under a multidisciplinary approach³⁸.

Self-medication associated to TMD was pointed by specialists as extremely common and noxious, being stressed excessive analge-

sic consumption and more common practice for muscular and headache presentations. Participants of the dynamics have emphasized the clinical impact of self-medication to treat TMD, stressing that the practice may contribute for worsening and even chronicity of the disease due to lack of professional follow up. It was also stressed the influence of media in drug consumption and the difficulty to access TMD/OFP specialists.

CONCLUSION

The strategy of the qualitative interview in focus group modality was adequate to the objective of the activity, raising relevant issues to be discussed in the literature and analyzed in future clinical trials.

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