

# Knowledge and use of Integrative and Complementary Health Practices by patients with orofacial pain

## *Conhecimento e uso das Práticas Integrativas e Complementares em Saúde por pacientes com dor orofacial*

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### ABSTRACT

**BACKGROUND AND OBJECTIVES:** Use of Integrative and Complementary Health Practices (ICHP) in pain management has increased, mainly due to the biopsychosocial nature of pain. The objective of this work is to evaluate the knowledge and use of ICHP in patients with orofacial pain and describe the sociodemographic profile of patients that use these therapies.

**METHODS:** This is a cross-sectional study and data collection was performed through a questionnaire about knowledge, use and interest in ICHP in a sample of patients with orofacial pain. Adult patients of both sexes under treatment from August 2018 to July 2019 at orofacial pain specialized services were included.

**RESULTS:** Fifty-six patients (84.8%) were female and among those 97% had previous knowledge of complementary practices, with acupuncture being the most known (89.6%). In addition, 59% of participants used therapies for orofacial pain, mainly phytotherapy (28.8%). Ninety-seven percent showed interest in knowledge and use of complementary therapies. Among users, the majority was female.

**CONCLUSION:** The patients know and use ICHP to relieve orofacial pain and show great interest in the field which justifies inclusion of complementary practices for management of orofacial pain.

**Keywords:** Chronic pain, Complementary therapies, Dentistry, Facial pain.

### RESUMO

**JUSTIFICATIVA E OBJETIVOS:** A utilização de Práticas Integrativas e Complementares em Saúde (PICS) no tratamento da dor tem aumentado, sobretudo em função da natureza biopsicossocial da dor. O objetivo foi avaliar o conhecimento e uso das PICS em pacientes com dor orofacial e conhecer o perfil sociodemográfico dos pacientes que utilizam essas terapias.

**MÉTODOS:** Estudo do tipo transversal, com pacientes atendidos de agosto de 2018 a julho de 2019 nas clínicas de dor orofacial. A coleta de dados foi feita por meio de um questionário sobre conhecimento, uso e interesse a respeito das PICS.

**RESULTADOS:** Dos 66 pacientes, 56 (84,8%) eram mulheres. Desses, 97% conheciam as práticas integrativas, sendo a acupuntura a mais conhecida (89,6%). Ademais, 59% dos participantes fizeram uso de alguma terapia para dor orofacial, sendo a fitoterapia a mais utilizada (28,8%), e 97% tinham interesse em conhecer e utilizar as práticas.

**CONCLUSÃO:** Pacientes com dor orofacial conhecem e utilizam as PICS para alívio da dor e promoção do bem-estar. Há grande interesse pelas práticas, fato que estimula a inclusão no tratamento complementar da dor orofacial.

**Descritores:** Dor crônica, Dor facial, Odontologia, Terapias complementares.

### INTRODUCTION

Chronic pain (CP) is a public health issue due to high costs associated with treatment, physical and emotional disabilities, and absenteeism<sup>1</sup>. Epidemiological studies report that 33 to 50% of the world population suffers from CP<sup>2,3</sup>. Among the various types of CP, orofacial pain (OFP), defined as all pain associated with soft and mineralized tissues of the head, face and neck, affects 12 to 22% of the world population and generates great discomfort and suffering<sup>3</sup>.

The recommended treatment for OFP, as well as for CP, in general, aims at reducing pain and recovering function. For this, one should consider not only the purely biological diagnosis, but also the wide range of psychological, social and contextual factors in each individual<sup>4,5</sup>. Considering, therefore, the biopsychosocial nature of CP, the use of Integrative and Complementary Health Practices (ICHP) becomes very relevant in the clinical management of pain and promotes the therapeutic link between health professionals and patient, generating more effective results<sup>6</sup>.

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Although further in-depth studies on the mechanisms, adverse effects and effectiveness of some ICHP are needed, several benefits for the relief of disease symptoms and CP, among them OFP, have already been reported, especially when conventional treatment doesn't present satisfactory results<sup>7-9</sup>.

In 2006, the Brazilian Ministry of Health approved the National Policy of Integrative and Complementary Health Practices (NPICHP), aiming at a humanized and integral attention for the patient, providing multiprofessional care<sup>10</sup>. Since then, interest and knowledge on the part of health professionals and patients regarding ICHP have increased in Brazil, mainly due to scientific studies that demonstrate their benefits<sup>7,8,11,12</sup>. The use of ICHP by patients is related to prior knowledge, access and benefits of combining ICHP with conventional treatment<sup>13</sup>. However, it's reported that the use is more widespread among individuals with great interest in increasing their knowledge about ICHP, as well as in patients with chronic health conditions, such as pain<sup>14,15</sup>. Therefore, it's important to assess the knowledge of patients suffering from OFP on ICHP in order to support decision making and therapeutic proposals of ICHP integration with traditional treatment, which can contribute to pain relief and better quality of life. This is particularly important in the context of OFP and TMD, since multiprofessional treatment is advocated as essential for the management of painful symptoms and control of perpetuating habits and psychosocial factors associated with these conditions<sup>16,17</sup>. Moreover, the recognition of ICHP as a therapeutic modality, both by those who work in health care and by the general population, will allow its applicability in clinical practice and the development of new studies, with clear repercussions for science as well as for the community<sup>6</sup>.

The objective was to evaluate the knowledge and usage of ICHP in patients with OFP, as well the sociodemographic profile of patients that use these therapies.

## METHODS

A descriptive, analytical and quantitative cross-sectional exploratory study was performed. The sample was chosen by convenience, in which all new patients from the Orofacial Pain Service of the Clinical Hospital and the Orofacial Pain course clinic of the School of Dentistry of the Federal University of Minas Gerais in Belo Horizonte were invited. Of the total of 88 patients who attended the services during the data collection period, 66 (75%), who met the following eligibility criteria, were included in the survey: to be in treatment in one of the described specialized services, to have a minimum age of 18 years old and be able to adequately understand the instructions during the application of the questionnaire. The exclusion criterion was the refusal to participate voluntarily and/or to Free Informed Consent Term (FICT).

The data collection was carried out through the application of an adapted questionnaire<sup>18</sup>, with questions related to sociodemographic factors, pain characteristics and treatments performed, in addition to questions on use, knowledge and interest in ICHP.

The data collection period was from August 2018 to July 2019. Prior to the start of data collection, a pilot study was conducted with 6 patients, corresponding to 10% of the sample, so that the researchers could train for the interview.

Research approved by the Research Ethics Committee (COEP) of the Federal University of Minas Gerais (CAAE 89495618.7.0000.5149).

## Statistical analysis

The data was analyzed by means of descriptive statistics. The association of sociodemographic and clinical aspects with the use of ICHP was evaluated using the Chi-square test, 5% significance level. The IBM® SPSS® Statistics 23.0 software was used.

## RESULTS

The majority was female (56; 84.8%), with 9 or more years of education (52; 78.8%), declared religion (55; 83.3%), residing in Belo Horizonte (44, 66.7%) and with familiar income from 1 to 4.9 minimum wages (48, 72.7%). As for the marital status, 30 patients (45.4%) were single and 30 (45.4%) were married, being the remaining (6; 9.1%) widowers, divorced or in stable union. The average age of the participants was 42±17 years old.

Twenty-seven (40.9%) patients presented OFP as the only site of pain, with the face and the temporomandibular joint (TMJ) being the most cited regions. Pain duration was 68.4±80.4 months and for symptom relief 17 (25.8%) patients reported using drugs, 12 (18.2%) non-pharmacological therapies and 28 (42.4%) the association of drugs and non-pharmacological treatments. Of the 66 (100%) participants, 40 (60.6%) reported using non-pharmacological therapies, being physiotherapy (13.6%), ICHP (10.6%) and physical activities (9.1%) the most reported. Only 9 (13.6%) participants did not use treatments for pain relief.

Regarding knowledge, use, and interest in ICHP, 64 (97%) patients reported previous knowledge, 39 (59%) made use of it, and 64 (97%) would like to have access to ICHP (Table 1). Acupuncture was the best known practice (89.4%), and phytotherapy the most used (n=19; 28.8%). The patients' greatest interest was also acupuncture (74.2%).

The most cited sources of knowledge about ICHP by the participants were friends (40.6%), newspaper/television/radio (34.4%) and family (34.4%). Table 2 details the motivations for using ICHP by the 39 (100%) patients who reported using it and pain relief was the most cited reason (n=14; 35.9%).

Table 3 shows the justifications reported by the 64 (97%) participants who would like ICHP to be offered in public health services.

When evaluating the sociodemographic characteristics in patients who reported using ICHP, the majority was female, with statistically significant difference (p=0.012). Most patients who used ICHP had more than 8 years of education, had no declared religion, were single/widowers/divorced, lived in the capital and had an income higher than 2 minimum wages. Nevertheless, no statistically significant difference was observed between these variables (p>0.05).

**Table 1.** Knowledge, use and interest regarding ICHP by patients seen in orofacial pain services

ICHP	Knowledge n (%)	Use n (%)	Interest n (%)
Acupuncture	59 (89.4)	11 (16.7)	49 (74.2)
Apitherapy	4 (6.1)	1 (1.5)	3 (4.5)
Aromatherapy	19 (28.8)	3 (4.5)	3 (4.5)
Art therapy	12 (18.2)	0	6 (9.1)
Auriculotherapy	36 (54.5)	7 (10.6)	17(25.8)
Ayurveda	4 (6.1)	0	2 (3.0)
Biodance/circular dance	9 (13.6)	2 (3.0)	7 (10.6)
Bioenergetics	1 (1.5)	0	2 (3.0)
Family constellation	11 (16.7)	0	2 (3.0)
Crenotherapy	3 (4.5)	1 (1.5)	0
Chromotherapy	11 (16.7)	1 (1.5)	3 (4.5)
Phytotherapy	45 (68.2)	19 (28.8)	15 (22.7)
Geotherapy	10 (15.1)	0	2 (3.0)
Hypnotherapy	19 (28.8)	0	8 (12.1)
Homeopathy	47 (71.2)	9 (13.6)	13 (19.7)
Massage	49 (74.2)	18 (27.3)	38 (57.6)
Anthroposophical medicine	3 (4.5)	0	2 (3.0)
Meditation	40 (60.6)	8 (12.1)	11 (16.7)
Music therapy	22 (33.3)	2 (3.0)	7 (10.6)
Naturopathy	2 (3.0)	1 (1.5)	0
Osteopathy	2 (3.0)	0	5 (7.6)
Ozoniotherapy	2 (3.0)	0	0
TCM body practices	12 (18.2)	4 (6.1)	7 (10.6)
Chiropractic	11 (16.7)	2 (3.0)	12 (18.2)
Reiki	19 (28.8)	3 (4.5)	5 (7.6)
Community therapy	3 (4.5)	0	2 (3.0)
Bach flower remedies	20 (30.3)	4 (6.1)	7 (10.6)
Yoga	45 (68.2)	6 (9.1)	30 (45.4)
Other (laser therapy)	0	7 (10.6)	1 (1.5)

TCM = Traditional Chinese Medicine.

**Table 2.** Motivations for which patients in orofacial pain services use ICHP

Motivations	n (%)
Pain relief	14 (35.9)
Pain relief/wellness	5 (12.8)
Wellness	3 (7.7)
Pain relief/anxiety	2 (5.1)
Pain relief/anxiety/wellness	2 (5.1)
Pain relief/stress	2 (5.1)
Pain relief/aesthetic	1 (2.6)
Anxiety/cardio-vascular diseases	1 (2.6)
Anxiety/wellness	1 (2.6)
Anxiety/depression	1 (2.6)
Anxiety/stress	1 (2.6)
Pain relief/anxiety/wellness/depression/ viral infections/inflammatory diseases	1 (2.6)
Wellness/aesthetics	1 (2.6)
Stress	1 (2.6)
Pain relief/weight loss	1 (2.6)
No information	2 (5.1)
Total	39 (100.0)

**Table 3.** Justifications of patients seen in orofacial pain services for offering ICHP for pain treatment

Justifications	n (%)
Providing benefits for people's health and well-being	39 (60.9)
To be accessible for the population	7 (10.9)
To be one more treatment option	5 (7.8)
Decrease the use of drugs	4 (6.2)
Complement traditional treatment methods/ provide benefits for the health and well-being of people	1 (1.6)
To decrease the use of drugs/provide benefits for the health and well-being of people	1 (1.6)
Believe to be a good treatment, based on people's report	1 (1.6)
Pain relief	1 (1.6)
Pain relief/to be accessible for the population	1 (1.6)
To be one more treatment option/provide benefits for the health and well-being of people	1 (1.6)
Complement traditional treatment methods	1 (1.6)
No information	2 (3.0)
Total	64 (100.0)

## DISCUSSION

This research highlighted the high prevalence of knowledge and use of ICHP by patients with OFP, demonstrating the relevance of integrating ICHP to traditional pain treatment in dentistry and the need for future studies in this field. It's also important to highlight the interest of patients in ICHP in public health services, especially due to the easier access and improved quality of life, relevant conditions in the context of user satisfaction and the expanded concept of health. As for the sociodemographic profile, the studied sample is similar to the profile of individuals with OFP worldwide. Young women are more affected by OFP, especially TMD<sup>6,19,20</sup>, possibly due to the action of the estrogen hormone<sup>19,20</sup>. In addition, women are more likely to seek preventive and complementary treatments for OFP<sup>15</sup>.

It's possible to observe that most patients with OFP use ICHP concomitantly to the pharmacological treatment, with the objective of improving pain relief, promoting physical and emotional well-being and reducing anxiety and stress. These data reinforce that patients with OFP, in general, seem not satisfied with the biomedical model-based care and seek other treatment methods<sup>2</sup>. Given the importance of understanding the multifactorial profile and biopsychosocial model of CP, the multiprofessional interaction in the diagnosis and treatment of pain, in order to provide comprehensive care to patients, is necessary<sup>22-24</sup>. From this perspective, the use of non-pharmacological therapies, as ICHP, in association with traditional treatment methods, contributes to the biopsychosocial approach to pain, allows personalized and holistic patient treatment, in addition to promoting the therapeutic link between professional and patient, with clear repercussions on

pain relief and improvement of life quality<sup>25</sup>. Furthermore, the adoption of complementary therapies favors the decrease in drug use and the prevention of health problems<sup>26</sup>.

In that sense, studies report that the use of ICHP is mainly associated with access, previous knowledge and benefits resulting from their association with conventional treatment<sup>13,15</sup>. Moreover, individuals with chronic pain seek to know and use complementary treatments to improve their health condition<sup>14</sup>. Within this context, the results of the present research reveal that participants have previous knowledge and interest, but the use was probably limited by the difficulty of access to ICHP, whether in the public or private health system.

The use of ICHP is primarily related to pain relief in patients with OFP, as it happens in other CP<sup>2,5</sup> conditions. However, part of the motivation is the promotion of well-being and control of anxiety and stress, which has a positive impact on quality of life<sup>25</sup>. Similarly, the interest in offering ICHP occurs mainly because of the potential health benefits and the possibility of access by the general population, which can bring numerous benefits to health and quality of life<sup>27,28</sup>.

Moreover, it was possible to observe a higher level of education in patients who make use of ICHP, reinforcing that access to knowledge about complementary therapies and their benefits is important for their use<sup>15</sup>. From that perspective, the relevance of the dissemination of knowledge in the field for the population in general and, especially, for the lower socioeconomic classes, becomes clear.

Research shows that interest in the knowledge and use of ICHP by patients and health professionals has increased significantly, mainly due to the promotion of physical, emotional and social well-being<sup>11,12</sup>. However, teaching about the applicability of ICHP in undergraduate courses at Brazilian colleges and universities, as well as scientific work in the field, are scarce, which prevents the spread of this knowledge and the generation of scientific evidence, limiting the dissemination and use by health teams and patients<sup>6</sup>. In conclusion, it's clear that there is a potential in the use of ICHP by patients with OFP. This is particularly important in undergraduate dentistry, public oral health policies and management of CP in the dental field.

As for the study's limitations, in some situations it was difficult for the patient to recognize some ICHP only by the presented names and, so that the process could be easier, images, symbols and concepts were presented by the interviewer. Therefore, the proposed tool needs validation. Among the patients who don't use ICHP, the lack of description for the reasons not to use it prevents inferences about their real motivations. Also, this is a convenience sample and studies with a representative sample and with patients with other types of CP will contribute to scientific advances in the field.

## CONCLUSION

OFP patients know and use ICHP for pain relief and the promotion of well-being. There is great interest in the practices, a fact

that encourages the inclusion of ICHP in the complementary treatment of OFP.

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Data Collection, Investigation, Writing - Original preparation

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Data Collection, Research

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Project Management, Writing - Original preparation, Writing - Review and Editing, Supervision

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Statistical analysis, Project Management, Writing - Original preparation, Writing - Review and Editing, Supervision

## REFERENCES

1. Turner JA, Franklin G, Fulton-Kehoe D, Egan K, Wickizer TM, Lymp JF, et al. Prediction of chronic disability in work-related musculoskeletal disorders: a prospective, population-based study. *BMC Musculoskelet Disord*. 2004;5:14.
2. Gureje O, Von Korff M, Simon GE, Gater R. Persistent pain and well-being: a World Health Organization Study in Primary Care. *JAMA*. 1998;280(2):147-51.
3. Fayaz A, Croft P, Langford RM, Donaldson LJ, Jones GT. Prevalence of chronic pain in the UK: a systematic review and meta-analysis of population studies. *BMJ Open*. 2016;20(6):e010364.
4. Magalhães BG, de Sousa ST, de Mello VV, da-Silva Barbosa AC, de-Assis-Morais MP, Barbosa-Vasconcelos MM, et al. Risk factors for temporomandibular disorder: binary logistic regression analysis. *Med Oral Patol Oral Cir Bucal*. 2014;19(3):e232-6.
5. Edwards RR, Dworkin RH, Sullivan MD, Turk DC, Wasan AD. The role of psychosocial processes in the development and maintenance of chronic pain. *J Pain*. 2016;17(9 Suppl):T70-92.
6. Silva LB, Lima IC, Bastos RA. Terapias complementares e integrativas: conhecimento e utilizações pelos docentes do curso de enfermagem de uma instituição pública. *Rev Saúde Col UEFS*. 2015;5(1):40-5.
7. Li X, Wang R, Xing X, Shi X, Tian J, Zhang J, et al. Acupuncture for myofascial pain syndrome: a network meta-analysis of 33 randomized controlled trials. *Pain Physician*. 2017;20(6):E883-E902.
8. Chen J, Huang J, Li JV, Lv Y, He Y, Zheng Q. The characteristics of TCM clinical trials: a systematic review of clinicaltrials.gov. *Evid Based Complement Alternat Med*. 2017;2017:9461415.
9. Zotelli VL, Grillo CM, Gil ML, Wada RS, Sato JE, da Luz Rosário de Sousa M. Acupuncture effect on pain, mouth opening limitation and on the energy meridians in patients with temporomandibular dysfunction: a randomized controlled trial. *J Acupunct Meridian Stud*. 2017;10(5):351-9.
10. Brasil. Ministério da Saúde (MS). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Portaria 971 – Política Nacional de Práticas Integrativas e Complementares (PNPIC) no Sistema Único de Saúde; Diário Oficial da União. 2006.
11. Dhanani NM, Caruso TJ, Carinci AJ. Complementary and alternative medicine for pain: an evidence-based review. *Curr Pain Headache Rep*. 2011;15(1):39-46.
12. Münstedt K, Harren H, von Georgi R, Hackethal A. Complementary and alternative medicine: comparison of current knowledge, attitudes and interest among German medical students and doctors. *Evid Based Complement Alternat Med*. 2011;2011:790951.
13. Armstrong AR, Thiébaud SP, Brown LJ, Nepal B. Australian adults use complementary and alternative medicine in the treatment of chronic illness: a national study. *Aust N Z J Public Health*. 2011;35(4):384-90.
14. Murthy V, Sibbritt D, Broom A, Kirby E, Frawley J, Refshauge KM, et al. Back pain sufferers' attitudes toward consultations with CAM practitioners and self-prescribed CAM products: a study of a nationally representative sample of 1310 Australian women aged

- 60-65 years. *Complement Ther Med*. 2015;23(6):782-8.
15. Zhang Y, Leach MJ, Hall H, Sundberg T, Ward L, Sibbritt D, et al. Differences between male and female consumers of complementary and alternative medicine in a National US Population: a secondary analysis of 2012 NHIS Data. *Evid Based Complement Alternat Med*. 2015;2015:413173.
  16. Fernández-de-las-Penas C, Svensson P. Myofascial temporomandibular disorder. *Curr Rheumatol Rev*. 2016;12(1):40-54.
  17. Wu JY, Zhang C, Xu YP, Yu YY, Peng L, Leng WD, et al. Acupuncture therapy in the management of the clinical outcomes for temporomandibular disorders: a PRISMA-compliance meta-analysis. *Medicine (Baltimore)*. 2017;96(9):e6064.
  18. Gonçalo CS, Mialhe FL, Vilalba JP, Barros NF. O ensino das práticas alternativas e complementares na graduação em Odontologia. In: Barros NF, Siegel P, Otani MAP, editors. *O ensino das práticas integrativas e complementares: experiências e percepções*. 1ª ed. São Paulo: Hucitec; 2011. 153-66p.
  19. Poveda Roda R, Bagan JV, Días Fernández JM, Hernández Bazán S, Jiménez Soriano Y. Review of temporomandibular joint pathology. Part I: classification, epidemiology and risk factors. *Med Oral Patol Oral Cir Bucal*. 2007;12(4):E292-8.
  20. Tosato JP, Caria PHF. Prevalência de DTM em diferentes faixas etárias. *RGO*. 2006;54(3):211-24.
  21. Silveira AM, Feltrin PP, Zanetti RV, Mautoni MC. Prevalence of patients harboring temporomandibular disorders in an otorhinolaryngology department. *Braz J Otorhinolaryngol*. 2007;73(4):528-32.
  22. Donnarumma MDC, Muzilli CA, Ferreira C, Nemr K. Disfunções temporomandibulares: sinais, sintomas e abordagem multidisciplinar. *Rev CEFAC*. 2010;12(5):788-94.
  23. Venancio RA, Camparis CM. Estudo da relação entre fatores psicossociais e desordens temporomandibulares. *Rev Bras Odontol*. 2002;59(3):152-4.
  24. Oliveira NCM, Machado NA de G, Siqueira AFC, Simamoto-Junior PC, Silva MR, Fernandes-Neto AJ. Programa de acolhimento, tratamento e controle de pacientes com disfunção temporomandibular e dor orofacial: experiência de seis anos. *Revista Em Extensão*. 2012;11(1):36-43.
  25. Dacal MPO, Silva IS. Impactos das práticas integrativas e complementares na saúde de pacientes crônicos. *Saúde Debate*. 2018;42(118):724-35.
  26. Mendes DS, Moraes FS, Lima GO, Silva PR, Cunha TA, Crossetti MGO, et al. Benefícios das Práticas Integrativas e Complementares no cuidado de enfermagem. *J Health NPEPS*. 2019;4(1):302-18.
  27. Otani MAP, Barros NF. A medicina Integrativa e a construção de um novo modelo de saúde. *Ciênc Saúde Coletiva*. 2011;16(3):1801-11.
  28. Cazarin G, Martins JG, de Sousa MM, Barcellos APM. Monitoramento das Práticas Integrativas e Complementares em Minas Gerais: a utilização de um instrumento de apoio aos sistemas de informação. *J Manag Prim Health Care*. 2017;8(2):278-89.