

# Brazilian Journal of ANESTHESIOLOGY



### LETTER TO THE EDITOR

## Medication adherence in treating non-oncologic chronic pain: a problem to solve?



Dear Editor

The World Health Organization (WHO) understands adherence to be the behaviors of a patient regarding recommendations or treatment prescribed by healthcare professionals. Nonadherence to long-term treatment in the overall population is approximately 50%. This high rate encourages the investigation of elements involving nonadherence because it interferes with treatment results and prognosis. <sup>1</sup>

In Brazil, Low Adherence to Pharmacological Treatment (LAPT) in non-communicable chronic diseases is 20.2%. Concerning non-oncological chronic pain, nonadherence varies from 8% to 53%. 1

LAPT has been associated with a lack of financial resources; social, cognitive, motivational, and adverse effect behavioral issues; and unique perceptions, beliefs, and expectations about therapeutic efficacy. Moreover, it is a process with intrinsic factors related to the local patient, health team, and health system.<sup>3</sup>

An integrative literature review assessed LAPT-related factors in non-oncological chronic pain based on these assumptions. Two independent researchers searched PubMed in June 2023. The descriptors used to search for articles in the database followed the Health Sciences Descriptors (DeCS) of the Virtual Health Library and the MESH database, established as follows: "chronic pain" [All Fields] AND "medication adherence" [All Fields].

Original articles published between January 2013 and June 2023 in English, Portuguese, or Spanish with titles and abstracts related to adherence to medical treatment of chronic pain were included. The researchers accessed the abstract of each retrieved article to determine whether it met the inclusion criteria. Disagreement between the reviewers were resolved by consensus.

The PubMed search retrieved 96 potentially eligible articles. Twenty-one articles were selected for a complete reading. After applying the inclusion criteria, eight articles were included in the review. These articles addressed medication adherence in the treatment of non-oncological chronic pain. From the selected articles analyzed, eight presented cross-sectional observational, cohort, and

longitudinal quantitative methodologies, and one article had a qualitative methodology.

There are many aspects of nonadherence to treatment by patients. Table 1 presents the principal issues found in the included studies. On the other hand, some elements presented in Table 1 could lead a patient to adhere to their treatment. The possibility of the patient having a choice in treatment could be a positive factor in treatment results and adherence. For example, patients undergoing treatment for migraines with flexible doses of subcutaneous injections of a drug had the option of choosing either monthly or quarterly treatment. Both options are patient friendly, reduce LAPT, and establish an easier-to-follow treatment routine.4 Moreover, the level of satisfaction with pain management and treatment adherence can also influence LAPT. For example, patients who reported having access to treatment information showed increased levels of medication acceptance, facilitated pain management, and better interactions with their physician.<sup>5</sup>

We can conclude that, to minimize the LAPT problem, the following measures are necessary: patient education, effective communication between patient and physician,

**Table 1** Factors associated with Low Adherence to Pharmacological Treatment (LAPT) in patients with non-oncologic chronic pain.

The relationship between persistent pain and the sense that the disease is worsening<sup>8</sup>

The belief that taking medication will lead to addiction  $^{7,11}$  Fear of adverse reactions  $^{7-9}$ 

The reduction of pain intensity leads to adjusting the medication with no medical orientation  $^{7,8,11}$ 

Presence of other comorbidities associated with mental disorders  $^{6,7,10}$ 

Use of polypharmacy due to associated comorbidities <sup>10</sup> High cost of recommended medical treatments <sup>8</sup> Low satisfaction with the treatment and health service <sup>5,9</sup> Routine <sup>4</sup> and daily working schedule influence the assiduity of treatment with anesthetic blockade <sup>5</sup>

Lack of information about the side effects or planned duration of the treatment when prescribing opioids<sup>7</sup>

Influence of other medical professionals in decision-making regarding reducing or interrupting the prescribed treatment with opioids<sup>7</sup>

psychological intervention based on cognitive behavioral therapy, and minimization of socioeconomic aspects that interfere with treatment. <sup>6,7</sup>

### Conflicts of interest

The authors declare no conflicts of interest.

#### References

- World Health Organization. Adherence to Long Ter Therapies Project. Evidence for Action. https://apps.who.int/iris/bitstream/handle/10665/42682/9241545992.pdf [Accessed 7 October 2020].
- Drummond ED, Simões TC, Andrade FB. An evaluation of nonadherence to pharmacotherapy for chronic diseases and socioeconomic inequalities in Brazil. Rev Bras Epidemiol. 2020;23: e200080.
- 3. Llorca CVY, Cortés Castell E, Ribera Casado JM, de Lucas Ramos P, Casteig Ayestarán JL, Casteig Blanco A, et al. Factors associated with non-adherence to drugs in patients with chronic diseases who go to pharmacies in Spain. Int J Environ Res Public Health. 2021;18:430.
- Cowan R, Cohen J, Rosenman E, Iyer R. Physician and patient preferences for dosing options in migraine prevention. J Headache Pain. 2019;20:50.. 4.
- Wong WS, Chow YF, Chen PP, Wong S, Fielding R. A longitudinal analysis on pain treatment satisfaction among Chinese patients with chronic pain: predictors and association with medical adherence, disability, and quality of life. Qual Life Res. 2015;24:2087.
- Scherrer JF, Salas J, Grucza R, Sullivan MD, Lustman PJ, Copeland LA, et al. Depression and buprenorphine treatment in patients with non-cancer pain and prescription opioid

- dependence without comorbid substance use disorders. J Affect Disord. 2021;278:563–9.
- 7. Paterson C, Ledgerwood K, Arnold C, Hogg M, Xue C, Zheng Z. Resisting prescribed opioids: a qualitative study of decision making in patients taking opioids for chronic noncancer pain. Pain Med. 2016;17:717–27.
- **8.** Sampaio R, Azevedo LF, Dias CC, Castro Lopes JM. Non-Adherence to pharmacotherapy: A prospective multicentre study about its incidence and its causes perceived by chronic pain patients. Patient Prefer Adherence. 2020;14:321–32.
- Balsa A, García de Yébenes MJ, Carmona L. Multilevel factors predict medication adherence in rheumatoid arthritis: a 6month cohort study. Ann Rheum Dis. 2022;81:327–34.
- Lable SL, Cui Z, Shen W. Duloxetine treatment adherence across mental health and chronic pain conditions. Clinicoecon Outcomes Res. 2014;6:75–81.
- 11. Markotic F, Obrdalj E, Zalihic A, Pehar R, Hadziosmanovic Z, Pivic G, et al. Adherence to pharmacological treatment of chronic nonmalignant pain in individuals aged 65 and older. Pain Medicine. 2013;14:247–56.

Emilie de Magalhães Pedreira ( ) a,\*, Viviane Borges Passos Mineiro ( ) b, Luciana Maria Pondé Bastianelli Knop ( ) c, Liliane Elze Falcão Lins-Kusterer ( ) b, Durval Campos Kraychete ( ) b

E-mail: empedreira@icloud.com (E.M. Pedreira). Received 15 March 2023; accepted 16 July 2023 Available online 27 July 2023

<sup>&</sup>lt;sup>a</sup> Escola de Medicina da Bahia, Psicologia, Salvador, BA, Brazil

<sup>&</sup>lt;sup>b</sup> Universidade Federal da Bahia, Salvador, BA, Brazil <sup>c</sup> SENAI CIMATEC. Salvador. BA. Brazil

<sup>\*</sup>Corresponding author.