The management of chronic pain –not oncological–: an emerging bioethical challenge

El manejo del dolor crónico –no oncológico–: un reto bioético emergente

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Abstract

Pain and suffering are substantial realities of human experience. Today we are beginning to become aware of the contextual reality of the health problem generated as a consequence of the liquid society and the discarding that has been inherited. Bioethics, as an interdisciplinary field, has a fundamental and crucial role in the orientation and guidance of health sciences. Analyzing and understanding these concepts (pain and suffering) is essential in order to be able to propose –proactively– specific strategies that favor and promote adequate multidimensional treatment. The purpose of this systematic review is to present a global and current vision of the perception that both chronic pain and suffering represent for modern society. Epidemiologically, there is a silent epidemic in this sense, which, if not comprehensively addressed, represents a risk factor for the development of social problems, in combination with the anthropological reductionisms that prevail at present.

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1. Introduction

Pain and suffering form a substantial part –inevitably– of the experience of the human being (1); they are undeniable anthropological realities, so it is essential to present a critical analysis from the perspective of bioethics that allows the person to know and understand him/herself from this perspective. The society in which humanity is developing is increasingly characterized as a society of discarding, of a liquid world (2), where there are no fundamental values that go beyond a subjective and relative interpretation of reality. Bioethics, as a common ground for interdisciplinary and multidisciplinary work (3), has much to say about the way pain is understood today (4, 5).

Over the last century, medicine has experienced exponential growth in terms of the technical and scientific basis that characterizes it; life expectancy has been increased; diseases –previously considered invincible– have been fought and defeated. However, there seems to be an increasingly widespread perception of how the medical sciences have focused more on the technique than on the person (6, 7). This has triggered a personalist movement in health professionals, who, through awareness, have been able to identify these deviations in medical practice (8). These interdisciplinary reflections (9-11) have led the International Association for the Study of Pain (IASP) to seek to redefine and clarify what is currently understood as pain in medical society (12, 13). For more than 40 years, pain was defined as «an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage». In 2018, the IASP convened different experts in the field to put to their consideration the relevance and appropriateness of such definition, so that in 2020 a new proposal was presented, defining pain as «an unplea-

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Table 1. Fundamental considerations: New definition of pain.

Considerations	Relevance
Pain is a personal experience influenced –to varying degrees– by biological, psychological, social and spiritual factors.	– Pain is understood as an individual reality, which is influenced by the globality, individuality and indivisibility of the human person.
Pain and nociception are distinct phenomena.	– Pain cannot be reduced to a sensory nervous process.
People learn the concept of pain through life experience.	– Being an individual and personal experience, it is lived and understood only through empirical realities.
If a person manifests a painful experience, it must be respected.	– One of the greatest fears on the part of patients suffering pain is misunderstanding on the part of physicians.
Although pain usually has a protective function, when it becomes chronic it can have adverse effects on a person's functionality and overall well-being.	– A fundamental aspect is that all chronic pain always begins as acute pain which, when it becomes chronic, becomes, in itself, a pathology.
One of the ways to express pain is a verbal description. The inability to communicate does not negate the possibility of a human being or animal experiencing pain.	– Based on the principle of subsistence, the ability to communicate does not reduce or minimize the possibility of experiencing pain, since pain is and exists, despite the complications corresponding to its verbalized expression. – Pain exists despite the fact that it cannot be expressed, which has led to the development of measurement scales that assess behavioral parameters, thus allowing a semiological approach in patients who cannot communicate their symptomatology.

Source: Own elaboration.

sant sensory and emotional experience associated with or similar to that associated with actual or potential tissue damage» (13). This new definition brought up different considerations (Table 1), which are fundamental to be able to complement, thus, the knowledge we have to date of this experience (13).

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Pain and suffering are such intertwined realities that it can sometimes be difficult to differentiate between them. As Burgos (1) said: «They are part of the experience of the human being». At this point it would be important to remember that, in order to speak of bioethics, it is essential first –I emphasize– to speak of the person. The person as an individual and indivisible unit is affected in its totality by both pain and suffering. Suffering is this biological, emotional-affective, social and spiritual experience which, from both a historical and cultural perspective, has been linked, in the Western world, with a teleological aspect of the human being (14, 15). To speak of pain and suffering is basically to speak of the person who experiences it in all its natural essence, influencing his or her individual and subjective affectivity (16).

2. Pathophysiology of chronic pain

Pain, as a subjective experience –in addition to being understood from an anthropological perspective– can and should be understood, in turn, from a pathophysiological perspective (Figure 1) (17-25).

The semiology of both acute and chronic pain is extremely complex, since an effort is made to objectify a reality that is always subjective; however, different efforts have been made to identify the characteristics of each of the painful conditions (Table 2).

Chronic pain is no longer considered as an isolated symptom, but as an individual pathological process, which must be approached from this perspective. In order to simplify its study, a global division between chronic pain –oncological– and chronic pain –non oncological– has been proposed (27). The purpose of this review article is to present an overview of the global perception that both chronic –non oncological– pain and suffering represent for the modern society in which we live.

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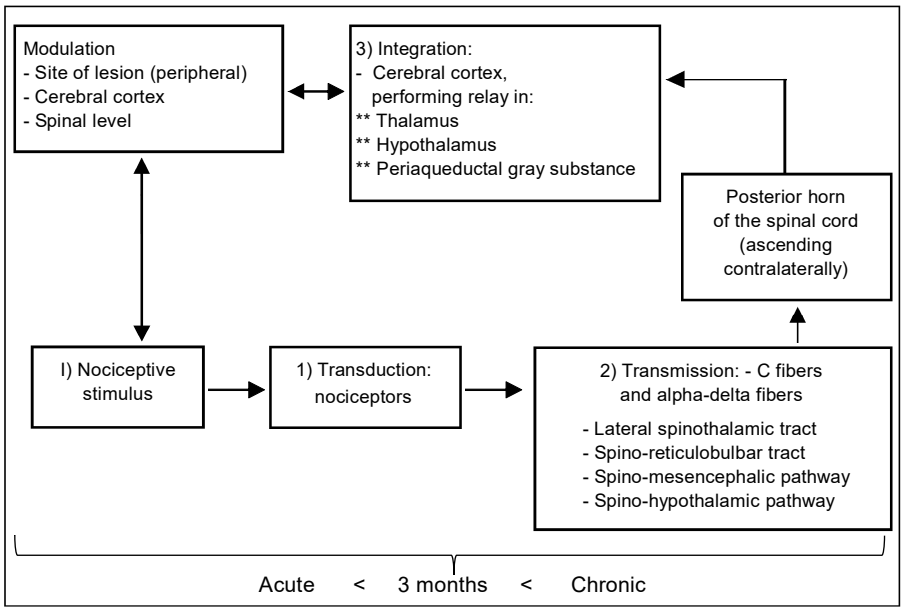
Figure 1. Physiology, perception and integration of pain.



Source: Own elaboration.

Table 2. Semiology of pain (acute and chronic)

Type of pain	Features
Nociceptive: There is an injurious stimulus.	Nociceptive pain is pain that is perceived by direct stimulation of nociceptors. Such stimulation can be classified as: – *Parietal*: well localized pain, with direct irritation of nerve fibers (example: appendicitis with peritoneal irritation). – *Visceral*: diffuse pain with direct irritation of nerve plexuses, with stimulation of autonomic pathways (example: abdominal distension).
– Neuropathic (26): There is a pathological stimulus on the nerve fibers.	Pain –usually– understood with characteristics other than nociceptive pain. – Tingling type pain. – Electrical and/or burning pain.

Acute < 3 months < Chronic

Source: Own elaboration.

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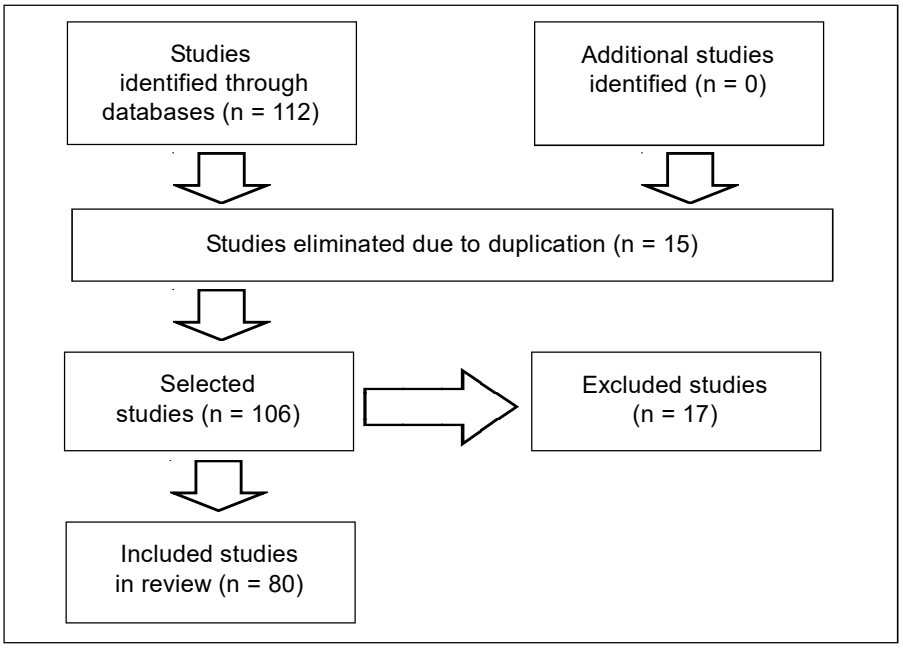
3. Methodology

A literature review was carried out, using the following platforms as search engines: PubMed, EBSCO Host, Web of Science and Scielo. The following keywords were used as key words, by means of Boléan search engines: *chronic pain*/chronic pain, *bioethics*/bioethics, *opioid treatment*/, pain management/ pain management. As inclusion criteria, articles were taken that met these descriptions and were available for download. All those presenting aspects related to pediatric patients or with chronic pain of oncologic etiology were excluded. Subsequently, using the *EndNote* reference manager, duplicate articles were identified. The risk of bias can be identified in terms of the deficiency of qualitative, quantitative or

Figure 2. PRISMA methodology.



Source: Own elaboration.

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Table 3. Concept of pain and its definitions.

Type of pain	Characteristics
IASP definition 1979 (12, 28)	An unpleasant sensory and emotional experience, associated with actual or potential tissue damage, or described in terms of such damage.
IASP definition 2020 (13, 17, 29)	An unpleasant sensory and emotional experience associated or similar to that associated with actual or potential tissue damage.

Source: Own elaboration.

review studies in this regard. Once the search was conducted, 112 articles were identified, of which 17 did not meet the inclusion criteria and 15 were eliminated due to duplication (Figure 2).

4. Results

a) Definition

Defining pain, both acute and chronic, is a fundamental aspect, since only from this conception will it be possible to understand the different spheres that comprise it, thus allowing society to work unified in comprehensive support (Table 3).

b) Public health and epidemiology (4):

Since the resurgence of palliative care and pain management in modern medicine (6, 7), society has become increasingly aware, so that from different areas it has been understood and evidenced that pain represents a real problem (30) of public health (17, 31-33), and that it makes up a true silent pandemic (22, 27, 34) (Table 4).

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Table 4. Pain, suffering and epidemiology.

Type of pain	Characteristics
Incidence and prevalence (estimated) (31, 35, 36)	– Annually, more than 61 million people in the world experience about 6 billion days related to severe suffering associated with health (37). – It is estimated that in Mexico the prevalence of chronic pain is 41.5% (47.3% women) (33.6% men) (31).
Main pain syndromes (21, 25, 27, 29)	Epidemiological report from the United States of America (2019) (27): – Headache: acute (7-51%), chronic (3-4.4%). – Cervicalgia: acute (16-40%), chronic (20%). – Low back pain: acute (22-33%), chronic (5-45%). – Nonspecific joint pain: chronic (40%).
Estimated direct and indirect costs (38)	– The United States of America reported in 2019 an estimated cost in excess of $600 billion annually (27).
Access to palliative care (34, 37, 39, 40)	– It is estimated that 1% of opioid drugs are distributed in the poorest 50% of the poorest countries (39). – 90% of opioid medications are distributed among the richest 10% of countries (39). – Mexico has <5% of opioid medications to meet the needs in the country (39).

Source: Own elaboration.

c) Multidimensionality of suffering

Pain is in itself such a complex experience that it cannot be approached from a single perspective. It is necessary to start from the concept of multidimensionality (41, 42), which implies, fundamentally, a multi-therapeutic approach, where the different spheres that make up human reality can be approached in an integral manner (21, 23, 43, 44) (Figure 3).

The isolated or generalized approach to pain is insufficient, since, as mentioned by the IASP, it is a subjective experience, which is why treatment should be oriented from an individualized perspective, favoring patient-centered medicine, where, based on a delibe-

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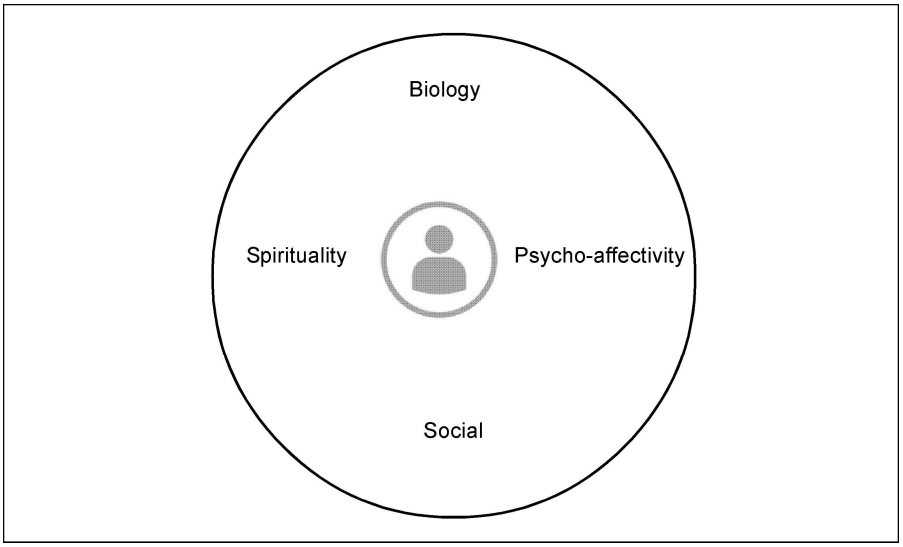
rative doctor-patient relationship, the patient is empowered in the fight against pain and suffering.

d) Bioethical aspects in pain management; responsible prescribing

Bioethical analysis (45, 46) in pain management is a challenge (4, 5, 47), since it can be approached from the perspective of social-distributive justice and promotion of human rights (34, 35), clinical research, or from the biomedical perspective (48, 49), in terms of the fundamental requirements to promote responsible prescribing (50-55) that weighs the risks and benefits of therapeutic alternatives in their complexity.

Today, opioid drugs represent an ambivalent crisis (Figure 4). On the one hand, there is a real shortage in which the human right to pain management cannot be satisfied due to a deficiency in the universality of health services and, on the other hand, there is a

Figure 3. Spheres conforming human multidimensionality.



Source: Own elaboration.

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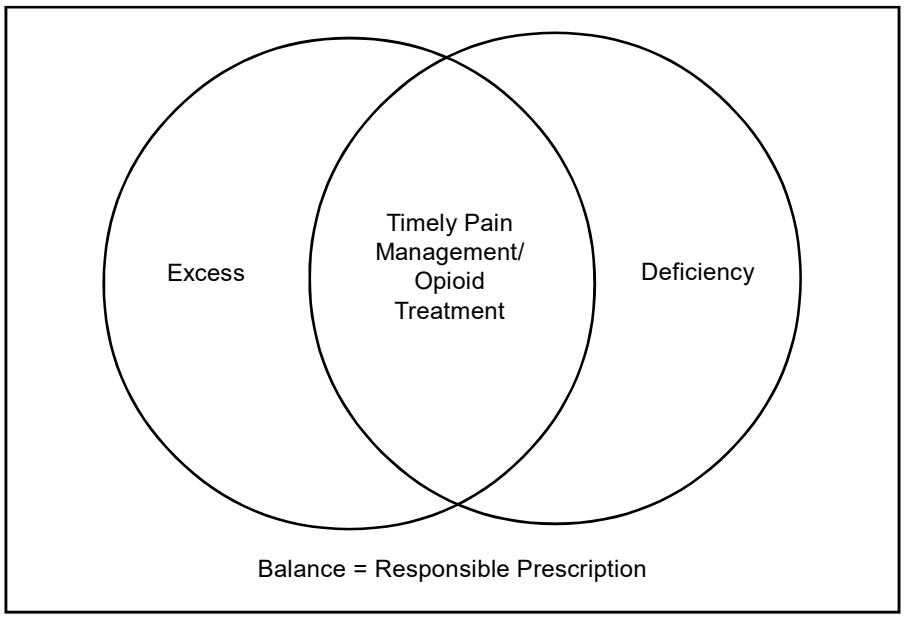
Figure 4. Ambivalent crisis in the treatment of chronic pain with opioids.



Source: Own elaboration.

real epidemic in terms of excessive consumption in some countries, which calls into question the existing risk-benefit analysis of these drugs. Opioids represent a crucial and elementary tool for pain management; however, as long as there is a lack of a culture and directed training regarding their responsible prescription, we will continue to experience this ambivalent crisis, in which bioethics really has a fundamental role in terms of orientation and guidance towards the transcendental good.

5. Discussion

Chronic pain –as a disease– represents –at the same time– one of the most worrying and silent medical, legal and social problems

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(14, 23, 56, and 57) for the society of the 21st century. In recent years, reflection and research have been prioritized in this regard, generating greater awareness of health-related suffering (19, 58). However, it is up to bioethics (47, 59) to establish a common territory (45), where all social stakeholders (9-11) can participate in open dialogue (49, 60-62), in order to determine the best means to follow, thus being able to work directly on a fundamental aspect for the human being: quality of life (63). This problem should be approached from an integral bioethical perspective (48, 52), considering the sum of advances that have been generated in the last 40-50 years. A satisfactory solution that proactively promotes (64) the dignity of the human person (8, 65) can only be found from an integral collaboration.

Both chronic pain and suffering (18, 24, 43) might seem to be alien crises and even a little obvious; however, they are fundamentally transcendental aspects that directly concern human beings in their deepest fibers (37), which is why they should be treated with the importance that corresponds to them. History (64, 66) has taught that a social problem that is poorly confronted can unleash problems so great that they affect the very conception of the person –anthropological reductionism– and, at the same time, it also shows how a crisis is a moment of opportunity and growth. Bioethics, as an interdisciplinary science (3, 67), must be capable of recognizing social problems –concerning biomedical sciences (68)–, favoring reflection in this sense, seeking to guide professional action in advance and in anticipation, so that an adequate and consistent solution can be offered, thus guiding the harmonious construction of society, from science towards the transcendental good, based on human nature (46).

Today, chronic pain represents a social call for humanity to participate actively and concretely for the benefit of the dignity of the human being (69, 70). The bioethical challenge begins with the call (vocation) to go out to meet people and to be able to apply their deliberative methodologies individually (50), so that the human be-

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ing is understood as what he or she is, an individual and indivisible substance. This will favor interdisciplinary reflection and collaboration and promote a deeply involved and integrated society (71). Pain is already a silent epidemic, which is why dialogue must begin proactively. This will allow a social transformation, in which solidarity, social justice, the value of life and respect for freedom will be the foundations that will allow the human being to achieve a life with true quality.

The treatment of pain, as a human right, implies a profound social responsibility for both the medical profession and society in general (32, 72). An erroneous or incomplete approach (41, 73) can trigger multiple health complications (74):

1. Algophobic societies (with fear or refusal to recognize pain/suffering) (20, 44):

The superficiality that has been inherited following contemporary cultural changes has directly influenced the socially held conception of pain and suffering. Although human beings are not called to suffer, suffering is an inescapable experience of humanity, an experience that confronts human beings with their limits and teleological aspirations. It is crucial that, as a society, we form a sense of acceptance with respect to such circumstances, so that they can not only be accepted and overcome individually, but can be lived collectively, remembering that the person is not understood from an isolated perspective, but only through the encounter with the other.

2. Unjustified increase in the consumption of opioids (75-77):

With an epidemic crisis affecting more than 61 million people around the world, the medical reality is confronted with an inherent therapeutic limitation. This has led in certain countries to favor the prescription, sometimes indiscriminate, of opioids, which, although they are extremely beneficial drugs in pain management, also carry a risk, due to the pharmacology of the drug itself. The

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possibility of developing dependence and addiction is extremely high, which in the end ends up contrasting the potential benefit of pain management with the real risk of developing an addiction with the corresponding complications, not only for the patient, but also for the family and social nucleus that surrounds him/her.

3. Deficiency regarding the correct and indicated use of opioids in pain management (54, 55, 78-80):
The ambivalence in the crisis over the use of opioids is identified by contrasting two simultaneous (syndemic) realities; on the one hand, there is indiscriminate abuse of opioids in both acute and chronic pain management; on the other hand, in other less favored countries there is a palpable deficiency in terms of access to such medications (opioids). This crisis is extremely complex and there is no simple solution. There is a sparing and limited pharmacological use due to multiple circumstances, ranging from socio-cultural and contextual conditioning to ethical-moral conceptions.

For bioethics, this crisis represents an invaluable area of opportunity, since, by favoring specific and concrete strategies that allow the development of skills for responsible prescribing, a substantial problem would be reached and solved: the inadequate management of pain with the consequent severe suffering associated with health.

4. Loss of quality of life (perpetuation of a life of suffering) (42):
Adequate management of pain and suffering from an integral –multidimensional– perspective aims to promote an adequate quality of life. This particular point will lead the reader to one of the transcendental questions of the medical vocation: what is the indicator of success in medicine? What is the essence of the profession? Curing is not always possible; however, accompanying the patient in his or her suffering, seeking to provide a higher quality of life (and of death) in the moments of maximum vulnerability repre-

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sented by the disease, is perhaps one of the greatest honors to which a health professional could aspire.

Quality of life is an indicator of the existing social commitment, in terms of the real involvement of the academic and scientific world in everyday life. Work and progress only make sense in their direct applicability to the quality with which we live day by day.

Today we are experiencing a reality influenced and contextualized by humanitarian crises. One could spend hours discussing and analyzing them; however, it is crucial and determining for bioethics that academic work results in transformative initiatives, which is why the recognition of these potential problems represents a courageous and creative challenge for bioethics: how to proactively guide academic work and how to prevent it from remaining in the academy, so that it can have a decisive influence on society? In a world marked by anthropological reductionism, it is time to defend the person, not with superficial solutions, but with profound anthropological reflections, so that society can be reoriented towards a more just world in which everyone has a place.

Based on this systematic review, we propose a series of research studies that can serve as a guide and orientation regarding the aspects identified as potential health complications. It is essential, therefore, to thoroughly understand that the only potentially sufficient way forward is through inter-, multi- and transdisciplinary work.

6. Conclusion

Bioethics, as a common ground for interdisciplinary work in the search for the transcendental good in the health sciences, faces in the 21st century multiple challenges that concern the human being in the deepest fibers of his being, which is why it is essential that from the academic and reflective work, at the same time, an applied field work is favored, where a direct response is given to

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the vocation and the call to go out to meet the person, generating a true and transformational impact on society. Such an undertaking will only be achieved through the promotion of inter, multi and transdisciplinary open dialogue between the different agents that actively participate in the harmonious construction of contemporary society.

Chronic pain and suffering represent today a true silent epidemic. For this reason it is crucial and fundamental to encourage study, research and reflection in this regard. It is time to go out to meet people, so that academic work does not remain in the academy, but really has a determined social influence. Failure to deal adequately with pain can unleash a series of unimaginable social crises. It is time to act in a proactive and directed way for the benefit of the human being in its multidimensionality; to promote an action centered on the person, recognizing him/her as a good and an end in itself, so as to overcome the main challenge of indifference and rejection, manifested through the algophobia that is lived and experienced day by day in modern societies.

Bibliographic references

1. Burgos JM. *Antropología Breve*. Palabra E, editor. España: Ediciones Palabra; 2010.
2. Bauman Z. *Vida Líquida.* Austral; 2013.
3. Emmerich N. What is Bioethics? *Medicine, Health Care and Philosophy.* 2015; 18(3): 437-441. https://doi.org/10.1007/s11019-015-9628-7
4. Christopher MJ. It's time for bioethics to see chronic pain as an ethical issue. *Am J Bioeth.* 2011; 11(6): 3-4. https://doi.org/10.1080/15265161.2011.589282
5. Yýldýrým G, Ertekin Pýnar Þ, Gürsoy S, Özdemir Kol I. Views of algology in patients about ethical issues related to pain. *Agri.* 2019; 31(3): 122-131. https://doi.org/10.14744/agri.2019.80378
6. Covarrubias AO, Templos ML. *et al.* Antecedentes de la medicina paliativa en México: Educación continua en cuidados paliativos. *Rev Mex Anest.* 2019; 42(2): 122-128.
7. Del Río IP A. Cuidados Paliativos: Historia y desarrollo. *Boletín Escuela de Medicina UC.* 2007; 32(1): 16-22.

8. Sgreccia E. *Human person and personalism. Cuad Bioet.* 2013; 24(80): 115-123.
9. Giordano J, Schatman ME. An ethical analysis of crisis in chronic pain care: Facts, issues and problems in pain medicine; Part I. *Pain Physician.* 2008; 11(4): 483-490. https://doi.org/10.36076/ppj.2008/11/483
10. Giordano J, Schatman ME. A crisis in chronic pain care: An ethical analysis. Part two: Proposed structure and function of an ethics of pain medicine. *Pain Physician.* 2008; 11(5): 589-595. https://doi.org/10.36076/ppj.2008/11/589
11. Giordano J, Schatman ME. A crisis in chronic pain care: An ethical analysis. Part three: Toward an integrative, multi-disciplinary pain medicine built around the needs of the patient. *Pain Physician*. 2008; 11(6): 775-784.
https://doi.org/10.36076/ppj.2008/11/775
12. Ibarra E. Una nueva definición de dolor. Un imperativo en nuestros días. *Rev Soc Esp Dolor*. 2006; 13(2): 65-72.
13. Raja SN, Carr DB, Cohen M, Finnerup NB, Flor H, Gibson S, *et al.* The revised International Association for the Study of Pain definition of pain: Concepts, challenges, and compromises. *Pain.* 2020; 161(9): 1976-1982.
https://doi.org/10.1097/j.pain.0000000000001939
14. Karches KE. The ends of medicine and the crisis of chronic pain. *Theoretical Medicine and Bioethics.* 2019; 40(3): 183-196.
https://doi.org/10.1007/s11017-019-09489-6
15. Jennings N, Chambaere K, Macpherson CC, Deliens L, Cohen J. Main themes, barriers, and solutions to palliative and end-of-life care in the English-speaking Caribbean: A scoping review. *Rev Panam Salud Pública.* 2018; 42: e15. https://doi.org/10.26633/RPSP.2018.15
16. Gevaert J. *El problema del hombre.* Sígueme, editor. España: Sígueme; 2001.
17. García J. Manejo básico del dolor agudo y crónico. *Anestesia en Méx.* 2017; 29(1): 77-85.
18. Crofford LJ. Chronic Pain: Where the body meets the brain. *Trans Am Clin Climatol Assoc*. 2015; 126: 167-183.
19. Maixner W, Fillingim RB, Williams DA, Smith SB, Slade GD. Overlapping chronic pain conditions: Implications for diagnosis and classification. *J Pain.* 2016; 17(9 Suppl): T93-t107. https://doi.org/10.1016/j.jpain.2016.06.002
20. Linton SJ, Flink IK, Vlaeyen JWS. Understanding the etiology of chronic pain from a psychological perspective. *Phys Ther.* 2018; 98(5): 315-324.
https://doi.org/10.1093/ptj/pzy027
21. Takai Y, Yamamoto-Mitani N, Abe Y, Suzuki M. Literature review of pain management for people with chronic pain. *Jpn J Nurs Sci.* 2015; 12(3): 167-183.
https://doi.org/10.1111/jjns.12065
22. Astudillo WM C, Astudillo E, Gabilondo S. Principios básicos para el control del dolor total. *Rev Soc Esp Dolor.* 1998; 6(1): 29-40.
23. Fillingim RB, Loeser JD, Baron R, Edwards RR. Assessment of chronic pain: Domains, methods, and mechanisms. *J Pain*. 2016; 17(9 Suppl): T10-20.
https://doi.org/10.1016/j.jpain.2015.08.010

24. Ahmadi A, Bazargan-Hejazi S, Heidari Zadie Z, Euasobhon P, Ketumarn P, Karbasfrushan A, *et al.* Pain management in trauma: A review study. *J Inj Violence Res.* 2016; 8(2): 89-98. https://doi.org/10.5249/jivr.v8i2.707
25. Foster NE, Anema JR, Cherkin D, Chou R, Cohen SP, Gross DP, *et al.* Prevention and treatment of low back pain: Evidence, challenges, and promising directions. *Lancet.* 2018; 391(10137): 2368-2383.
https://doi.org/10.1016/S0140-6736(18)30489-6
26. Coluzzi F, Mattia C. Oxycodone. Pharmacological profile and clinical data in chronic pain management. *Minerva Anestesiol.* 2005; 71(7-8): 451-460.
27. Domenichiello AF, Ramsden CE. The silent epidemic of chronic pain in older adults. *Prog Neuropsychopharmacol Biol Psychiatry.* 2019; 93: 284-290.
https://doi.org/10.1016/j.pnpbp.2019.04.006
28. Radbruch L, De Lima L, Knaul F, Wenk R, Ali Z, Bhatnaghar S, *et al.* Redefining palliative care. A new consensus-based definition. *J Pain Symptom Manage.* 2020; 60(4): 754-764. https://doi.org/10.1016/j.jpainsymman.2020.04.027
29. Smith BH, Fors EA, Korwisi B, Barke A, Cameron P, Colvin L, *et al.* The IASP classification of chronic pain for ICD-11: Applicability in primary care. *Pain.* 2019; 160(1): 83-87. https://doi.org/10.1097/j.pain.0000000000001360
30. Shapiro RS. Liability issues in the management of pain. *J Pain Symptom Manage.* 1994; 9(3): 146-152. https://doi.org/10.1016/0885-3924(94)90123-6
31. Barragán AM, S. Gutiérrez, LM. Dolor en adultos mayores de 50 años: Prevalencia y factores asociados. *Salud Pública Mex.* 2007; 49(1): 488-494.
https://doi.org/10.1590/S0036-36342007001000008
32. Morrone LA, Scuteri D, Rombola L, Mizoguchi H, Bagetta G. Opioids resistance in chronic pain management. *Current Neuropharmacology.* 2017; 15(3): 444-456. https://doi.org/10.2174/1570159X14666161101092822
33. Llaca-García E. La pandemia de COVID-19 en México: El papel fundamental de los cuidados paliativos y bioética. In: Templos-Esteban LA, editor. México*: Medicina y Ética;* 2021; 179-195. https://doi.org/10.36105/mye.2021v32n1.05
34. Brennan F, Lohman D, Gwyther L. Access to pain management as a human right. *American Journal of Public Health.* 2019; 109(1): 61-65.
https://doi.org/10.2105/AJPH.2018.304743
35. Carr DB, Fox DM, Rothstein MA, Spellman CM. Pain Management and public health: Introduction to the special section. *Am J Public Health.* 2019; 17-18.
https://doi.org/10.2105/AJPH.2018.304841
36. Leppla IE, Gross MS. Optimizing medication treatment of opioid use disorder during COVID-19 (SARS-CoV-2). *J Addict Med.* 2020; 14(4): e1-e3.
https://doi.org/10.1097/ADM.0000000000000678
37. Bhadelia A, De Lima L, Arreola-Ornelas H, Kwete XJ, Rodríguez NM, Knaul FM. Solving the global crisis in access to pain relief: Lessons from country actions. *American Journal of Public Health.* 2019; 109(1): 58-60.
https://doi.org/10.2105/AJPH.2018.304769

38. Hadler RA, Rosa WE. Distributive justice: An ethical priority in global palliative care. *Journal of Pain and Symptom Management.* 2018; 55(4): 1242-1245. https://doi.org/10.1016/j.jpainsymman.2017.12.483
39. Knaul FM. Disparities and crisis: Access to opioid medicines in Mexico. *Lancet Public Health.* 2021; 6(2): e83-e4. https://doi.org/10.1016/S2468-2667(21)00009-8
40. Zylicz Z. The changing face of palliative care. Advances in palliative medicine. 2011; 10(3/4): 85-88.
41. Haverfield MC, Giannitrapani K, Timko C, Lorenz K. Patient-Centered pain management communication from the patient perspective. *J Gen Intern Med.* 2018; 33(8): 1374-1380. https://doi.org/10.1007/s11606-018-4490-y
42. Sullivan MD, Vowles KE. Patient action: As means and end for chronic pain care. *Pain*. 2017; 158(8): 1405-1407. https://doi.org/10.1097/j.pain.0000000000000921
43. Crofford LJ. Psychological aspects of chronic musculoskeletal pain. *Best Pract Res Clin Rheumatol*. 2015; 29(1): 147-155. https://doi.org/10.1016/j.berh.2015.04.027
44. 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. https://doi.org/10.1016/j.jpain.2016.01.001
45. Ferrer U. Interdisciplinariedad de la bioética: Su posibilidad y sus límites. *Cuadernos de Bioética.* 2013; XXIV(2): 265-274.
46. Pastor LM. From virtue bioethics to bioethics personalistic: Is integration possible? *Cuad Bioet.* 2013; 24(80): 49-56.
47. Souza LA, Pessoa AP, Barbosa MA, Pereira LV. The bioethical principlism model applied in pain management. *Rev Gaucha Enferm.* 2013; 34(1): 187-95. https://doi.org/10.1590/S1983-14472013000100024
48. Millás-Mur J. Ética y bioética en el pregrado de medicina: Una propuesta. *Revista Peruana de Medicina Experimental y Salud Pública.* 2019; 36: 93-99. https://doi.org/10.17843/rpmesp.2019.361.4260
49. Compagnone C, Tagliaferri F, Allegri M, Fanelli G. Ethical issues in pain and omics research. Some points to start the debate. *Croat Med J.* 552014, p. 1-2.
50. Matthias MS, Bair MJ. The patient-provider relationship in chronic pain management: Where do we go from here? *Pain Med.* 2010; 11(12): 1747-1749. https://doi.org/10.1111/j.1526-4637.2010.00998.x
51. Henry SG, Holt ZB. Frustrated patients and fearful physicians. *J Gen Intern Med.* 322017, p. 148-149. https://doi.org/10.1007/s11606-016-3868-y
52. Guerra López R. Bioethics and rationality. Personalism at the service of expanding the horizon of reason at the foundation of bioethics. *Cuad Bioet.* 2013; 24(80): 39-48.
53. D'Hotman D, Pugh J, Douglas T. When is coercive methadone therapy justified? *Bioethics*. 2018; 32(7): 405-413. https://doi.org/10.1111/bioe.12451
54. Kaebnick GE. Bioethics and addiction. *Hastings Center Report*. 2020; 50(4): 2. https://doi.org/10.1002/hast.1165

55. Rieder TN. Opioids and ethics: Is opioid-free the only responsible arthroplasty? *Hss J.* 152019, p. 12-16. https://doi.org/10.1007/s11420-018-9651-3
56. Pati NB, Gupta VRM, Mayasa V, Velivela MDS, Hussain A. Rethinking chronic pain treatment with opioids. *Indian Journal of Pharmaceutical Sciences.* 2017; 79(6): 849-857. https://doi.org/10.4172/pharmaceutical-sciences.1000301
57. Rodrigues P, Crokaert J, Gastmans C. Palliative sedation for existential suffering: A systematic review of argument-based ethics literature. *Journal of Pain and Symptom Management.* 2018; 55(6): 1577-1590.
https://doi.org/10.1016/j.jpainsymman.2018.01.013
58. Becker WC, Bair MJ, Picchioni M, Starrels JL, Frank JW. Pain management for primary care providers: A narrative review of high-impact studies, 2014-2016. *Pain Med.* 2018; 19(1): 40-49. https://doi.org/10.1093/pm/pnx146
59. Carvalho AS, Pereira SM, Jacomo A, Magalhaes S, Araujo J, Hernández-Marrero P, *et al.* Ethical decision making in pain management: A conceptual framework. *Journal of Pain Research.* 2018; 11: 967-976.
https://doi.org/10.2147/JPR.S162926
60. Saulnier KM. Telling, Hearing, and Believing: A critical analysis of narrative bioethics. *Journal of Bioethical Inquiry.* 2020; 17(2): 297-308.
https://doi.org/10.1007/s11673-020-09973-y
61. Kaebnick GE. Bioethics and Addiction. *Hastings Cent Rep.* 2020; 50(4): 2. https://doi.org/10.1002/hast.1165
62. Bandini JI, Courtwright AM, Rubin E, Erler KS, Zwirner M, Cremens MC, *et al.* Ethics consultations related to opioid use disorder. *Psychosomatics*. 2020; 61(2): 161-170. https://doi.org/10.1016/j.psym.2019.10.003
63. Gudat H, Ohnsorge K, Streeck N, Rehmann-Sutter C. How palliative care patients' feelings of being a burden to others can motivate a wish to die. Moral challenges in clinics and families. *Bioethics*. 2019; 33(4): 421-430.
https://doi.org/10.1111/bioe.12590
64. García LF, Fernandes MS, Moreno JD, Goldim JR. Mapping Bioethics in Latin America: History, theoretical models, and scientific output. *J Bioeth Inq.* 2019; 16(3): 323-331. https://doi.org/10.1007/s11673-019-09903-7
65. Sgreccia E. *La persona y el respeto por la vida humana.* 1997.
66. Wilson D. What can history do for bioethics? *Bioethics*. 2013; 27(4): 215-223. https://doi.org/10.1111/j.1467-8519.2011.01933.x
67. Cortina A. La dimensión pública de las éticas aplicadas. España: *Revista Iberoamericana*; 2002, p. 45-64. https://doi.org/10.35362/rie290950
68. Beauchamp T, Childress J. Principles of Biomedical Ethics: Marking its fortieth anniversary. Am J Bioeth. 2019; 19(11): 9-12.
https://doi.org/10.1080/15265161.2019.1665402
69. Varsi C, Ledel Solem IK, Eide H, Børøsund E, Kristjansdottir OB, Heldal K, *et al.* Health care providers' experiences of pain management and attitudes towards digitally supported self-management interventions for chronic pain: A qualitative study. *BMC Health Services Research.* 2021; 21(1): 1-16.
https://doi.org/10.1186/s12913-021-06278-7

70. Cameron F, Janze A, Klarare A. Homecoming-Dignity through movement at the end of life: A qualitative interview study with healthcare professionals. *Am J Hosp Palliat Care*. 2021: 10499091211017876.
https://doi.org/10.1177/10499091211017876
71. Balboni MJ, Sullivan A, Smith PT, Zaidi D, Mitchell C, Tulsky JA, *et al.* The views of clergy regarding ethical controversies in care at the end of life. *Journal of Pain and Symptom Management.* 2018; 55(1): 65+.
https://doi.org/10.1016/j.jpainsymman.2017.05.009
72. Black E, Khor KE, Demirkol A. Responsible prescribing of opioids for chronic non-cancer pain: A scoping review. *Pharmacy*. 2020; 8(3).
https://doi.org/10.3390/pharmacy8030150
73. Bushnell MC, Ceko M, Low LA. Cognitive and emotional control of pain and its disruption in chronic pain. *Nat Rev Neurosci.* 2013; 14(7): 502-511.
https://doi.org/10.1038/nrn3516
74. Kohrt BA, Griffith JL, Patel V. Chronic pain and mental health: Integrated solutions for global problems. *Pain.* 2018; 159 Suppl 1(Suppl 1): s85-s90.
https://doi.org/10.1097/j.pain.0000000000001296
75. Adamou N, Tukur J, Muhammad Z, Galadanci H. A randomised controlled trial of opioid only versus combined opioid and non-steroidal anti inflammatory analgesics for pain relief in the first 48 hours after Caesarean section. *Niger Med J.* 2014; 55(5): 369-373. https://doi.org/10.4103/0300-1652.140319
76. Adeniji AO, Atanda OO. Randomized comparison of effectiveness of unimodal opioid analgesia with multimodal analgesia in post-cesarean section pain management. *J Pain Res.* 2013; 6: 419-424. https://doi.org/10.2147/JPR.S44819
77. Calvo-Alén J. Opioids in chronic musculoskeletal conditions. *Ther Adv Musculoskelet Dis.* 2010; 2(5): 291-297. https://doi.org/10.1177/1759720X10370237
78. Saigal AN, Jones HM. Interdisciplinary mitigation of opioid misuse in musculoskeletal patients. *Hss J.* 2019; 15(1): 72-75.
https://doi.org/10.1007/s11420-018-09656-w
79. Smith HS, Peppin JF. Toward a systematic approach to opioid rotation. *J Pain Res.* 2014; 7: 589-608. https://doi.org/10.2147/JPR.S55782
80. Rieder TN. The Perilous Blessing of Opioids. *Mo Med.* 2020; 117(3): 202-203.