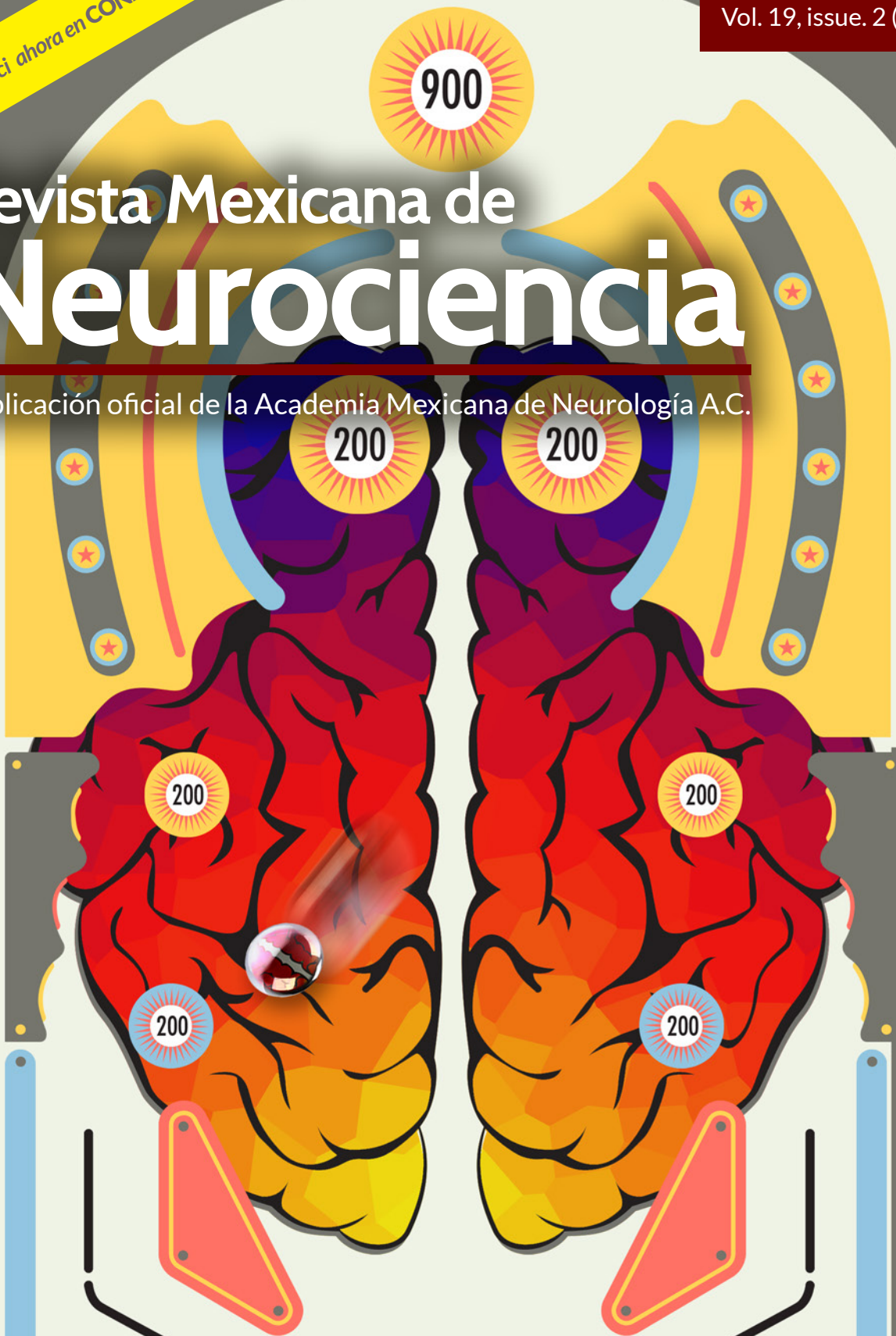
Rev Mex Neuroci ahora en CONACyT

Vol. 19, issue. 2 (march-april 2018)

Revista Mexicana de Neurociencia

Publicación oficial de la Academia Mexicana de Neurología A.C.



Revista Mexicana de Neurociencia; 19;2 (2018):74-85

Órgano Oficial de Difusión de la AMN

Academia Mexicana de Neurología, A.C.

www.revmexneuroci.com / ISSN 1665-5044

Review

Zoila Trujillo-De Los Santos,[1] Francisco Paz-Rodríguez,[2] Teresa Corona,[3] María Alejandra Sánchez-Guzmán.[4]

[1]*Geriatrics Clinic. National Institute of Neurology and Neurosurgery, MVS.*
[2]*Neuropsychology Laboratory and Support Groups. National Institute of Neurology and Neurosurgery, MVS.*
[3]*General Directorate. National Institute of Neurology and Neurosurgery, MVS.*
[4]*Violence and Gender Laboratory. National Institute of Neurology and Neurosurgery, MVS.*

Keywords

Palliative Care, scientific activity, scoping review, Mexico, end of life care.

Research on Palliative Care in Mexico. Scoping review

Investigación sobre Cuidados Paliativos en México. Revisión Sistemática Exploratoria

Abstract

The normative process initiated with the reforms to the General Health Law in 2009 has paralleled the institutionalization of Palliative Care and the development of academic and research work in our country. With the objective of describing the scientific activity developed in the area of palliative care in Mexico in the last 25 years, a scoping review was carried out to describe the characteristics of research papers published in scientific journals. Descriptive statistics were calculated, and content analyzed. We found 608 articles, selected 81. The first report was publisher 1992; the year with the most publications was 2013 with 19.

The national journal that most covered the subject was Gaceta Medica Oncologica, at the international level was Psicooncologia. The most recurrent themes are professional attitudes/decisions, end-of-life care and activities of hospice teams. The most studied disease is cancer. Those who maintain the leadership in the publications are doctors with clinical and epidemiological perspectives, in journals of low impact and national distribution.

Resumen

La institucionalización de los Cuidados Paliativos y el desarrollo del trabajo académico y de investigación en nuestro país ha sido paralelo con el proceso normativo iniciado con las reformas a la Ley General de Salud en 2009. Con el objetivo de describir la actividad científica desarrollada en el área de Cuidados Paliativos en México en los últimos 25 años, se realizó una revisión sistemática exploratoria para describir las características de los trabajos de investigación publicados en revistas científicas. Se calcularon las estadísticas descriptivas y se analizó el contenido. Encontramos 608 artículos, seleccionamos 81. El primer artículo data de 1992, el año con más publicaciones fue 2013 con 19.

La revista nacional que más abordó el tema fue Gaceta Médica Oncológica, a nivel internacional fue Psicooncologia. Las temáticas más recurrentes son: actitudes/decisiones de los profesionales, cuidados prestados al final de la vida y actividades de los equipos de cuidados paliativos. La enfermedad más estudiada es el cáncer. Quienes mantienen el liderazgo en las publicaciones son médicos con una mirada clínica y epidemiológica, en revistas de bajo impacto y distribución nacional.

Palabras clave

Cuidados paliativos, actividad científica, revisión sistemática exploratoria, México, cuidado al final de la vida.

Corresponding author:
Francisco Paz Rodríguez.
Instituto Nacional de Neurología y Neurocirugía "MVS".
Departamento de Neuropsicología y Grupos de Apoyo.
Insurgentes Sur No 3877, Col La Fama, México D. F. CP 14269.
Teléfono (5255)-5528-7878.
e-mail: fpaz@innn.edu.mx

Introduction

The World Health Organization (WHO) defines Palliative Care as "the active total care of the patient whose disease is not responsive to curative treatment. Control of pain, of other symptoms, and of psychological, social, and spiritual problems is paramount."[1] Palliative care includes the family and is attended by a multidisciplinary team. In 2002, the WHO specified that every person who has a progressive and advanced disease has the right to receive palliative care.[2,3] The current epidemiological context characterized by the aging of the population and the increase of chronic degenerative diseases—whose progression in most cases is towards advanced and terminal stages—makes the need to know and to apply palliative care a pressing matter.

The background of the current concept of palliative care is found in the first efforts to control pain, mainly regarding cancer. However, the source nearer to the current definition is derived from the work of Dr. Cicely Saunders at St. Christopher's Hospice in London. In 1967, after ascertaining that patients with pain and in terminal stages did not receive adequate treatment, she suggested rethinking the procedure in these cases. She coined the term "total pain" to emphasize that pain is not limited to a physical expression but is a total experience for the patients that include anxiety, depression, and fear, the worry about the grief that will afflict the family, and often the need to find meaning in the situation, a deeper reality in which to trust.[4] This rethinking is so important that, from this moment, hospices with this approach were developed in England to meet the demand at the National Health Service for the care of patients with cancer and terminal illnesses. It laid the foundations to deploy a comprehensive international approach for the care of these patients, considering not only their needs but also the needs of their families and people close to them, with interdisciplinary work, and social support.

In Mexico, palliative care emerges as a movement to control pain in cancer patients, stemming from the increase of this disease and epidemiological reports. In 1996, the Mexican Association for the Study and Treatment of Pain convened a group of experts, the Cocoyoc Group, to analyze, propose, and modify the regulation and control of opioids.[5,6] At this moment, work began to establish the Official Mexican Standard (NOM in Spanish) for the practice of pain medicine and palliative care. A consensus was reached in the management of cancer pain in 2006. Pain clinics were developed in the various institutions in the country, which encouraged many algologists to train as palliative doctors. Discussions began in the legislature about legal changes in the management of pain with opiates and palliative care. In December 2009, the decree establishing reforms to the General Health Law (LGS in Spanish) was published in the Official Journal of the Federation (DOF in Spanish). The modified articles were: 166 Bis (palliative care for terminally ill patients); 3rd frac. II and XXVII bis (medical care and comprehensive treatment of pain); and 33 frac. IV (palliative medical care activities by a multidisciplinary professional team).[7] On December 31, 2010, the National Palliative Care Program (PALIAR in Spanish) was initiated.

On November 5, 2013, the decree amending and adding various provisions to the LGS regulation regarding the provision of healthcare services was published in the DOF. On December 9, 2014, NOM-011-SSA3-2104 was published, establishing the criteria for the care of terminally ill patients through palliative care. On December 26 of the same year, the General Health Council's agreement was published in the DOF making obligatory the integral management schemes in palliative care. Added to this normative process was the institutionalization of palliative care service in the different health systems.

There also was academic and research work devoted to this area to identify the development of palliative care and the needs and evaluations of specific therapeutic actions through reviews, reports, and research with cross-sectional studies. In 1996, the Ethics and Humanities Subcommittee of the American Academy of Neurology stated: "Many patients with neurologic disease die after

long illnesses during which a neurologist acts as the principal or consulting physician. Therefore, it is imperative that neurologists understand, and learn to apply, the principles of palliative medicine."[8] However, the research suggests that there are large gaps in the education of resident neurology physicians in these subjects.[9] It is known that several neurological diseases are incurable and that they have complications in their final stage, but there are almost no studies documenting the application of palliative care in these conditions.[8,9] In addition, there is no review that allows knowing the general panorama of palliative care in Mexico.

Consequently, the question that motivates this investigation is: What are the characteristics of palliative care research work in Mexico published in scientific journals during the period from 1990 to 2015?

Objective

To describe the scientific activity developed in the area of palliative care in Mexico in the last 25 years. We are interested in knowing who writes, where, and what they write.

Methods

A scoping (systematic exploratory) review[10,11] was carried out to offer a general description of the characteristics and current knowledge of the research work in palliative care in Mexico, published in scientific journals during the period from 1990 to 2015. We reviewed the following databases: PubMed, SciELO, CONRICyT, Scopus, and Web of Science. The search criteria were: (("palliative care" [MeSH Terms] OR ("palliative" [All Fields] AND "care" [All Fields]) OR "palliative care" [All Fields]) OR (end [All Fields]] AND ("life" [MeSH Terms] OR "life" [All Fields])) OR ("terminal care" [MeSH Terms] OR ("terminal" [All Fields] AND "care" [All Fields]) OR " terminal care "[All Fields])) AND ("mexico" [MeSH Terms] OR "mexico" [All Fields]). The selection criteria used were: articles published during the period from January 1990 to December 2015, in peer-reviewed scientific journals, whose main topic was palliative care, and whose content made reference to works or research with samples of patients, caregivers, and health professionals in Mexico. The exclusion criteria were: works that had not been done in Mexico and which were not scientific publications (e.g. letters to the editor, news, indicators, bibliographic reviews, conference proceedings, posters, guides, and triptychs). The search was conducted by four researchers who subsequently selected the articles through the title, abstract, and full reading of the article.

We found 608 articles of which we selected 116. Thirty-five of these were discarded in the peer review because they were: not focused on palliative care (23), international multicentre studies (4), standardization studies of scales not centered on palliative care (3), editorial works (3), unpublished work (1), a congress report (1). In total, 81 articles were included in an Excel database. (Figure 1)

Synthesis and Analysis of Data

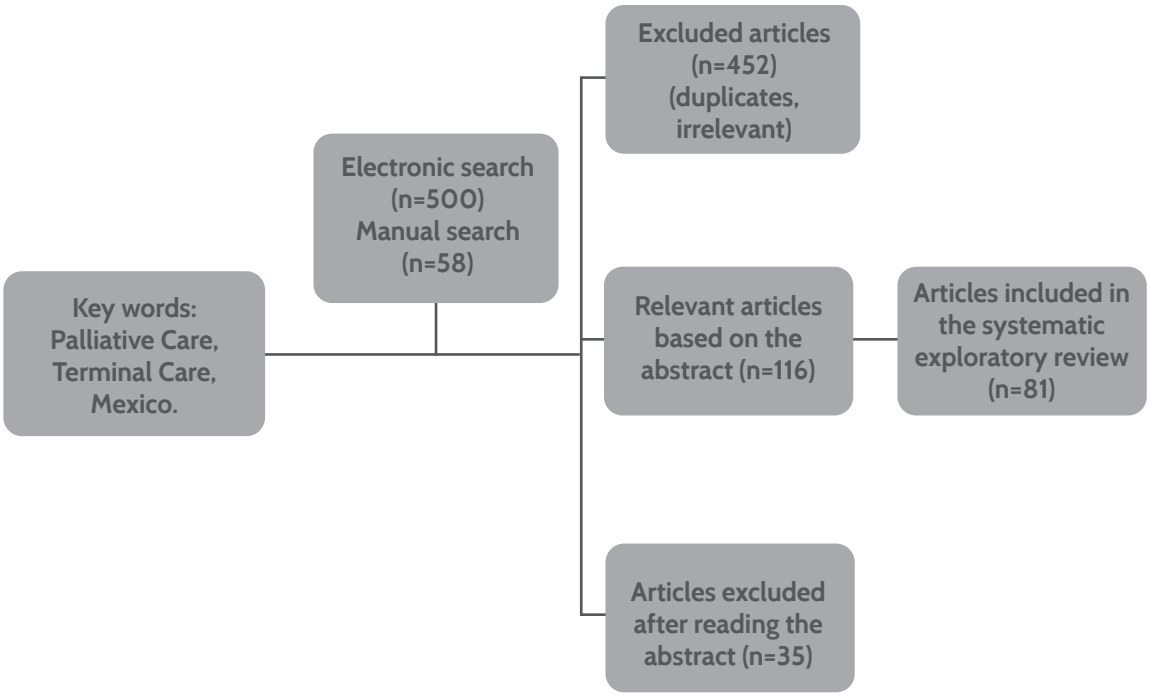
The following data were obtained: author, title, journal, year of publication, study design, participants, context, theme, and indexation. The data were entered into an Excel database and analyzed together. The descriptive statistics were then calculated and the content of the studies analyzed.

Results

The first publication was made in 1992, and from then to 2005 the articles were sporadic. By 2006 publications increased, and from then to 2011 there was an average of 4.1 articles per year. From 2012 to 2015 there was a significant increase, and 2013 was the year with the most publications (19 articles). The journal that most published works on palliative care was the *Mexican Oncology Gazette*.

We found that the publications writing about palliative care were 72.8% national (59) and 27.2% international (22). The *Mexican Oncology*

Figure 1. Flowchart of included studies.



Gazette had the most articles on palliative care —17 in total—with cancer the main theme. In the International field, *Psycho-Oncology* is the journal where Mexican researchers published the most.

In order to know the academic impact of the journals, we used the evaluation parameters of the Regulation for the Admission, Promotion, and Permanence to the Institutional System of Researchers in Medical Sciences of the current Ministry of Health.[10] According to this regulation, articles can be classified from group I to VII ascending in the qualitative classification of periodic scientific journals and the impact factor allocated by the publication of the 2014 *Journal Citation Report*. Of the works reviewed, 60 belong to group I (74.1%), 10 to group II (12.3%), and 11 to group III (13.6%).

Sixty-eight articles were written in Spanish (84%) and 13 (16%) in English. The journals publishing the most were focused on neoplasms. There are six international journals whose main topic is palliative care, and only one of them publishes in Spanish. In Mexico, there is no publication dedicated to palliative care. The most studied condition with a palliative approach is cancer (33.3%) and those who write on this subject are mostly multidisciplinary teams headed by doctors. One of the working groups that have published the most on the subject belongs to the Palliative Care Service of the National Cancer Institute.

Regarding the topics reviewed, we found that the most recurrent were attitudes and decisions of professionals regarding palliative care and care provided at the end of life. (Table 1)

The diversity of issues did not allow for an integrated review; however, it allowed us to describe the most representative topics. The articles categorized as *professional attitudes/ decisions* were written during the period from 1996 to 2015, and 2013 was the year with the highest productivity at six articles (26%). With regard to *attitudes*, they explore social representations,

Table 1. Thematic categorization of the review of palliative care studies (n=81).

Category	*n*	%
Attitudes/decisions of professionals[11-33]	23	28.4
Care provided at the end of life[34-49]	16	19.8
Activity of the palliative care teams[50-58]	9	11.1
Review on the subject[5,59-66]	9	11.1
Management of pain, agitation, sedation of patients[67-72]	6	7.4
Transmission of bad news[73-76]	4	4.9
Needs of informal caregivers[77-80]	4	4.9
Legal and juridical aspects6,[81-83]	4	4.9
Validation of measuring instruments[84-86]	3	3.7
Ethical dilemmas[87-88]	2	2.5
Spirituality[89]	1	1.2

Table created for this study by its authors.

meaning, and beliefs (fear, experiences, etc.) about palliative care. Regarding decisions, they evaluate knowledge, skills, problems in pain management, informed consent management, and physicians' positions regarding palliative care.

The works on care provided *at the end of life* were carried out in the period from 2006 to 2015, and 2014 was the year with the highest productivity at seven articles (44%). In general, these were proposals, recommendations, and measures to improve the care of patients in the terminal stage and the benefits that this provides for a dignified death.

In order to classify the articles by type, we reviewed the description indicated in the text of the work (classification granted sometimes by the journal itself) and found: 38 original articles, 6 clinical cases, 13 trials, and 24 reviews. However, a more detailed reading of the content was made, classifying the works according to the type of study and we found: review of the topic (33), descriptive studies (32), retrospective review (5), clinical cases (5), qualitative approach (2), intervention studies (2), exploratory studies (1), and instrument validation (1).

Discussion

In the present review, it is clear that the research was initially focused on attitudes[13-35] and knowledge of physicians and health personnel, which were certainly necessary given the little knowledge on the subject in our country. Progressively, the range of research topics was broadened to include matters such as the type of palliative care provided,[36-51] team development,[52-60] and some revisions.[5,61-69] Maintaining the leadership in publications on palliative care are physicians with a clinical and epidemiological perspective in journals that, according to the classification and the criteria used, are of low impact and limited distribution.[12]

Another element we found is that, since it's a discipline in development, the research in Mexico uses models and instruments developed in other populations that do not necessarily consider the cultural, social, structural, economic and political conditions, or even the morphological characteristics of our population and context.

The fact that the topics most addressed in Mexico are the attitudes and beliefs of the health personnel and the conceptual review of the subject reveals at least two dimensions to reflect on: 1. The uncertainty in which many doctors work on

the conceptualization and application of palliative care—an example of this is the lack of consensus in key terms such as terminal illness, terminality, and palliative sedation, among others. Adding a lack of clear criteria on the application and interpretation of regulations and administration, it generates defensive attitudes from doctors as well as from patients and family members. 2. Another issue of great relevance that deserves analysis is that the concept and application of palliative care transforms some fundamentals and practices on which modern medicine is based—specifically the paradigm of healing and the paternalistic model in the doctor-patient relationship. This could be related to the institutional structuring of palliative care services and the reluctance of some physicians to apply these measures in a timely and appropriate manner.

As noted in the results of the review, in our country (as well as internationally), there is still a tendency to focus strictly on cancer as the only object of palliative care application[93] in contrast to the recommendations by the WHO and the British Health System, both of which emphasize the need to extend research and palliative application in other chronic and advanced diseases such as amyotrophic lateral sclerosis, chronic renal insufficiency, refractory heart failure, or advanced HIV/AIDS, dementia, and frailty in the elderly, among others.[2]

Aspects such as pain, and especially the use of opiates, have been poorly reported. Just a few data on their use in pain control: high-income countries consume 92% of the morphine produced for therapeutic purposes against only 8% of low-income countries (83% of the world population).[13] One reason for this omission in Mexico is the limited approach to the topic in medical schools because opioid management is touched tangentially and left to specialties such as anesthesiology in the curriculum. This school deficiency has resulted in general practitioners and many specialists not using them, even when indicated. Another problem shared by many doctors and some of the general population is the myth about the dangers implied in their therapeutic use and their relationship with addictions, specifically regarding morphine. A structural limitation was the difficulty to obtain a prescription for narcotics, which was resolved in early 2016 through a resolution by the Federal Commission for the Protection against Sanitary Risks facilitating electronic prescriptions.

It is interesting to mention our observation that palliative care publications and their qualitative content are related to the political and legislative work on the subject. Stemming from the 2009 changes in the General Health Law, its regulation, and NOM-011, there has been an increase in the number of publications as well as diversification in themes regarding this research. However, issues such as living wills, capacity and autonomy in patients with advanced and terminal illnesses, and the right to die are still under discussion in the legal, clinical and institutional areas.

Conclusion

What we can conclude is that the application of palliative care is extremely complex, both in its conceptualization and in its implementation. There are many topics to review such as the bioethical dilemmas, the psychological and subjective implications, the social structures that underlie the decision making, the cultural construction of death, and the administrative needs in the field of public health, which is to say, a broader approach and more inclusive of other disciplines such as sociology, anthropology, psychology, and law. We propose there should be a more direct junction between palliative care programs and scientific and academic work.

Conflict of Interest
The authors declare they have no conflict of interest.

Funding
No funding was received for the realization of this work.

References

1. World Health Organization. Cancer pain relief and palliative care. *Report of a WHO Expert Committee* (WHO Technical Report Series, No. 804). OMS, Ginebra, Suiza; 1990: 11-12.
2. National Cancer Control Programes. *Policies and Managerial Guidelines. 2nd Edition.* Geneva S: 2002: 83-84.
3. Astudillo Alarcón W, Díaz-Albo E, García Calleja JM, Mendinueta C, Granja P, Fuente Hontañón C De de la, *et al*. Los cuidados paliativos y el tratamiento del dolor en la solidaridad internacional. *Med Pal.* 2009; 16(3): 178-86.
4. Saunders C. "Velad conmigo", Inspiración para una vida en Cuidados Paliativos. *IAHPC Press International Association for Hospice and Palliative Care.* Houston TX, USA. 2011: 43-57.
5. González C, Méndez J, Romero IJ, Bustamante J, Castro R, Jiménez M. Cuidados paliativos en México. *Rev Med Hosp Gen Mex.* 2012; 75(3): 173-79.
6. Guevara-López U, Covarrubias-Gómez A. Cronología de eventos hacia una reforma legislativa en materia de dolor y cuidados paliativos. *Rev Mex Anest.* 2008; 31(4): 328-33.
7. Secretaría de Salud. Programa Nacional de Capacitación en Cuidados Paliativos para equipos de primer contacto en atención primaria. Secretaría de Salud: México; 2016.
8. Boersma I, Miyasaki J, Kutner J, y Kluger B. Palliative care and neurology: Time for a paradigm shift. *Neurology.* 2014; 83(6): 561–567.
9. Seeber, A. A., Hijdra, A., Vermeulen, M., y Willems, D. L. (). Discussions about treatment restrictions in chronic neurologic diseases. *Neurology.* 2012; 78(8): 590–597.
10. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology.* 2005; 8(1): 19-32.
11. Manchado GR, Tamames GS, López GM, Mohedano ML, D´Agostino Marcelo, VdeC J. Revisiones Sistemáticas Exploratorias. *Med Segur Trab.* 2009; 55(216): 12-19.
12. CCINSHAE. Convocatoria Para el Ingreso, la Promoción y la Permanencia al Sistema Institucional de Investigadores en Ciencias Médicas de la Secretaría de Salud, 2016. http://www.ccinshae.salud.gob.mx/descargas/convocatoria/investigacion/CONVOCATORIA_INGRESO_PROMO_PERMANENCIA_2016_Final.pdf
13. Sánchez y Tépoz J. Disponibilidad y acceso a los opioides. En: Taller de Cuidados Paliativos. Secretaria de Salud. Abril 2016 Cd. de México: 18.
14. Barragán-Solís A. La metáfora raíz como categoría de análisis en las representaciones de los cuidados paliativos. Cuicuilco. 2011; 18(52): 133-53.
15. Barrera-Tello V, Manero-Brito R. Aspectos psicológicos en el servicio de cuidados paliativos. *Enseñanza e Investigación en Psicología.* 2007; 12(2): 343-57.
16. Sánchez F, Palomo M, Castelán-Martínez OD, Gaytan JF, Castorena I, Olivar V. Explorando el conocimiento de los médicos y su actitud en pacientes pediátricos en cuidados paliativos. *GAMO.* 2015; 14: 356-58.
17. Ascencio-Huertas L, Allende-Pérez SR, Verastegui-Avilés E. Creencias, actitudes y ansiedad ante la muerte en un equipo multidisciplinario de cuidados paliativos oncológicos. *Psicooncologia.* 2014; 11(1): 101-15.
18. Trujillo-De Los Santos Z, Paz-Rodríguez F, Sánchez-Guzmán MA, Nava-Galán G, Zamora-Ruíz P, García-Pastrana C, *et al*. Estudio exploratorio sobre conocimientos de cuidados paliativos y actitudes de profesionales de la salud, ante la muerte y el trabajo emocional. *Rev Mex Neur.* 2013; 14(1): 8-13.
19. Álvarez-del Río A, Torruco-García U, Morales-Castillo JD, Varela-Ruiz M. Aprender sobre la muerte desde el pregrado: Evaluación de una intervención educativa. *Rev Med Inst Mex Seg Soc.* 2015; 53(5): 630-7.
20. Allende S, Carvell HC. Mexico: status of cancer pain and palliative care. *J Pain Symptom Manage.* 1996; 12(2): 121-3.
21. Allende-Pérez S, Cantú Quintanilla G, Verástegui-Avilés E. La trascendencia del consentimiento informado en bioética y la complejidad de informar al paciente terminal su pronóstico en la primera visita: visión de paciente y familia en el Instituto Nacional de Cancerología. *GAMO.* 2013; 12(4): 244-9.
22. Mondragon-Sanchez EJ, Torre CEA, Morales EML, Landeros-Olvera EA. Comparación del nivel de miedo a la muerte entre estudiantes y profesionales de enfermería en México. *Rev Latino-Am Enfermagem.* 2015; 23: 323-8.

23. Carrillo ER, Carrillo CJR, Carrillo CLD. Cuidados paliativos en la unidad de terapia intensiva. *Rev Asoc Med Crit y Ter Int.* 2007; 21(4): 207-16.
24. Martínez-Torres YE, Flores-Bravo MC, Córdoba-Ávila MA, Campos-Castolo M, Mirón-García J, Aguirre-Gas H. Evaluación del conocimiento sobre cuidados tanatológicos y su aplicación por el personal de enfermería de un Centro Médico Nacional. *Rev CONAMED.* 2010; 15: 4-14.
25. Álvarez-Del-Río A, Marván ML, Santillán-Doherty P, Delgadillo S, Oñate-Ocaña LF. Facing death in clinical practice: a view from physicians in Mexico. *Arch Med Res.* 2013; 44(5): 394-400.
26. Ascencio-Huertas L, Rangel-Domínguez NE, Allende-Pérez S. Proceso de atención psicológica en el programa de atención y cuidados en oncología del instituto nacional de cancerología. *Psicooncologia.* 2013; 9(2/3): 393-406.
27. Alcázar-Olán R, Reyes-Chiquete D, Plancarte-Sánchez R. Valoración del paciente que solicita muerte asistida. *Rev Oncol.* 2003; 5: 65-9.
28. Pichardo GLM, Dinner K. La experiencia de la muerte y los cuidados paliativos. Una visión desde la enfermería. *An Med(Mex).* 2010; 55: 161-166.
29. Verástegui-Avilés E, Allende-Pérez S. Aspectos éticos en pacientes con cáncer avanzado en cuidados paliativos. *GAMO.* 2013; 12: 250-5.
30. Arrieta O, Guzmán de Alba E, Alba-López LF, Acosta-Espinoza A, Alatorre-Alexander J, Alexander-Meza JF, *et al*. Consenso Nacional Cancer Pulmón. Consenso Nacional de Diagnóstico y Tratamiento del cáncer de pulmón de células no pequeñas, Cuidados Paliativos. *Rev Invest Clin.* 2013; 65(S1): s5-s84.
31. Villagomez-Ortiz AJ. Postura del colegio de medicina interna de México respecto a la atención del enfermo en estado terminal y la eutanasia. *Med Int Mex.* 2008; 24: 59-64.
32. Salomón SML, Gayosso CO, Pliego Reyes CL, Zambrano RE, Pérez EP, Aldrete VJ. Una propuesta para la creación de unidades de cuidados paliativos en México. *Med Int Mex.* 2008; 24: 224-229.
33. Rodriguez-Miranda R, Swetz KM, Hernández-Ortiz A, *et al*. Palliative sedation: Clinical practice challenges in Mexico and development of a national protocol for Mexico. *Prog Palliat Care.* 2015; 23: 274-280.
34. Barragán-Solís A, Bautista-Sánchez S, Morales-López H. Representaciones sobre los Cuidados Paliativos en un grupo de estudiantes de medicina de la Ciudad de México. *Arch Med Fam.* 2012; 14(1): 15-19.
35. Herrera-Guerrero MI, Torres-Gomes A, Allende-Perez S, *et al*. Correlación del estado funcional de Karnofsky con la supervivencia de pacientes con tumores de origen gastrointestinal en un servicio de cuidados paliativos. *Cir Gen.* 2014; 36(3): 134-137.
36. Vallejo-Palma JF, Garduño-Espinosa A. Cuidados paliativos en pediatría. *Acta Pediátr Mex.* 2014; 35: 428-435.
37. Chirino-Barceló YA, Gamboa-Marrufo JD. Cuidados paliativos en pediatría. Bol Med Hosp Infant Mex. 2010; 67: 270-280.
38. Ignorosa-Nava CA. González-Juárez L. Cuidados paliativos para una muerte digna: Estudio de un caso. *Enferm Univ.* 2014; 11(3): 110-6.
39. Garduño EA, Ham MO, Cruz CA, Díaz GE, Reyes LC. Decisiones médicas al final de la vida de los niños. *Bol Med Hosp Infant Mex.* 2010; 67(3): 281-92.
40. Cárdenas-Turanzas M, Carrillo MT, Tovalín-Ahumada H, Elting L. Factors associated with place of death of cancer patients in the Mexico city metropolitan area. *Support Care Cancer.* 2007; 15: 243-9.
41. Cárdenas-Turanzas M, Tovalín-Ahumada H, Carrillo MT, Páez-Aguirre S, Elting L. The place of death of children with cancer in the metropolitan areas of Mexico. *J Palliat Med.* 2008; 11(7): 973-9.
42. Cardenas-Turanzas M, Tovalin-Ahumada H, Romo CG, Okhuysen-Cawley R. Assessing need for palliative care services for children in Mexico. *J Palliat Med.* 2014; 18(2): 162-6.
43. Garduño EA, Mancilla HO, Venegas MJ, *et al*. Decisiones médicas al final de la vida. Recomendaciones para la atención a pacientes con enfermedades en estado terminal. *Acta Pediatr Mex.* 2006; 27(5): 307-16.
44. Domínguez-Ocadio G, Allende-Pérez S, Verástegui-Avilésa E, Monreal-Carillo EA. Medicina del futuro: Atención virtual como modelo de atención en medicina paliativa. *GAMO.* 2013; 12: 240-3.
45. Perez-Camargo DA, Urbalejo-Ceniceros VI, Verástegui-Avilés E, Allende-Perez S. Soporte nutricional y manejo de síntomas previo a quimioterapia, en pacientes con cáncer de colon avanzado inicialmente fuera de tratamiento oncológico: reporte de un caso. *GAMO.* 2013; 12(4): 286-90.
46. Sosa-Sánchez K, Ramírez-Mora JC, Alarcón-Almanza JM, Fuentes-García VE. Cuidados paliativos en el hospital infantil de México «Federico Gómez»: Una realidad. *Rev Mex Anest.* 2014; 37: 171-6.

47. Landa-Ramírez E, Cárdenas-López G, Greer JA, Sánchez-Román S, Riveros-Rosas A. Evaluación de la depresión en pacientes con cáncer terminal y su aplicación en el contexto mexicano: Una revisión. *Salud Ment*. 2014; 37(5): 415-22.
48. Rivera-Flores LG, de la Teja-Ángeles E, Durán-Gutiérrez LA. Manejo paliativo de manifestaciones estomatológicas en un paciente pediátrico con leucemia en etapa terminal. Reporte de caso clínico. *Acta Pediatr Mex*. 2015; 36(2): 97-104.
49. Allende-Pérez S, Herrera A, Meneses A, Mohar A, De La Garza J, Verastegui E. Care for all: Palliative care strategy to provide intensive acute symptom control management for patients with previously undiagnosed terminal cancer. *J Palliat Care Med*. 2014; 4(5); 188. doi:10.4172/2165-7386.1000188.
50. Perez-Camargo DA, Allende-Perez S, Meneses-Garcia A, De Nicola-Delfin L, Copca-Mendoza ET, Sánchez-López MS. et ál. Frecuencia de anorexia-caquexia y su asociación con síntomas gastrointestinales, en pacientes paliativos del Instituto Nacional de Cancerología, México. *Nutr Hosp*. 2014; 30(4): 891-895.
51. Covarrubias-Gómez A, Hernández-Martínez EE, Ruiz-Ramírez S, López Collada-Estrada M. Assessment of pain and other symptoms in Mexican patients with advanced illness. *J Pain Palliat Care Pharmacother*. 2014; 28(4): 394-8.
52. Allende-Perez S, Ortega-Olvera L, Verástegui-Avilés E, Dominguez-Ocadio G, Monreal-Carrillo EA, Ascencio-Huertas L. La pieza perdida en la medicina actual: atención domiciliaria a pacientes paliativos oncológicos. *GAMO*. 2013; 12(4): 229-33.
53. Garduño EA, Ham MO, Cruz CA, Díaz GE, Reyes LC. Experiencias en cuidados paliativos en el Instituto Nacional de Pediatría. *Rev Mex Pediatr*. 2009; 76: 75-80.
54. Medina ZLE, de la Cruz CAM, Sánchez SME, González P, Avilés A. Nivel de conocimientos del personal de salud sobre cuidados paliativos. *Rev Esp Méd Quir*. 2012; 17(2): 109-14.
55. Cárdenas-Turanzas M, Torres-Vigil I, Tovalín-Ahumada H, Nates JL. Hospital versus home death: results from the Mexican Health and Aging Study. *J Pain Symptom Manage*. 2011; 41(5): 880-92.
56. Montejo-Rosas G, Galaviz-Muro A, Espinoza-Rodríguez LN, Cortéz-Gutiérrez L. Cuidados paliativos en cáncer avanzado. Experiencia de siete años en el hospital civil de Guadalajara, Jalisco, México, Dr. Juan I. Menchaca. *Gac Med Mex*. 2002; 138: 231-34.
57. Escutia-Gutiérrez R, Cortéz-Álvarez CR, Alvarez-Álvarez RM, *et al*. Pharmaceutical services in a Mexican pain relief and palliative care institute. *Pharm Pract*. 2007; 5(4): 174-8.
58. Alonso-Juárez M, Hernández-Ruíz G, Bernal FO. Cáncer de páncreas, diagnóstico y tratamiento paliativo con terapia homeopática. *Rev Med Homeopat*. 2014; 7: 17-23.
59. Vélez-Pérez A, Jiménez Abad MA, Castañeda LC , Lozano-Herrera J O'Shea CG. Atención paliativa en el cáncer de próstata. *GAMO*. 2015; 14(3): 185-6.
60. Castañeda de la Lanza C, O'Shea-Cuevas G, Narvaes-Tamayo MA, Lozano HJ, Castañeda PG, Castañeda de la Lanza JJ. Calidad de vida y control de síntomas en el paciente oncológico. *GAMO*. 2015; 14: 150-6.
61. Castañeda de la Lanza C, O'Shea-Cuevas G, Gallardo-Valdés DM, Farreras-Piña D, Calderón M, Chávez-Enríquez EP. Cuidados paliativos: la experiencia en pediatría. *GAMO*. 2015; 14(3): 181-184.
62. Barragán-Solís A, Bautista-Sánchez S, Morales-López H. Elementos teóricos sobre los cuidados paliativos y el concepto de paciente terminal. *Arch Med Fam*. 2012; 14(1): 1-3.
63. Allende-Pérez S, Verástegui-Avilés E, Mohar-Betancourt A, Arrieta-Rodríguez ÓG, Barrera-Franco JL, Castañeda-de La Lanza C. Incorporación de los cuidados paliativos al Plan Nacional de Cáncer: Consenso. *GAMO*. 2013; 12: 213-22.
64. Montejo-Rosas, G. El enfermo con cancer incurable y la medicina paliativa en Mexico. *Salud Publica Mex*. 1992; 34: 569-74.
65. Dion S. Politics and palliative care: Mexico. *Int J Palliat Nurs*. 2015; 21(1): 50.
66. Kaneko-Wada Fde J, Domínguez-Cherit G, Colmenares-Vásquez AM, Santana-Martínez P, Gutiérrez-Mejía J, Arroliga AC. El proceso de muerte en la unidad de cuidados intensivos (UCI). Punto de vista médico, tanatológico y legislativo. *Gac Med Mex*. 2015; 151(5): 628-34.
67. Alvarez A, Mohar A, Kraus A. En torno a la muerte. Una revision y una propuesta. *Revista de Investigacion Clinica*. 1997; 49: 151-161.
68. Allende-Pérez S, Verástegui-Avilés E. El periodo de agonia. *GAMO*. 2013; 12: 256-66.
69. Pérez-Camargo DA, Allende-Pérez S, Domínguez-Ocadio G, Verástegui-Avilés E. Alimentación e hidratación en medicina paliativa. *GAMO*. 2013; 12(4): 267-75.
70. Lara-Solares A, Tamayo-Valenzuela AC, Gaspar-Carrillo SP. Manejo del paciente terminal. *Cancerología*. 2006; 1: 283-95.
71. Lara-Solares A. Sedación del paciente terminal. *Rev Mex Anest*. 2006; S1: s148-s150.

72. Allende-Perez S, López-Franco JL, Verástegui-Avilés. Manejo paliativo de la disnea por tamponade cardiaco: presentación de un caso. *GAMO*. 2013; 12(4): 291-97.
73. Allende-Pérez S, Verástegui-Avilés E, Chavira-Estefan S, Tejeida-Bautista MDL, Domínguez-Ocadio G. Cuándo referir a un paciente con cáncer a cuidados paliativos? *GAMO*. 2013; 12: 280-85.
74. Flores CJA, Lara SA, López, Aréchiga G, Morgenstern D. Clínicas del dolor y cuidados paliativos en México: manejo del estreñimiento inducido por opiáceos. Conclusiones de un grupo de expertos. *Rev Sox Esp Dolor*. 2009; 16: 468-481.
75. Medina-Sanson A, Pazos-Alvarado E, Pérez-Villanueva H, Salgado-Arroyo B. Los cuidados paliativos: Un aspecto esencial de la Oncologiá Pediátrica. *GAMO*. 2013; 12: 182-95.
76. Verástegui-Avilés E. Consenting of the vulnerable: the informed consent procedure in advanced cancer patients in Mexico. *BMC Med Ethics*. 2006; 7: 13. doi:10.1186/1472-6939-7-13.
77. Martín del Campo A, Romero-Cabello R, Sánchez CJ, Ángeles-Moreno AC, Romero-Feregrino R, Bustamante-Rojano JJ. *et al*. ¿Cómo transmite malas noticias el médico especialista? Estudio realizado con médicos especialistas del Hospital General de México. *Rev Med Hosp Gen Méx*. 2012; 75: 76-83.
78. Ascencio-Huertas L, Allende-Pérez S, Castañeda-de La Lanza C, Verástegui-Avilés E. La comunicación de las "malas noticias" en cuidados paliativos. *GAMO*. 2013; 12: 276-9.
79. García-Reyes W, Lara-Solares A, Guevara-López U, Flores-Rebollar A, Loaeza-Del Castillo A. Cómo se dan las malas noticias de enfermedad terminal por un grupo médico no especializado en cuidados paliativos. *Rev Mex Anest*. 2008; 31(1): 9-14.
80. Trujillo De Los Santos Z, Paz-Rodríguez F, Sánchez-Guzmán MA, Nava-Galán G, Zamora-Ruíz P, García-Pastrana C, Ochoa-Morales A, Medina-Durán R. Estudio Piloto en Cuidadores de Pacientes con enfermedades Neurológicas, Sobre el significado y conocimiento de cuidados paliativos. *Acta Bioethica*. 2015; 21(2): 191-198.
81. Rangel-Dominguez N. Efectos de la solución de problemas sobre los comportamientos de autocuidado de cuidadores de pacientes oncológicos en fase paliativa: un estudio piloto. *Psicooncologia*. 2013; 10: 2-3.
82. Casas-Martínez, ML. Detección de necesidades familiares en la atención a pacientes en estado terminal y crónicos en la Ciudad de México. *Rev CONAMED*. 2006; 6: 19-24.
83. García-Maldonado G, Saldívar-González AH, Martínez-Perales GM, Sánchez-Nuncio R, Lin-Ochoa D. Sobrecarga emocional en cuidadores de mujeres que requieren cuidados paliativos. *Rev Med Hosp Gen Méx*. 2012; 75; 3: 140-147.
84. García-Echeverría FJ, Zavala-Suárez E, Sotomayor-Sánchez S, Córdoba-Ávila MÁ. Conocimiento del personal de enfermería acerca de la Ley de Voluntad Anticipada en dos hospitales del Distrito Federal. *Rev CONAMED*. 2011; 16(4): 164-70.
85. Bistre S. New legislation on palliative care and pain in Mexico. *J Pain Palliat Care Pharmacother*. 2009; 23(4): 419-25.
86. Cossío-Díaz JR, Franco González-Salas JF, Kershenobich-Stalnikowitz D, Goslinga-Remírez L, Montes de Oca-Arboleya R, Torres-Morán L, *et al*. Regulación de los cuidados paliativos y muerte asistida. *Gac Med Mex*. 2015; 151(1): 119-30.
87. Allende-Pérez S, Pérez-Camargo DA, Urbalejo-Ceniceros VI, Ochoa-Carrillo FJ. Evaluación del estado de nutrición en pacientes con cáncer avanzado, referidos a cuidados paliativos del Instituto Nacional de Cancerología, México. *GAMO*. 2013;12:223-8.
88. Trujillo-Cariño AL, Allende-Pérez S y Verástegui-Avilés E. Utilidad del Índice Pronostico paliativo (PPI) en pacientes con cáncer. *GAMO*. 2013; 12(4): 234-39.
89. Suárez-del-Real Y, Allende-Pérez S, Alférez-Mancera A, Rodríguez RB, Jiménez-Toxtle S, Mohar A, *et al*. Validation of the Mexican-Spanish version of the EORTC QLQ-C15-PAL questionnaire for the evaluation of health-related quality of life in patients on palliative care. *Psychooncology*. 2011; 20: 889-96.
90. Tenorio González, F. Ética y Cuidados Paliativos en el enfermo con cáncer avanzado. *Cir Ciruj*. 2005; 73(6): 495-500.
91. Grether P, Lisker R, Loria A, Álvarez-del Río A. Decisiones sobre el final de la vida en la atención perinatal. Una visión del equipo de salud en México. *Salud Publica Mex*. 2015; 57: 489-495.
92. Sandoval-Guzman PE, Rangel-Dominguez NE, Allende-Pérez S, Asencio-Huertas L. Concepto de espiritualidad del equipo multidisciplinario de una unidad de cuidados Paliativos: Un estudio Descriptivo. *Psicooncologia*. 2014; 11(2-3): 333-44.
93. Organización Mundial de la Salud. 67.ª Asamblea Mundial de la Salud. Fortalecimiento de los cuidados paliativos como parte del tratamiento integral a lo largo de la vida. Ginebra, Organización Mundial de la Salud. 2014: 38-43.

Revista Mexicana de Neurociencia, 2018; 19(2): 74-85
www.revmexneuroci.com

Diseño por:
Design Cortex
designcortex.mx