

Use of Opioid Analgesics in Pain Therapy

Víctor Alfredo Sanchez-Espinoza¹, Isabel Cristina Mesa-Cano^{1,2},
Andrés Alexis Ramírez-Coronel^{1,2,3}, Verónica Alexandra Santander Calle²

¹Master's Degree in Postgraduate Care Management of the Catholic University of Cuenca, Ecuador.

²Nursing Career of the Catholic University of Cuenca, Ecuador.

³Laboratory of Psychometry, Comparative Psychology and Ethology of the Center for Research, Innovation and Technology Transfer (CIITT) of the Catholic University of Cuenca, Ecuador

Abstract:- This paper is developed with the objective of conducting a systematic review on the nursing assessment of patients with persistent pain treated with opioids that allows us to recognize which pain assessment scales are used to determine the pharmacological treatment of persistent pain with opioids, define the associated complications to the treatment of pain with opioids, in hospitalized patients and to identify the drugs of first choice for the treatment of pain with opioids. The methodology used was a systematic review of the literature, which began with a search strategy in which the inclusion and exclusion criteria, keywords and search engines were determined to obtain a total of 30 articles reviewed, most of which were published among in 2017 and 2019, which coincided in the variables of pain 70%, nursing 20%, opioids 57% and analgesics 30%. Among the conclusions, the following stand out: it is important not only to apply pain assessment scales to indicate the appropriate treatment, but there is also a need to carry out control through re-evaluations that allow determining the effectiveness of the applied treatment. Likewise, it is necessary for professionals to understand the fundamental role they play in the therapeutic approach to pain and the need to recognize not only the protocols but also the forms of use that each opioid requires.

Keywords:- Pain, Analgesics, Opioids, Therapy, Rating Scale, Nursing.

I. INTRODUCTION

In recent decades, the use of opioids has increased significantly as an effective alternative for pain management at different levels; that is, the use of this type of analgesic has become a fundamental tool for pain therapy. It is important to understand that pain relief is a fundamental premise for those specialists in the health field, since it is considered an ethical-health care imperative¹ understood as a priority in the medical practice of the 21st century.

The therapeutic approach to pain should be considered from different perspectives that allow the use of appropriate drugs. In this regard, the International Association for the Study of Pain (IASP) indicates that pain generates an unpleasant experience for the patient because it affects mobility, mood and is associated with other damages of

different magnitudes, since it appears as a consequence of innumerable pathologies and injuries; hence, the complexity when selecting the most effective analgesic, since the patient's characteristics also play a role.²

In this order of ideas, the use of this type of analgesic has been recognized since ancient times, since history refers to the use of opium in different civilizations and periods of history. From the Egyptians to Ehrhart and Bockmühl during World War II, there is sufficient evidence of the use of opium to treat various ailments and even as an important contribution to the development of medicine, as was the case with the creation of methadone,³ the classification of weak and strong opioids and the prototype opioid, morphine, a natural derivative of opium.⁴

These types of analgesics are currently used to treat acute postoperative pain, cancer pain, chronic non-oncological pain, among others; however, medical specialists have been warning for decades about the importance of avoiding or reducing problems related to misuse, addiction or adverse effects due to their chronic use because the lack of criteria in the administration of this type of analgesics can lead to undesirable situations and harmful side effects for the patient.

Several studies show the potency of opioids that have turned them into drugs with specific advantages; however, their adverse reactions show important systemic effects⁵, since this type of drugs are considered important elements for adequate analgesia.

One of the most important pharmacological characteristics of these analgesics lies in the wide interindividual variability of the doses required to adequately treat pain. For this reason, the efforts of specialists in relation to the use of opioids are oriented to create guidelines and protocols that allow the adequate use of this type of analgesics to achieve the desired effect for their correct use based on their dosage, the type of patients, the tolerance that is clinically expressed through the need to increase the dose of an analgesic over time to achieve the required analgesic effect.⁶

In this context, the misuse of opioids in hospital areas due to the lack of application of pain scales, the associated overdoses, as well as the increasing incidence of withdrawal syndrome, causes the person to compulsively seek drugs, as

well as poor assessment and therefore incorrect treatment lead staff to administer high or in other cases unnecessary analgesic doses.⁷

This is why it is convenient to analyze the nursing care provided to this type of patients, which is centered on compliance with medical indications and satisfaction of the needs referred by the user; but this care does not include the monitoring of this type of patients according to the therapeutic pain assessment scale proposed by the World Health Organization (WHO), which can lead to the development of complications associated with the management of these drugs.

Pain is one of the symptoms that causes the greatest suffering and is present in the greatest number of diseases, which is why it is currently recognized as a basic health problem in the world that is clinically recognized. However, its relief is frequently ineffective due to various factors, among which cultural, religious, political, economic or inadequate practices of health professionals stand out. This is a reality that contravenes the ethical nature of healthcare practice, which recognizes pain relief as a human right and an obligation of healthcare professionals whose premise of providing adequate pain control to avoid human suffering is based on the Hippocratic Oath and the Declaration of Geneva, which demands above all to look after the patient's health.⁹

For this reason, the nurse's participation in the patient care process is essential to alleviate pain, since one of her functions is to evaluate and intervene throughout the care process in favor of continuity and systematization of care, with special emphasis on the assessment phase as a crucial moment in the collection of objective and subjective data that account for the real and potential situations and contexts of the person experiencing cardiovascular disease. ¹⁰

II. METHODOLOGY

The present study was developed through a systematic review of the literature that began with a search strategy in which inclusion and exclusion criteria, key words and search engines were determined. The preliminary articles obtained in the initial search were obtained by entering the health descriptors: opioids, analgesics, analgesia, assessment, nursing, pain, therapy, treatment, drugs. The main search engines were: Dialnet, Scielo, Medigraphic, Elsevier, Infomed, Taylor and Francis, Proquest.

In relation to the inclusion and exclusion criteria that allowed us to deepen the search, the following should be pointed out:

Inclusion Criteria

- Articles in English and Spanish.
- Year of publication between 2010-2020.
- Quantitative and mixed studies. Criterios de Exclusión
- Studies published during the established period (2010-2020).
- Bibliographic studies, monographs, essays, thesis, degree works of any level.
- Repeated articles from a previous search.
- Publications with partial information that do not have access to the full text.

The article selection process began with the identification stage, then went on to the pre-selection stage (Screening), then to the eligibility stage according to the depth of each of the pre-selected publications, which were reviewed in detail to determine coincidences, results and contributions that each of them could make to the main key concepts of this study, which were: Nursing assessment, persistent pain, opioid treatment, pain therapy, assessment scales, pharmacological treatment. In this case, the total number of articles included in the systematization was 30.

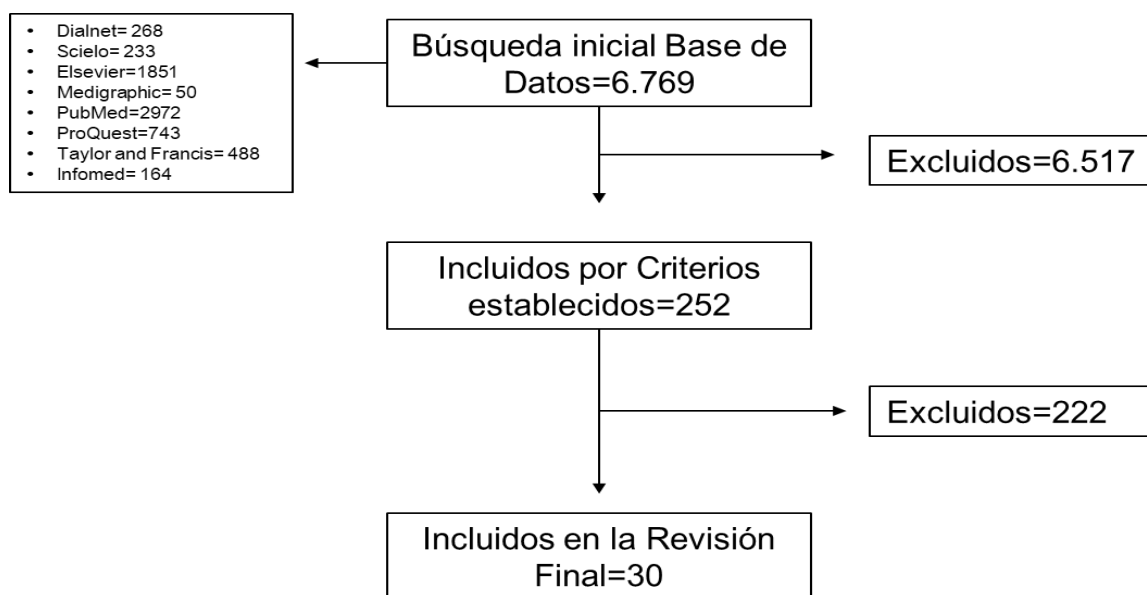


Figure 1 Search systematization flowchart

Development

Pain is considered as the main cause of consultation in the world and it is originated by multiple causes at the same time it generates a series of comorbidities that directly affect the patient's quality of life such as anxiety, depression, sleep disorders, immunosuppression, among others. Numerous studies⁴ emphasize that when pain becomes chronic, it ceases to be a symptom and becomes in itself a disease that deserves to be treated with drugs to reduce discomfort and at the same time avoid the risk factors related to this type of ailment.

Currently, pain is a major health concern in the world because it affects a large part of the population, often as a consequence of other conditions or procedures in primary care or surgery; it is also the main cause of work absenteeism and disability, incurring significant costs for the State. Thus, pain relief has been discussed in different medical scenarios in order to search for adequate and effective measures to establish standards and protocols that allow for adequate treatment.

However, despite the existence of important scientific advances in pain mitigation, there are still effective barriers to pain control related to cultural, educational, political and economic aspects that prevent or hinder adequate pain treatment. In this context, medicine is unable to generate a highly effective analgesic treatment that minimizes the unjustified suffering that many patients still suffer and that entails an increase in the risk associated with other complications and, therefore, an increase in morbidity.¹¹

In this order of ideas, one of the most complex issues of pain care is to measure it, therefore, there are multiple evaluations that are performed to complement the information provided by the patient in relation to pain intensity so that the physician can establish real approximations through the visual analog scale. In addition, other factors such as the general condition or the appearance of other pathologies that make the patient's daily life difficult also play a role, which requires the application of different therapeutic alternatives.¹²

It is important to understand that pain can occur as a manifestation of a pathology or can result from related medical practices such as a cure or after a surgical intervention.¹³ In this context, it should be noted that the medical approach is insufficient to relieve pain, as specific pharmacological treatment is required to evaluate other situations experienced by people with chronic pain.

Consequently, the assessment of pain is essential to be able to indicate the appropriate treatment, therefore studies¹⁰ refer to the importance of the assessment because it favors the medical practice (for the treating physician and for the nurse) by allowing a comprehensive view of the patient in order to make the most appropriate therapeutic decisions, likewise, the literature shows that this type of assessment favors evidence-based practice.¹⁴

In this context, the use of opioid drugs has been suggested by the World Health Organization, which also indicates that medical interventions and specialists should be evaluated and reinforced in relation to learning the indications, contraindications and safe use of these drugs.¹⁵ Likewise, the use of opioids requires greater control and follow-up in relation to their use and consumption in the different health institutions in order to offer timely and effective treatments for pain relief in patients.

In this order of ideas, the recommendations generated by the WHO in relation to the use of opioids are directed to the use of analgesic rating scales in which opioids occupy the third step for short periods that will progressively decrease to the first step, where they can remain for longer with this management.¹⁶ Thus, the selection of the drug and the route of administration must respond to the intensity of pain, previous treatments with opioids, concomitant diseases and the characteristics of each patient.¹⁷

In the case of the characteristics of each patient, it is necessary to understand that each individual has different amounts and subtypes of receptor¹⁸ which can generate different effects due to the wide distribution of opioid receptors inside and outside the nervous system. Among the adverse effects that opioids can produce are: euphoria, dysphoria, sedation, respiratory depression, constipation, cardiovascular disorders, convulsions, nausea, vomiting, among others.¹⁸

In this sense, understanding the dosage calculation for opioid rotation is an indispensable skill for its proper use and to guarantee its effectiveness, in addition to the fact that a large part of the adverse symptoms occur when doses have not been applied in adequate amounts and forms. Therefore, it is common that there is a need to change one opioid for another or its route of administration, so it is important to use a consistent method of calculating these doses.⁵

Although opioids are an effective alternative for pain relief, there are a series of complications associated with this type of treatment, the effects of which vary according to the form and quantity in which they have been administered, the lack of follow-up, the patient's adherence to treatment and other factors related to the patient's educational level, age, among others, since these factors can favor addiction to this type of drug due to abuse.⁶

In this sense, opioids have an addictive nature, therefore, their psychotropic effects make them vulnerable to abuse and misuse. However, despite having a high addictive risk, opioids are currently among the most effective treatments in pain therapy.⁵

Among the drugs of first choice for pain treatment with opioids identified in the systematic review are morphine, pethidine, fentanyl, tramadol and methadone, each of them evaluated according to their speed of onset, potency, duration of effect, adverse effects and sedation effects.¹⁹

III. RESULTS

Among the findings of the present study, it is necessary to indicate that most of the studies used are from the years 2017 and 2019 with 23% and 37% respectively, while the years with the lowest number of articles selected were from 2015 with only 7%. For their part, the types of articles selected were analyses, clinical cases, descriptive studies and original articles whose keywords associated with greater coincidence were: pain 70%, nursing 20%, opioids 57% and analgesics 30%.

In relation to the contribution of the articles in the construction of the present study by key concepts, they were divided into three large groups which are: Nursing assessment (assessment scales), pain (Persistent pain, pain

therapy) and opioids (Opioid treatment, pharmacological treatment).

Figure 1. Contribution of the selected articles to the investigation

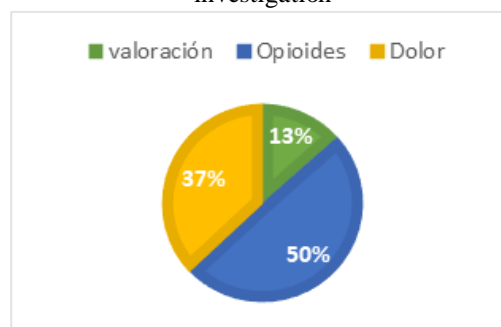


Table 1. Articles selected for systematization

Z	YEAR	AUTHOR	TYPE OF STUDY	KEYWORDS	GENERAL OBJECTIVE	CONCLUSIONS	APORTE		
							1	2	3
1	2018	Usarralde, Pérez, Vidal. ²⁸	Descriptive	Opioid analgesics, pain	To analyze the prescription characteristics of major opioids for the treatment of pain in hospitalized patients.	The degree of analgesia achieved with opioid treatment was satisfactory, with an acceptable value.		X	
2	2019	Acuña. ⁵	Descriptive	Opioids, pain	To give context to the central theme, we will show the consequences of the indiscriminate prescription of opioids and the serious health problems that affect the general population of opioids and the serious health problems that affect the general population not suffering from chronic pain.	Need for protocolized strategies that avoid variability of criteria among professionals, that favor uniform and periodical control of pain relief objectives. pain.		X	
3	2019	Aguilar, Mata, Valentí, Peláez, Hernández, Mir. ⁸	Critical-reflexive analysis	Pain	To analyze the advances made in Pain Management, during the last decade, from the perspective of specialists in Anesthesiology and Resuscitation working in Pain Management Units.	Need for breakthroughs in the field of pain relief.			X
4	2017	Antolinez, Pérez, Molina, López. ¹⁴	Descriptive	Analgesics, opioid analgesics	To determine the prevalence of opioid-type medication consumption period and describe the characteristics of their prescription in patients hospitalized in an oncology center during 2013.	The results suggest an association with increased consumption of opioid drugs in late stages of oncologic disease.		x	

5	2017	Calvo, Torres. ¹⁶	Systematic Review	Opioids, pain.	To review the main clinical practice guidelines, systematic reviews, recommendations and strategies to minimize the risks of opioids in the treatment of chronic non-cancer pain.	Patients with a high risk of medication misuse should continue to be treated appropriately and, if their pain requires it, should receive major opioids, albeit with more structured strategies.		x	
6	2020	Cardoso, López, Lor, Cuevas, Flores, Covarrubias. ¹⁸	Review article	Pain, opioid	To present the pharmacological classification, therapeutic uses, health risks and adverse reactions of opioids as drugs, raising the paradigm of using this type of drugs for pain control. opioids as drugs, presenting the paradigm of using this type of drugs for pain control.	Work must be done to develop strategies to address the problems that could result from the increased use of prescribed and non-prescribed opioids.		x	x
7	2018	Dos Santos, Grance, Llanos. ²¹	Clinical case	Pain, nursing, multimodal assessment		The holistic assessment of the patient favored pain control, and accompanied her during the disease and treatment process.			X
8	2017	García. ⁴	Critical-reflexive analysis	Pain management		There are pharmacological, non-pharmacological and interventional management options that should be managed together according to each patient for the best pain relief.		X	X
9	2019	Guzmán, Román, Osorio. ¹⁰	Review Article	Nursing	To describe validated nursing instruments for the assessment of discipline-specific phenomena in people experiencing cardiovascular disease.	The identified instruments favor the daily practice of nursing professionals, contribute to the assessment of phenomena that can be intervened by the nurse.	x		
10	2015	Hernández. ⁶	Critical-reflexive analysis	Opioid, analgesics		Adequately understand the need for equianalgesic dose calculation for opioid rotation in patients.		x	
11	2020	Martín, Martín. ³	Critical-reflective analysis	Opioids		In recent years, several bifunctional agonists of NOP/MOP have been investigated, such as AT-201, AT-212, cebranopadol or GRT6005, BU08028 NOP/MOP bifunctional agonists such as AT-201, AT-212, cebranopadol or GRT6005, BU08028, etc. Current data indicate that AT 121 is a safe drug: in primates a dose of 0.03 mg/kg produces complete analgesia without altering respiratory function.		x	

12	2015	Martínez, Collado, Rodríguez, Moya. ¹¹	Critical-reflective analysis	Pain relief, pain management		In addition to the need to generalize Pain Units and palliative care teams in sufficient numbers, an effort must be made to prepare professionals in all specialties. specialties.			x
13	2019	Pascual, Sánchez. ¹²	Critical-reflective analysis	Opioids	To analyze the use and misuse of opioid drugs for the treatment of pain.	Consensus is needed among all professionals who have access to the prescription and dispensing of these drugs.		X	
14	2019	Peñaloza, Contreras, Beltrán, Michilena. ²²	Descriptive	Pain, nursing	To determine the level of knowledge of the nursing staff regarding pain management.	Although the staff has a very good level of knowledge on the subject, it is insufficient to meet the need for pain relief in patients.			x
15	2019	Pérez N, Martínez M, Díaz I, Antón M. ²⁷	Original Article	Pain, painkillers, opioids	To characterize the knowledge about opioid analgesics and their prescription by pediatric pediatric professionals.	Poor pharmacological knowledge regarding opioids and low availability of these drugs are the most influential factors in poor pain management in pediatrics.		x	x
16	2019	Perezamador, Salcedo. ¹⁵	Critical-reflective analysis	Analgesia, pain	Analyze analgesia in the patient with noxious substance use.	Perform a rotation equianalgesic to the opioid to be used in anesthesia and analgesia, type of substance used and its last dose administered, as well as signs and symptoms of withdrawal and always having prepared multimodal management strategies.		x	
17	2019	Rivas, Alarcón, Gatica, Neupayante, Schneider. ²⁰	Systematic Review	Pain	To determine the reliability of pain assessment scales in noncommunicative critically ill patients.	It is necessary to continue promoting the development of research in this line, which evaluates such a sensitive subject as pain, which the Ministry of Health has catalogued as the fifth vital sign.	x	x	
18	2016	Rubio. ²⁹	Critical-reflective analysis	Nursing, assessment	Analyze the role of nursing in clinical judgment.	The information must be available in a timely manner to those professionals who are involved in the patient care process.	x		
19	2016	Salvador, Aliaga. ³³	Critical-reflective analysis	Opioids	To analyze the simultaneous administration of opioids.	The differences between the pharmacological effects of opioids can be compared to the differences, heard in a piece of music, that occur simply by changing the volume of the various instruments.		x	
20	2016	Sandí, Sandí. ²⁶		Opioids		The physician's knowledge of the neurobiological basis of opioid dependence can facilitate the understanding of the patient's behavior and problems and thus establish goals and optimal treatment.			

21	2019	Ranapurwala, Carnahan, Brown, Hinman, Casteel. ³⁰	Original Article	Opioids	To assess the impact of the Iowa Prescribing Monitoring Program (PMP), implemented in 2009, on opioid analgesic prescribing patterns (OPR).	Our study suggests that Iowa PMP implementation may have resulted in declines in RPO prescribing, and this impact varies by patient age and sex.		x	
22	2020	Taínta, Arteche, Martín, Salas, Goñi. ³¹	Original Article	Pain, sickness	To determine the level of knowledge of the nurses and their attitudes towards pain management in their daily practice, as well as to relate this to their sociodemographic data.	To determine the level of knowledge of the nurses and their attitudes towards pain management in their daily practice, as well as to relate this to their sociodemographic data.		x	
23	2016	Torijano, Sánchez, De la Hija, Astier. ²⁴	Critical-reflective analysis	Opioid, pain	To analyze the use of opioids in patients with chronic pain.	The use of a more effective model of chronic disease care based on a biopsychosocial model of care, which treats the whole person and not just the pain, could reduce the potential for a new generation of chronic diseases. pain, could reduce the potential for a new generation of chronic opioid users. of chronic opioid users		x	x
24	2017	Tormo, Marín, González, Ruiz, Robles, Vivar. ³²	Original Article	Pain, opioid analgesics	Analyze all opioid prescriptions in patients with non-cancer pain and review their frequency and characteristics. and characteristics	The frequency of prescription of major opioids major opioids in non-oncology patients is 3.6 % of our population.		x	x
25	2017	Farmer, Drewes, Chiariono, De Giorgio, O'Brien, Morlion, Tack. ¹⁷	Original Article	Opioid analgesics, pain	To provide an overview of opioid-induced pathophysiology and provide a pragmatic management algorithm for clinical practice.	The combination of interventions with opioids allows to control the response of this pathophysiology.		x	x
26	2018	Vicente, Delgado, Bandrés, Ramírez, Capdevill. ⁹	Critical-reflective analysis	Pain, scales	To review the different scales and questionnaires used for pain assessment and their limitations for subsequent use, both for medical and occupational or expert purposes.	Scales and questionnaires are useful; the researcher must decide which one to use in each case according to his or her experience and the objective sought.	x		
27	2017	Villegas, Palacio. ²²	Case Report	Pain, Opioid Analgesics	To present the case of a poly-interventional patient, with a non-functioning gastrointestinal tract, with progressively increasing, uncontrolled pain and exposed to high doses of opioids. high doses of opioids.	Opioid tolerance and hyperalgesia are 2 phenomena whose therapeutic approach is extremely complex in the absence of a functional gastrointestinal tract. in the absence of a functional gastrointestinal tract. The rotation of opioids, ketamine and dexmedetamine rotation of opioids, ketamine and dexmedetomidine were the mainstay of treatment in this case.		x	x

28	2019	Schuler, Dick, Stein. ²	Descriptive	opioids, pain	To examine (1) age-specific source patterns of misused prescription opioid analgesics and reasons for misuse, and (2) age- and source-specific associations of misused prescription opioid analgesics and reasons for misuse and (2) age- and source-specific associations with opioid use disorder (OUD), heroin use, benzodiazepine misuse, and OUD treatment utilization.	Ongoing clinical initiatives regarding optimal opioid prescribing practices are needed in addition to non-opioid strategies for pain management.			x
29	2017	Abiuso, Santelice, Quezada. ¹⁹	Critical-reflective analysis	Pain management, analgesia	Establish recommendations for the most frequent scenarios to be solved in emergency services.	A standard of care must be developed: from non-pharmacological strategies to protocolized therapeutic regimens with the vision of making the ED a place of comprehensive and humanized pain management.			x
30	2019	Perera, López, Candelas, Chacón, Morizot. ²³	Descriptive	Pain, nursing	To monitor the effectiveness of the treatment applied in patients with acute pain in the emergency department by the triage nurse.	There is a high percentage of patients who improve their pain perception after the first treatment administered by triage nurses.	x		x

Note: The contribution corresponds to: 1= Assessment, 2= opioids and 3= pain.

IV. DISCUSSION

The development of the present study has been oriented to recognize the nursing assessment of patients with persistent pain treated with opioids considering the importance of determining what type of pain the patient presents in the first encounter with the specialist in the health institution. In this sense, it is important to understand that the use of assessment scales is one of the main tools used to determine the most effective pharmacological treatment in relation to pain relief, which are based on behaviors, as well as on physiological responses independent of the patient.²⁰

Thus, in order to treat pain adequately, it is necessary to perform a correct assessment even though it is a subjective experience. In this sense, the literature reviewed shows that there are multiple pain assessment scales that are valid and reliable as long as they are used appropriately; in this case, the most frequent according to similar studies¹⁹ are: the numerical assessment scale, the verbal descriptor scale or the visual analog scales.

Likewise, specialists have stated that the key to pain control lies in the correct assessment through nursing assessment scales that focus on attention to detail, management, and any difficulties derived from symptomatic control.²¹⁻²² However, although assessment is fundamental to pain management, there are significant deficiencies not only in the control of this type of procedure but also in the knowledge of the different measurement scales by nursing specialists, which can be

counterproductive in the adequate indication of effective treatments, In a study conducted among nursing personnel to determine the level of knowledge they had regarding the different assessment scales for pharmacological treatment²¹ it was recognized that 56% of the nursing personnel do not reevaluate the patient after applying the analgesic treatment to recognize the effectiveness of the intervention and whether the patient's need was satisfied; additionally, the referred study showed that 13% of the nurses do not know the type of scales suitable for this type of evaluation, which shows that there are certain difficulties among the specialists to intervene in pain management.

Another important aspect of pain assessment that should be considered at the time of evaluation is the patient's history of pain and direct observation of the patient's behavioral responses to understand the subjective experience.²²⁻²³ The literature shows that pain requires not only an individualized and multifaceted approach but also the recognition of all genetic, cultural and psychosocial factors that could influence the onset of pain.²⁴

In this regard, it is also necessary to understand that the use of opioids has been questioned due to the multiple complications associated with this type of pain treatment, since depending on the characteristics of the patient, he/she can develop multiple complications from the effects produced by the use of these drugs. In this regard, it has been pointed out²⁵ that the prolonged use of opioids can generate various effects such as dependence, opioid-induced hyperalgesia (OIH) and even addiction.

In this regard, a comparative analysis performed in 90 patients undergoing abdominal hysterectomy revealed that the use of ketamine, paracetamol, propofol, gabapentin, buprenorphine, among other opioids show no side effects and do generate analgesic effects.²⁵ However, in another study 24 90% of individuals with opioid dependence present an additional psychiatric disorder. Likewise, brain abnormalities have been reported as a result of opioid abuse that are directly associated with the development of opioid dependence and addiction, because most opioids have distribution volumes of 1 to 10 L/kg, which makes it impossible to completely eliminate a significant amount of the drug in some patients with special clinical conditions, as in the case of people undergoing hemodialysis.²⁶

In relation to the drugs of first choice for the treatment of pain with opioids, the most commonly prescribed in the studies analyzed were codeine, tramadol and morphine²⁷ due to characteristics such as hemodynamic stability, associated risks and analgesic effects, which in the case of morphine provides a more stable maintained analgesia than other opioids, but has effects such as hypotension and bronchospasm, which is not recommended for people with renal failure.¹⁹ Likewise, fentanyl is one of the most widely used opioids in the hospital setting because it is included in hospital analgesia protocols and, together with oxycodone, is prescribed in older patients, while morphine and pethidine are generally prescribed in younger patients.

Finally, nursing actions in correspondence with the needs identified in hospitalized patients are evidenced in numerous studies 19-21-29 that show that the prevalence of pain in hospitalized adults is high because analgesic treatment is inadequate and pain rating scales have not been used for the most part.¹⁹ Thus, when protocols are not applied to evaluate and specify the appropriate treatment for pain management, the nurse specialist moves away from his or her role as caregiver, which is one of the most important because he or she is the closest to the patient of the entire team, since his or her work demands a continuous presence with the patient and can recognize when the patient manifests symptoms of pain. 21

In this sense, it is evident that the nurse's accompaniment of the patient is not sufficient, as there are errors made by these specialists regarding the use of opioids, including the prescription of opioids, lack of knowledge of the opioid rotation strategy and the appropriate type of associations between the different types of opioids,²⁹ which is consistent with other studies 30 that point to the importance of training in pain by nurses, as they report better scores on scales that measure the level of knowledge and barriers to the approach to pain. 31-32 Among the most common barriers that limit the approach to pain are: the cultural barrier, generating an empathic bond, instructing the resident physician to manage discharge, permanent monitoring, attending to the patient's pain-related concerns, doubts and fears.²¹ Likewise, the adverse effects, products of this therapy, are limited due to the variety of factors that affect the processing of pain. 33

V. CONCLUSION

The use of opioids in pain therapy has been an effective alternative in the medical field, however, the indiscriminate use, the lack of evaluations through assessment scales, the prescription without proper reevaluation controls to determine its effectiveness and the lack of specialized professional training in the use of opioids for pain treatment, are some of the factors of greater incidence in the lack of effectiveness and effects associated with the misuse of this type of drugs. Thus, the number of side effects that have been reported worldwide from the use of opioids should be evaluated in context to determine the level of incidence that these factors have had on such effects.

In relation to the role of the nursing professional in correspondence with the needs of hospitalized patients in relation to the pain therapy they require, it is necessary for professionals to understand the fundamental role they play in the therapeutic approach to pain and the need to recognize not only the protocols but also the forms of use required for each opioid to be treated, as well as the responsibility they have to make the respective assessments through the pain evaluation scales, The recording and transmission of information as fundamental processes for the correct prescription of opioids so that they can be effective in the management of the pain of each patient being treated.

REFERENCES

- [1]. Guardia J. Consensus guide for the good use of opioid analgesics. Valencia: Socidrogalcohol; 2017.
- [2]. Schuler M, Dick A, Stein B. Heterogeneity in prescription opioid analgesic abuse across age groups: 2015-2017 National Survey on Drug Use and Health. *J Gen Intern Med.* 2019. (accessed March 26 2021); 35(3):792-799.
- [3]. Martín M, Martín MV. AT-21, the perfect opioid? *Rev Elect Anestesiar.* 2020 (accessed March 26, 2021);12(7): 4. Available in: <http://revistaanestesiar.org/index.php/rear/article/view/862/1275>
- [4]. García J. Basic management of acute and chronic pain. *Anesthesia in Mexico.* 2017 (accessed March 5, 2021); 29(1):77-85. Available at: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2448-87712017000400077
- [5]. Acuña J. Risk of addiction to opioid analgesics in the treatment of chronic non-oncologic pain. *Rev Med Clin Condes.* 2019 (accessed 05 March 2021);30(6):466-479. Available at: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1134-80462017000600313
- [6]. Hernández A. Echi analgesia and opioid rotation in the perioperative period. *Rev Mex Anests.* 2015 (accessed March 05, 2021). 38(1):172-174. Available at: <https://www.medigraphic.com/pdfs/rma/cma-2015/cmas151an.pdf>

- [7]. World Health Organization Pharmacological Treatments and Analgesia Scales, 2017. Available at: <https://www.dolor.com/tratamiento-farmacologico-escala-analgésica-oms.html>.
- [8]. Aguilar J, Mata J, Valentí P, Peláez R, Hernández B, Mir B. Evolution of pain treatment in the last decade (2008-2018). *Medicina Balear*. 2019 (accessed 05 March 2021); 34(1): 29-34. Available at: http://www.socmue.cat/docs/gr_treball/socmueDolor/7-evoluci-n-del-tratamiento-del-dolor-en-la-ultima-d-cada-2008-2018-1.pdf
- [9]. Vicente M, Delgado S, Bandrés F, Ramírez M, Capdevilla L. Pain assessment. Comparative review of scales and questionnaires. *Rev Soc Esp Dolor*. 2018. (accessed March 18, 2021); 25(4):228-236. Available at: https://scielo.isciii.es/scielo.php?script=sci_abstract&pid=S1134-80462018000400228&lng=es&nrm=iso.
- [10]. Guzmán A, Román M, Osorio J. Assessment instruments in cardiovascular nursing. *Rev Cub Enfer*. 2019 (accessed March 18, 2021); 35(3):1-20. Available at: <http://www.revenfermeria.sld.cu/index.php/enf/article/view/2578/483>
- [11]. Martínez C, Collado F, Rodríguez J, Moya J. Pain relief: a universal human right. *Rev Soc Esp Dolor*. 2015. (accessed March 18, 2021); 22(5): 224-230. Available at: http://scielo.isciii.es/pdf/dolor/v22n5/07_aespecial.pdf
- [12]. Pascual F, Sanchez C. Use and misuse of opioid drugs for pain management. *Health and Addictions*. 2019; (accessed March 18, 2021); 19(1): 31-35. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=6818212>
- [13]. Míguez M, Guerrero G, Mata S. Pain management in primary care. *Pediatrics update course 2018*. Madrid: Lúa Ediciones 3.0. p.377-399. Available at: https://www.aepap.org/sites/default/files/377-393_manejo_del_dolor_en_ap.pdf
- [14]. Antolínez A, Pérez P, Molina B, López D. Opioid consumption in patients hospitalized in an oncology center. *Rev Colomb Cancerology*. 2017. (accessed March 26, 2021); 21(4):194-201. Available at: <http://www.scielo.org.co/pdf/rcc/v21n4/0123-9015-rcc-21-04-00194.pdf>
- [15]. Perezamador M, Salcedo M. Analgesia in the patient with substance abuse. *Rev Mex Anesthesiology*. 2019. (accessed March 25, 2021); 42(3): 183-186. Available at: <https://www.medigraphic.com/pdfs/rma/cma-2019/cma193j.pdf>
- [16]. Calvo R, Torres L. Opioid therapy in chronic non-oncologic pain: recommendations for safe prescription. *Rev Soc Esp Dolor*. 2017. (accessed March 25, 2021); 24(6):313-323. Available at: <http://scielo.isciii.es/pdf/dolor/v24n6/1134-8046-dolor-24-06-00313.pdf>
- [17]. Farmer A, Drewes A, Chiarioni G, Giorgio R, O'Brien T, Morlion B, and Tack J. Pathophysiology and management of opioid-induced constipation: European expert consensus statement. *European Journal of Gastroenterology* 2017. (accessed March 27, 2021); 7(1): 7-20. Available at: <https://doi.org/10.1177/2050640618818305>
- [18]. Cardoso J, López M, Cuevas M, Flores J, Covarrubias S. Pharmacology and epidemiology of opioids. *Rev Bio Sci*. 2020. (accessed March 27, 2021); 7:e955. DOI: doi.org/10.15741/revbio.07.e955. Available at: <http://revistabiociencias.uan.mx/index.php/BIOCIENCIAS/article/view/955>
- [19]. Abiuso N, Santelices J, Quezada R. Acute pain management in the emergency department. *Rev Med Clin Condes*. 2017. (accessed March 27, 2021); 28(2):248-260. Available at: <https://www.elsevier.es/es-revista-revista-medica-clinica-las-condes-202-articulo-manejo-del-dolor-agudo-en-S0716864017300391>
- [20]. Rivas E, Alarcón E, Gatica V, Neupayante K, Schneider M. Pain assessment scales in noncommunicative critically ill patients. *Enferm Cuid Humaniz*. 2018. (accessed March 18, 2021); 7(1):115-129. Available at: <http://www.scielo.edu.uy/pdf/ech/v7n1/2393-6606-ech-7-01-57.pdf>
- [21]. Dos Santos S, Grance G, Llanos V. From the subjectivity of pain to a multidimensional nursing assessment. *Rev Dolor*. 2018. (accessed March 27, 2021); 69:32-34. Available at: <https://pesquisa.bvsalud.org/hansen/resource/pt/biblio-1117788?src=similardocs>
- [22]. Villegas M, Palacio C. Case report: opioid tolerance and hyperalgesia following abdominal trauma. *Rev Colomb Anesthesiol*. 2017 (accessed March 27, 2021); 45(51):12-15. Available at: <https://www.sciencedirect.com/science/article/pii/S0120334716000228>
- [23]. Perera J, López F, Candelas R, Chacón R, Morizot G. Prevalence and therapeutic approach to acute pain in the emergency department provided by triage nursing. *Aquichan*. 2019. (accessed March 21, 2021); 19(4): e1944. Available at: [file:///C:/Users/Windows/Downloads/10727-Manuscrito%20original-57261-3-10-20200312%20\(1\).pdf](file:///C:/Users/Windows/Downloads/10727-Manuscrito%20original-57261-3-10-20200312%20(1).pdf)
- [24]. Torijano M, Sánchez J, De la Hija M, Astier M. Use of opioids in patients with chronic pain. *Therapeutics in PHC*. 2016. (accessed March 21, 2021); 23(10):607-616. Available at: <http://www.comcordoba.com/wp-content/uploads/2017/05/Uso-de-opiC3B3ides-en-pacientes-con-Dolor-CrC3B3nico.-FMC-2016.pdf>
- [25]. Aguirre A. Opioid-induced hyperalgesia: a therapeutic dilemma. *AVFT*. 2019. (accessed March 21, 2021); 38(1):35-38. Available at: https://www.revistaavft.com/images/revistas/2019/avft_1_2019/8_hiperalgésia_inducida_por_opioides.pdf

- [26]. Sandi S, Sandi L. Opioid dependence and its treatment. *Rev Clín UCR -HSJD*. 2016. (accessed March 27, 2021); 1(1): 87-92. Available at: <https://www.mediagraphic.com/pdfs/revcliescmed/ucr-2016/ucr161j.pdf>
- [27]. Pérez N, Martínez MC, Díaz I, Antón M. Prescribing habits and knowledge about opioid analgesics in pediatric professionals. *Rev haban cienc med*. 2018 (cited 06 April 2021); 18(1):60-73. Available from: <http://www.revhabanera.sld.cu/index.php/rhab/article/view/2458>
- [28]. Usarralde A, Pérez M, Vidal A. Study of major opioid prescription for pain control in hospitalized patients. *Rev Soc Esp Dolor*. 2018. (accessed April 06, 2021); 25(6): 318-324. DOI: 10.20986/resed.2017.3629/2017. <http://scielo.isciii.es/pdf/dolor/v25n6/1134-8046-dolor-25-06-00318.pdf>
- [29]. Rubio J. Nursing role in clinical judgment: assessment and diagnosis. *Enfer cardiol*. 2016. (accessed March 20, 2021); 23(69):30-39. Available at: https://campusaec.com/wp-content/uploads/2017/02/69_02-1.pdf
- [30]. Ranapurwala S, Carnahan R, Brown G, Hinman J, Casteel C. Impact of the Iowa prescription monitoring program on opioid analgesic prescribing patterns: an Interrupted Time Series Study 2003-2014. *Pain Medicine*. 2019. (accessed March 21, 2021); 20:290-300. Available at: <https://pubmed.ncbi.nlm.nih.gov/29509935/>
- [31]. Taínta M, Arteché Y, Martín I, Salas V, Goñi R. Knowledge and attitudes of nurses in an intensive care unit about patients' pain. *An Sis Sanit Navar*. 2020. (accessed April 6, 2021); 43(2): 177-187. Available at: <http://scielo.isciii.es/pdf/asisna/v43n2/1137-6627-asisna-43-02-177.pdf>
- [32]. Tormo J, Marín L, González M, Ruiz M, Robles J, Vivar M. Prescription of major opioids in patients with non-oncologic pain: description of its characteristics in a primary care health area. *Rev Soc Esp Dolor*. 2017. (accessed April 6, 2021) ;24(1):19-26. Available at: <https://scielo.isciii.es/pdf/dolor/v24n1/original3.pdf>
- [33]. Salvador E, Aliaga L. Opioid combination. *Rev Soc Esp Dolor*. 2016. (accessed March 27, 2021) ;23(3):159-163. Available at: https://scielo.isciii.es/scielo.php?script=sci_arttext&id=S1134-80462016000300007