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Original Article

Description of the level of knowledge and attitudes of nurses and assistants regarding pain in a health care institution in Santander, Colombia

Descripción del nivel de conocimientos y actitudes de enfermeras y auxiliares respecto al dolor en una institución de salud de Santander, Colombia.

Descrição do nível de conhecimento e atitudes de enfermeiras e auxiliares em relação à dor em uma instituição de saúde em Santander, Colômbia

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Author Contributions

APBM: *Drafting and supervision.* ***MLJV:*** *Conceptualization.* ***ALAA:*** *Preparation of the original draft.* ***GIAL:*** *Research.* ***CMT:*** *Research.* ***LYCM:*** *Research.* ***SSG:*** *Methodology, data analysis.*

ABSTRACT

Introduction. Pain is defined by the International Association for the Study of Pain (IASP) as an unpleasant sensory and emotional experience. Therefore, the role of nursing in this fifth vital constant is fundamental. The objective of this study was to describe the level of knowledge and attitudes of professional nurses and nursing assistants regarding pain in a tertiary health care institution in Bucaramanga, Colombia. **Methodology.** A descriptive cross-sectional study, with a sample of 162 participants. The *Knowledge and Attitudes Survey Regarding Pain* was used. Inclusion criteria: Professional nurses and nursing assistants with at least three months in service. Exclusion criteria: Nursing students and nurses with formative and non-clinical tasks. **Results.** The average age was 31 years, 86.4% female, and the average number of years of experience in service was 1.54 years. The percentage of correct answers in knowledge was 30.7% for professional nurses and 25.6% for assistants. **Discussion.** Although some international studies have evaluated knowledge and attitudes regarding pain using the same survey, this study is the first in Colombia that compares nurses and assistants, showing better percentages of correct answers and a greater number of questions with results classified as "satisfactory." **Conclusions.** The level of knowledge and attitudes regarding pain obtained from the nurses is higher than that of assistants. However, specific weaknesses in these areas were identified in both populations.

Keywords:
Knowledge; Pain; Nursing; Pain Management; Pain Measurement.

RESUMEN

Introducción. El dolor es definido por la Asociación Internacional para el Estudio del Dolor (IASP, por su sigla en inglés) como una experiencia sensorial y emocional desagradable. Por tanto, la función que cumple la enfermería en esta quinta constante vital es fundamental. El objetivo de este estudio fue describir el nivel de conocimientos y actitudes de enfermeras profesionales y auxiliares respecto al dolor en una institución asistencial de tercer nivel de atención de Bucaramanga, Colombia. **Metodología.** Estudio descriptivo de corte transversal, con una muestra conformada por 162 participantes. Se utilizó el cuestionario *Knowledge and Attitudes Survey Regarding Pain*. Criterios de inclusión: enfermeras profesionales y auxiliares con mínimo tres meses en el servicio; criterios de exclusión: estudiantes de enfermería y enfermeras con labores formativas y no clínicas. **Resultados.** El promedio de edad fue de 31 años, sexo femenino 86.4%, la media de años de experiencia en el servicio fue de 1.54 años. El porcentaje de respuestas correctas de conocimientos fue de 30.7% para enfermeras profesionales y 25.6% para auxiliares. **Discusión.** Aunque se han realizado a nivel internacional estudios que han evaluado el conocimiento y actitudes del dolor haciendo uso del mismo cuestionario, este estudio es el primero en Colombia que compara enfermeras y auxiliares, evidenciando mejores porcentajes de respuestas correctas y mayor número de preguntas con resultados clasificados como "satisfactorios". **Conclusiones.** El nivel de conocimientos y actitudes respecto al dolor obtenidos de las enfermeras es mayor que en los auxiliares; sin embargo, se identificaron en ambas poblaciones debilidades específicas en estas áreas.

Palabras clave:
Conocimiento; Dolor; Enfermería; Manejo del Dolor; Dimensión del Dolor.

RESUMO

Introdução. A dor é definida pela Associação Internacional para o Estudo da Dor (IASP, sigla em inglês) como uma experiência sensorial e emocional desagradável. Portanto, o papel que a enfermagem desempenha neste quinto sinal vital é fundamental. O objetivo deste estudo foi descrever o nível de conhecimento e atitudes de enfermeiras e auxiliares em relação à dor em uma instituição de atendimento terciário de Bucaramanga, Colômbia. **Metodologia.** Estudo descritivo, transversal, com uma amostra de 162 participantes. Foi utilizado o questionário *Knowledge and Attitudes Survey Regarding Pain*. Critérios de inclusão: enfermeiras e auxiliares com no mínimo três meses no serviço. Critérios de exclusão: estudantes de enfermagem e enfermeiras com funções de formação e não missionárias. **Resultados.** A idade média foi de 31 anos, sexo feminino 86,4%, a média de anos de experiência no serviço foi de 1,54 anos. O percentual de respostas corretas de conhecimento foi de 30,7% para enfermeiras e 25,6% para auxiliares. **Discussão.** Embora tenham sido realizados estudos internacionais que avaliaram conhecimentos e atitudes sobre a dor usando o mesmo questionário, este estudo é o primeiro na Colômbia que compara enfermeiras e auxiliares, mostrando melhores percentuais de respostas corretas e maior número de perguntas com resultados classificados como "satisfatórios". **Conclusões.** O nível de conhecimento e atitudes em relação à dor, obtido das enfermeiras é superior ao dos auxiliares. No entanto, foram identificadas fragilidades específicas nestas áreas em ambas as populações.

Palavras-chave:
Conhecimento; Dor; Enfermagem; Manejo da Dor; Medição da Dor.

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Introduction

Pain is a complex and critical phenomenon that affects a large number of individuals. In acute conditions, it is commonly temporary with rapid recovery. When pain is present for a period of longer than three months, it is classified as chronic pain and has a great impact on the individual's health and lifestyle (1,2). It is important to emphasize that perceived experiences are presented differently in the person in care and depend on previous situations in physical, social, and cultural contexts. In this context, suffering has a particular influence on coping with pain (Figure 1).

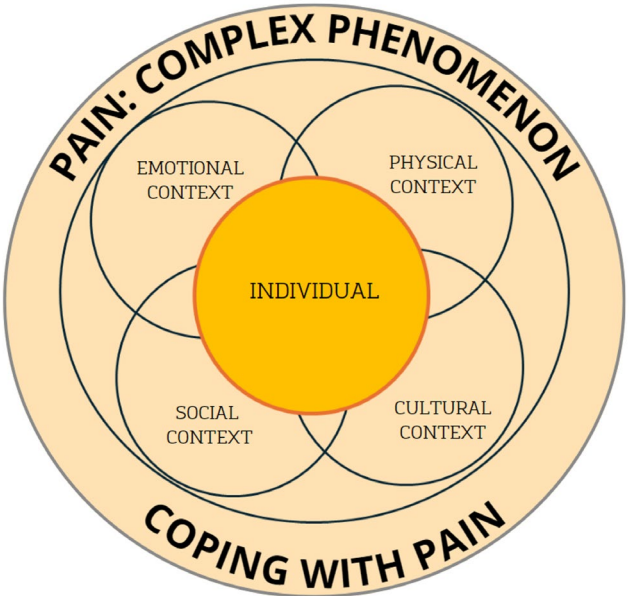

Figure 1. Pain and individual coping.
Source: prepared by authors.

Chronic pain in seniors is considered to have a prevalence of 25-85% of the total population (3,4). Economic costs are reported in countries, such as the United States, where chronic pain management can cost between $560 and 635 billion dollars annually (5). At the same time, pain causes continuous symptoms, such as fatigue, depression, anxiety, fear and sleep disturbance in the suffering population (6).

The North American Nursing Diagnosis Association (NANDA) and the International Association for the Study of Pain (IASP), in the latest consensus by multinational teams, define pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage" (7,8). The IASP declared that access to pain management is a human right, considering it the fifth vital sign (9,10). Although many studies have demonstrated and warned of the inadequate management of pain in most countries, either because of the economic situation, which makes it difficult to access the best resources and technologies for adequate treatment or because of the lack of knowledge in assessment and comprehensive management by health personnel (11). Because of this, several international organizations, including the Joint Commission on Accreditation of Healthcare Organization (JCAHO), have included auditing excellence in caring for patients in their mission to improve the quality of pain management (12).

In Colombia, a study carried out in a population of people over 18 years of age with a hospital stay of more than 24 hours showed that the classification with the highest percentage of pain according to its intensity is mild (48.8%) and moderate (36.6%), emphasizing that pain affects the daily life of people in care by 28% for general activities and 16.1% for other conditions, such as sleep, mood, work, fun and sexual relations (13).

It is important for health care personnel to recognize the emphasis they place on assessment to identify the causes, duration, location, and intensity of pain with their knowledge in order to classify it appropriately and quickly. Pain can present the same signs and symptoms as other critical phenomena, such as psychosocial behaviors, restlessness, despair, or specific physiological processes (14). Therefore, preventing, controlling, and relieving pain in time through a correct multidisciplinary intervention will counteract serious complications that may arise over time (15).

In the frameworks of the above observations, the attitude of the professional and nursing assistant is fundamental in managing pain relief, through their compassionate care defined as "a deep awareness of the suffering of others and a willingness to alleviate it" (16). Nursing professionals also require knowledge and skills that allow them to lead and manage an effective health care plan in assessing and managing pain in each individual (17,18).

In this integral approach, the role professional nurses are fundamental, considering that they can assume activities to mitigate pain and adopt good practices in pain; with training and orientation according to institutional protocols. Success lies in the coordination, training, and commitment of the entire work team and in the education provided to the patients and their caregivers (18).

With reference to the importance of the knowledge and skills nurses should have, these should be supported by the best scientific evidence. Internationally, there are nursing associations, such as the Registered Nurses Association of Ontario (RNAO), which have experience in developing clinical practice guidelines with evidence-based recommendations. The RNAO has a total of 54 good clinical practice guidelines, most notably the Assessment

and Management of Pain Guideline, third edition 2013, which provides a critical resource for nurses committed to alleviating suffering in health care subjects who are in pain (19,20).

Taking into account the above considerations, promoting effective strategies for assessing and managing pain largely depends on the academic training of health professionals, specifically in nursing. For Colombia, it is also a priority for nurses and nursing assistants to have the knowledge and attitudes that will help them take an integral approach to the complex and multifactorial phenomenon of pain. In addition, health care personnel being committed to evidence-based compassionate care and patient care with high quality standards is considered an institutional priority (20,21). Therefore, the objective of this study was to describe the level of knowledge and attitudes of professional nurses and nursing assistants regarding pain in a tertiary health care institution in Bucaramanga, Colombia, which implements clinical practice guidelines on pain management, by applying the "Survey on knowledge and attitudes regarding pain" instrument.

Methodology

Design

Descriptive cross-sectional study in which a survey was applied to assess the knowledge and attitudes of nurses and nursing assistants regarding pain. The survey was applied in a tertiary health care institution in northeastern Colombia, which has been using clinical practice guidelines to assess and manage pain for 6 years.

Non-probabilistic convenience sampling was performed, which included a total of 162 out of 447 (36.2%) nurses and nursing assistants who attended the training conducted through the institution's primary groups. The respondents who agreed to participate in the study were professional nurses (n=77) and nursing assistants (n=85). Inclusion criteria took into account working with more than 3 months of experience in the urgent care, internal medicine, oncology, surgery, gynecology and/or intensive care unit areas. Undergraduate, graduate, or auxiliary nursing students rotating in the urgent care department, internal medicine, special services, and pain clinic were excluded, as well as professional nurses who were performing training and non-clinical work in other institutions, who were in the urgent care, internal medicine, or special services department.

Instrument

The instrument used to assess the nurses' level of knowledge and attitudes was the validated Knowledge and Attitudes Survey Regarding Pain (KASRP). This instrument was developed in 1987 and has been used extensively since then in many studies (22). Permission for use was obtained from the original authors, and the cross-cultural validation process was carried out with the direct and inverse translation methodology, which was performed by three professionals with degrees in foreign languages, whose native language was Spanish and whose professional emphasis was English. The survey is composed of 22 true-false questions, 15 multiple-choice questions with a single answer and 2 clinical cases with 2 sub-questions, for a total of 39 questions (22,23).

Data Collection

The research team collected data from September to December 2018. For this purpose, it was supported by the primary nursing committee of the health care institution, in which the principal investigator presented the title, purpose, objective and importance of the research. The leaders of each health care area applied the self-completion survey physically to those who agreed to participate in the study and met the inclusion criteria. All participants fully completed the paper survey and sent the document to the institution's research department. To protect personal data, each participant was assigned a continuous whole number code, and the surveys were only handled by the researchers in charge of the statistical analysis.

Data Analysis

The researchers in charge of the analytical process reviewed the total 162 surveys, and the data was coded and analyzed in the statistical program STATA 14. The descriptive statistical analysis was developed by including the results of frequency, percentage and mean with their respective standard deviation. Pearson's correlation coefficient (Pearson's Chi-square) was used to evaluate the correlation between the level of knowledge of nurses and nursing assistants, determining differences of $(p) < 0.05$ as significant. In order to interpret the level of knowledge, the scores of correct answers to the survey were classified as satisfactory with values greater than or equal to 70%, less satisfactory between 50% and 69% and unsatisfactory below 50%.

Ethical Considerations

Following the national regulations of resolution 8430 of 1993 of the Colombian Ministry of Health, which establishes the technical and administrative regulations for health care research and the regulations of the Declaration of Helsinki, the study was classified as without risk to the integrity of the participants. The ethical component of the research protocol was reviewed, evaluated and approved by the Ethics Committee of Universidad Autónoma de Bucaramanga and the study's implementation was monitored by the Ethics Committee of the Health Care Institution.

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Results

Sociodemographic characteristics.

The results of the sociodemographic characteristics of the evaluated population are presented in Table 1 with respect to level of education, sex, area of work and service.

Table 1. Sociodemographic characteristics of the participants

Variable	n	%
Level of education (n: 162)		
Professional nurses	77	47.5%
Nursing assistants	85	52.4%
Sex (n: 162)		
Female	140	86.4%
Male	22	13.5%
Work area in the last year (n: 148)		
Clinical area	144	97.3%
Administrative area	3	2.0%
Teaching	1	0.6%
Main service where you work (n: 156)		
Internal Medicine	69	44.2%
Urgent Care	31	19.8%
Oncology	28	17.9%
Gynecology	10	6.4%
Surgery	8	5.1%
Other area (administrative)	6	3.8%
Intensive Care Unit	4	2.5%

This table presents the sociodemographic characteristics of the evaluated population with respect to level of education, sex, area of work and service.

Source: prepared by authors.

Regarding the level of training, 52.4% of the participants were nursing assistants and 47.5% were professional nurses. In general, the female sex predominated, and the mean age was 31.39 with a standard deviation of ±0.61. The mean in years of experience in the institution was 6.1 (sd ±0.40), while the years of experience in the service was lower, with a mean of 1.54 (sd ±0.20). The service with the highest participation was internal medicine, with 44.2%, followed by urgent care with 19.8%.

Level of Knowledge and Attitudes Regarding Pain

Table 2 shows the results of the survey according to the correct answers obtained from the total population evaluated, with data described of nurses and assistants as well as the significance score (p) measured by Pearson's Chi-square.

The nurses' results show that they scored satisfactory (higher than 70%) on 12 out of 39 questions. The questions classified in this way were: P4- attitude towards pain (85.7%), P5- knowledge of pharmacological treatment with non-steroidal anti-inflammatory drugs (71.4%), P8- knowledge of opioid treatment (74.4%), P15- attitude towards pain (70.1%), P16- knowledge of drug equivalence (71.4%), P17- knowledge of pain assessment (88. 3%), P24- knowledge of opioid treatment (84.4%), P25- knowledge of multimodal treatment (88.3%), P27- knowledge of multimodal treatment (98.7%), P29- attitude towards pain (79.2%), P32- attitude towards pain (87.0%) and P34- knowledge of opioid treatment (72.7). The score classified as unsatisfactory (lower than 50%) corresponded to 24 of 39 questions.

With respect to the results of the nursing assistants, they obtained a satisfactory score (higher than 70%) in 10 of 39 questions. The questions classified in this way were: P1- knowledge of pain assessment (85.8%), P4- attitude towards pain (90.5%), P5- knowledge of pharmacological treatment with non-steroidal anti-inflammatory drugs (70.5%), P15- attitude towards pain (71.7), P16- knowledge of drug equivalence (75. 9%), P17- knowledge of pain assessment (82.3%), P24- knowledge of opioid treatment (80.0%), P25- knowledge of multimodal treatment (88.2%), P27- knowledge of multimodal treatment (92.9%) and P29- attitude towards pain (72.9%). The score classified as unsatisfactory (lower than 50%) corresponded to 22 of 39 questions.

The overall results were satisfactory for a total of 12 out of 39 questions. The questions with this classification were: P1- knowledge of pain assessment (77.7), P4- attitude towards pain (88.2%), P5- knowledge of pharmacological treatment with non-steroidal anti-inflammatory drugs (70.9%), P15- attitude towards pain (70.9%), P16- knowledge of drug equivalence (72.2%), P17- knowledge of pain assessment (85.1%), P24- knowledge of opioid treatment (82.1%), P25- knowledge of multimodal treatment (88.2%), P27- knowledge of multimodal treatment (95.5%), P29- attitude towards pain (75.35), P32- attitude towards pain (76.5%), P34- knowledge of opioid treatment (70.9%). The score classified as unsatisfactory (lower than 50%) corresponded to 24 of 39 questions.

Nine of 39 questions proved to have significant results in the level of knowledge and attitudes in nurses and nursing assistants, highlighting question 13 related to "the spiritual beliefs of the people in care may lead them to think pain and suffering are necessary," which obtained (p: 0.000).

Table 2. Results of the level of knowledge and attitudes of professional nurses and nursing assistants regarding pain. (Knowledge and Attitudes Survey Regarding Pain. KASRP)

Question	Correct answers by professionalnurses		Correct answers by nursing assistants		Overall correct answers		
	n (77)	%	n (85)	%	n (162)	%	Q*-value
Q1: Are vital signs always reliable indicators of a patient's pain intensity?	53	68.8	73	85.8	126	77.7	0.019[a]
Q2: Since children under 2 years of age have underdeveloped nervous systems, do they have decreased pain sensitivity?	19	24.6	28	32.9	47	29.0	0.247
Q3: Do patients who can be distracted from pain usually not have severe pain?	43	55.8	56	65.8	99	61.1	0.191
Q4: Can patients sleep despite severe pain?	66	85.7	77	90.5	143	88.2	0.336
Q5: Are aspirin and other non-steroidal anti-inflammatory drugs not effective painkillers for painful bone metastases?	55	71.4	60	70.5	115	70.9	0.013[a]
Q6: Does respiratory depression rarely occur in patients who have been receiving stable doses of opioids for monthly periods?	34	44.1	30	35.2	64	39.5	0.249
Q7: Can combining painkillers that work by different mechanisms result in less pain control?	15	19.4	29	34.1	44	27.1	0.036[a]
Q8: Is the duration of analgesia of 1-2 mg of morphine intravenously usually 4-5 hours?	57	74.0	53	62.3	110	67.9	0.112
Q9: Should opioids not be used in patients with a history of substance abuse?	42	54.5	52	61.1	94	58.0	0.393
Q10: Are elderly patients unable to tolerate opioids for pan relief?	4	5.1	14	16.4	18	11.1	0.023[a]
Q11: Should patients be encouraged to endure as much pain as possible before requesting an opioid medication?	5	6.49	7	8.24	12	7.4	0.672
Q12: Can children under 11 years of age not reliably report pain?	6	7.7	9	10.5	15	9.2	0.540
Q13: Can patients' spiritual beliefs lead them to think pain and suffering are necessary?	13	16.8	41	48.2	54	33.3	0.000[c]
Q14: After an initial dose of an opioid painkiller is administered, should subsequent doses be adjusted according to response?	5	6.4	7	8.2	12	7.4	0.672
Q15: Is giving patients sterile injected water a useful test to determine if the pain is real?	54	70.1	61	71.7	115	70.9	0.819
Q16: Is hydrocodone 5 mg plus acetaminophen 500 mg orally approximately equal to 5-10 mg morphine orally?	55	71.4	62	75.9	117	72.2	0.830
Q17: If the patient's source of pain is unknown, should opioids not be used during the pain assessment period?	68	88.3	70	82.3	138	85.1	0.286

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Q18: Do anticonvulsant drugs, such as gabapentin, produce optimal pain relief after a single dose?	27	35.0	45	52.9	72	44.4	0.022[a]
Q19: Are benzodiazepines not effective painkillers and are they rarely recommended as part of an analgesic regimen?	25	32.4	31	36.4	56	34.5	0.593
Q20: Is narcotic/opioid addiction defined as a chronic neurobiological disease?	6	7.7	2	2.3	8	4.9	0.111
Q21: Does the term "equianalgesia" mean approximately equal to analgesia, and is it used when referring to the dosage of various analgesics?	14	18.1	30	35.2	44	27.1	0.014[a]
Q22: Is an assessment of sedation recommended during opioid pain management because excessive sedation proceeds to respiratory failure?	4	5.1	6	7.0	10	6.17	0.622
Q23: What is the recommended route of administration of opioid painkillers for patients with persistent cancer-related pain?	3	3.9	2	2.3	5	3.0	0.571
Q24: What is the recommended route of administration of opioid painkillers for patients with mild to severe sudden onset pain in clinical scenarios?	65	84.4	68	80.0	133	82.1	0.464
Q25: Which of the following painkillers is considered the drug of choice in prolonged pain?	68	88.3	75	88.2	143	88.2	0.988
Q26: A 30 mgr. dose (3% presentation) of morphine orally is approximately equivalent to?	22	28.5	20	23.5	42	25.9	0.465
Q27: Should painkillers for post-operative pain initially be administered?	76	98.7	79	92.9	155	95.5	0.072
Q28: Clinical case	2	2.6	7	8.2	9	5.5	0.118
Q29: What is the most likely reason a patient with pain would ask for higher doses for their pain?	61	79.2	62	72.9	123	75.3	0.351
Q30: Which of the following drugs is useful in treating cancer pain?	19	24.6	25	29.4	44	27.1	0.498
Q31: Who is the best person to pinpoint the intensity of the patient's pain?	47	61.0	44	51.7	91	56.1	0.235
Q32: Which of the following describes the best approach to cultural considerations in caring for patients with pain?	67	87.0	57	67.0	124	76.5	0.003[b]
Q33: How likely is it that patients who develop pain already have alcohol and or drug abuse problems?	33	42.8	22	25.8	55	33.95	0.023[a]
Q34: What is the time to the maximum effect of morphine administered intravenously?	56	72.7	59	69.4	115	70.9	0.642
Q35: What is the time to the maximum effect of orally administered morphine?	29	37.6	27	31.7	56	34.5	0.431
Q36: After abrupt discontinuation of an opioid, physical dependence is manifested by the following:	13	16.1	11	12.9	24	14.8	0.481

Q37: Which statement is true regarding opioid-induced respiratory depression?	10	12.9	20	23.5	30	18.5	0.085
Q38(A): Clinical case	36	46.7	32	37.6	68	41.9	0.241
Q38(B): Clinical case	0	0.00	3	3.53	3	1.8	0.096
Q39: Clinical case	36	46.7	35	41.1	71	43.8	0.475

Q: Question regarding the KASRP
Q*- value: Pearson's chi-square.
a: $p<0.05$, mild significance value
b: $p<0.01$, moderate significance value
c: $p < 0.001$, high significance value

This table presents the results of the survey according to the correct answers obtained, question by question, of the total evaluated population, with data described by nurses, assistants as well as the significance score (p) measured by Pearson's Chi-square.
Source: prepared by authors.

Discussion

One of the fundamental pillars in comprehensively caring for people in health care settings is the knowledge and attitude of the health care personnel with respect to pain. It is important to highlight that this study is the first in Colombia to evaluate the knowledge and attitudes regarding pain, comparing the professional and assistant nursing population using the Knowledge and Attitudes Survey Regarding Pain (KASRP) instrument. It should be noted that nursing professionals graduate with university studies lasting 8 to 10 academic semesters in Colombia, depending on the academic institution, while nursing assistants obtain their degree through technical training lasting an average of 3 semesters (1.5 years). Within work performance in care, the professional brings their own body of knowledge into the nursing care plan and can make a critical judgment based on the science of care. Meanwhile, nursing assistants perform operationally and utilizing technically tasks in attending to patients under the supervision of nursing professionals.

Research participants are part of a healthcare institution recognized by the Registered Nurses Association of Ontario (RNAO) as Best Practice Spotlight Organizations (BPSO) for implementing the pain assessment and management guideline. The above confirms the importance of continuous training in assessing, interpreting and managing the skills of all health care personnel for a comprehensive approach to pain.

Internationally, several studies evaluated knowledge of and attitudes towards pain using the same survey, carried out in populations of nurses and physicians, with overall results that differed from this studies. This is the case for the study by Alkhatib et al. (Jordan) (24), in which nurses (n=81) and general medicine practitioners (n=56) were evaluated. In this study, 4 out of 39 questions were answered correctly and categorized as satisfactory in nursing (values ranging from 72.8 to 77.8%) (25). In the study by Bernhofer et al. (United States) (25), in which they evaluated nurses (n=747), the satisfactory scores obtained according to the survey were 11 out of 39 questions (values between 71.6 and 91.1%). For the study by Kahsay et al. (Eritrea) (26), conducted in a professional nursing population (n=126), 7 out of 39 questions were answered correctly and classified as satisfactory (values between 73.0 to 88.9 %) (26). In the study by Yu et al. (China) (27), conducted on nurses (n: 505), a total of 8 out of 39 questions were satisfactory (values ranging from 73.4 to 89.1%) (27); and the study by Al-Atiyyat et al. (United Arab Emirates) (28), conducted on nurses (n=115), obtained a total of 9 out of 39 questions (values ranging from 72.0 to 83.0%) classified as satisfactory (28).

In contrast to the results obtained in international studies on knowledge and attitudes regarding pain measured with the same instrument, this study presents a higher number of satisfactory answers, at 12 out of 39 questions (values between 70.1 and 98.7%) by the nurses.

The authors acknowledge the fact that the sampling was carried out by convenience as a limitation of the study, with a sample size that may not be representative, and without results from other studies conducted specifically on the same population of nurses and nursing assistants.

Conclusions

The level of knowledge and attitudes obtained from professional nurses is higher than that obtained from nursing assistants. However, weaknesses in specific areas were identified in both populations, making the need to continue strengthening education in these contents visible. It begins with academic training and is complemented in work contexts through continuing education in institutional programs.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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Ethical Considerations

Protection of persons and animals: This study is considered risk-free due to its nature. It was approved by the Universidad Autónoma de Bucaramanga (UNAB) Institutional Ethics Committee.

Data confidentiality: The authors declare that they have followed their center's protocols on publishing patient data.

Right to privacy and informed consent: The authors have obtained the informed consent of patients or subjects mentioned in the article. This document is in the possession of the corresponding author referred to in the article.

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