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Nurses' knowledge and practices regarding pain management in newborns

Conhecimento e práticas de enfermeiros acerca do manejo da dor em recém-nascidos Conocimiento y prácticas de enfermeros acerca del manejo del dolor en recién nacidos

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ABSTRACT

Objective: To analyze nurses' knowledge and practices regarding pain management of newborns admitted to Neonatal Intensive Care Units. Method: A descriptive and cross-sectional study. Data were collected from 51 nurses based on an adapted questionnaire aimed at evaluating knowledge and practices regarding the management of neonatal pain in six hospitals in Curitiba and its Metropolitan Region. Results: For most nurses (86.0%), neonates feel pain. A total of 34.7% of the nurses reported never using pain assessment scales. Pain management was recorded by 84.3% of the nurses. Administered pharmacological measures were Paracetamol and Fentanyl (47.1%) and Morphine (17.6%); while non-pharmacological measures adopted were sweetened solution (68.6%), non-nutritive sucking (58.8%) and positioning (56.9%). Conclusion: Nurses considered neonatal pain a real event; however, they do not perform pain assessment or treatment of newborns in a systematized way. It is necessary to implement knowledge translation strategies in order to improve pain management in newborns.

DESCRIPTORS

Pain; Pain Management; Infant, Newborn; Neonatal Nursing; Intensive Care Units, Neonatal.

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INTRODUCTION

The International Association for the Study of Pain (IASP) defines pain as "an unpleasant sensory and emotional experience associated with actual or potential injuries. Pain is always subjective. Each individual learns the application of the word pain through experiences related to illness early in life"(1). However, this definition has been challenged because of the inability of newborns to verbalize their pain, considering that an absence of verbal communication does not prevent one from experiencing pain and needing treatment⁽²⁾.

Newborns experience numerous painful experiences as early as the first days of life, such as the intramuscular administration of vitamin K and skin perforation to measure blood glucose. Newborns admitted to Neonatal Intensive Care Units (NICUs) are constantly exposed to painful procedures of varying intensities such as surgeries, tracheal cannula aspirations, and venous punctures, among others⁽³⁾.

A study conducted in eight NICUs and five Pediatric Intensive Care Units (PICUs) showed that the number of painful interventions per newborn was 364 in the first 14 days of hospitalization, and an average of 12 painful procedures and 16 stressful procedures per day. Furthermore, about 80% of hospitalized newborns had their pain undertreated⁽⁴⁾. Insufficient use of analgesics has also been observed in other studies in NICUs⁽⁵⁻⁷⁾.

The association between neonatal pain experiences in preterm infants and the implications of these children's development are the results of a systematic review that points to a negative impact on postnatal growth and brain development, in addition to negative effects on attention, and cognitive, emotional and motor development⁽⁸⁾.

Identifying pain is of utmost importance for its effective management. Self-reported pain is considered by health professionals as one of the best instruments for assessing pain. However, newborns cannot verbalize their pain. Thus, it is essential that other methods are known and used by professionals to assess pain, such as the use of validated scales.

Due to the deleterious effects of pain in newborns and shortcomings in professional practices of assessing and treating pain in newborns, we asked: What are nurses' knowledge and practices regarding pain management in newborns? By analyzing how pain management is carried out by nurses in Curitiba and the metropolitan area, is it possible to advance scientific knowledge striving for excellence in providing care for newborns? Thus, the objective of the study was to verify nurses' knowledge and practices regarding pain management in newborns admitted to NICUs.

METHOD

A descriptive and cross-sectional study carried out in Curitiba and its Metropolitan Region (Paraná state) in six public hospitals having Neonatal Intensive Care Units (NICUs). The sample consisted of 52 nurses working in NICUs. One participant was lost due to refusing to participate. Thus, the final sample consisted of 51 nurses working in NICUs of the institutions in the period of data collection between December, 2014, and July, 2015. Those who were on leave during this

period, on vacation or on maternity leave were excluded. Thus, the nurses who accepted to participate were included in the study and signed the Free and Informed Consent Form.

The research project was approved by the Research Ethics Committee of the USP School of Nursing (CEP/EEUSP) under approval number 952.238. Of the six hospitals named co-participating institutions, one of them accepted the CEP/EEUSP approval. Two institutions had the same Research Ethics Committee, and the project was approved under number 1.069.253. The remaining three institutions approved the project under the numbers 1.098.877; 1.032.303 and 1.132.335.

The researcher initially contacted the nursing coordinators of each participating institution by telephone or e-mail to introduce the research project and request permission for data collection.

A questionnaire designed by Capellini et al. (9) was applied for this study, but data collection was performed only after authorization was obtained from the authors. The questionnaire was adapted to this study's objectives consisting of three parts, with the first part containing information regarding nurses profile such as: training, performance and professional qualification; the second and third parts were regarding nurses knowledge and practices regarding the management of neonatal pain, respectively. The questionnaire was developed using the Likert Scale, which quantifies attitudes and behaviors through estimating the response degree(10). It was composed of affirmative sentences and answers regarding nurses' knowledge as follows: I disagree, I partially disagree, I do not know, I partially agree and I agree. For the questionnaire evaluating nurses' practices, the answers were as follows: Never, rarely, sometimes, most of the time, and always. Only one answer is supposed to be marked for each statement.

Completion of the questionnaire was scheduled for each nurse and participants were informed that their answers would not be used to assess their performance at work. The questionnaire ensured anonymity and was self-completed without consulting other people, protocols or any didactic material, with an estimated duration of 30 minutes. The questionnaire used in this study⁽⁹⁾ was evaluated as to its ability to convey the content in an understandable way and approved by six professionals with expertise in the field, being three nurses with doctorate degrees and experience in studying neonatal pain (one Canadian and two Brazilians), and three Brazilian nurses with experience in teaching, practice and research in the neonatal area, all individually instructed for this activity.

Data were entered into a spreadsheet in Microsoft Excel 2010, analyzed in the Statistical Package for the Social Sciences (SPSS-version 21.0) and submitted for descriptive analysis. The results were presented as absolute and relative frequencies in graphs and tables. The level of significance was 5%.

RESULTS

Of the 51 nurses participating in the study, 50 (98%) were female and only one (2%) was male. Their ages varied

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from 21 to 52 years, with an average of 30.8 years (SD=6.45). Total experience of the nurses ranged from less than one year to 26 years, with an average of 6.02 years (SD=5.86); their experience in an NICU ranged from less than one year to 20.17 years, with an average of 4.39 years (SD=5.74), and their experience in the NICU where the study was carried out ranged from less than one year to 18.25 years, with an average of 3.78 years (SD=5.39).

When questioned about the existence of guidelines, protocols or routines to assess and manage neonatal pain, 17 (33.3%) nurses answered that they exist, 21 (41.2%) reported that they do not exist, and 13 (25.5%) did not know how to respond.

The scale for assessing pain in newborns was used by 32 (62.7%) nurses and 17 (34.7%) reported never using a scale. Regarding the type of scale used to assess neonatal pain, 11 (21.6%) nurses reported using the 'Neonatal Infant Pain Scale' (NIPS)⁽¹¹⁾; three (5.9%) used the 'Crying, Requires Oxygen for Saturation above 90%, Increased Vital Signs, Expression, Sleep' (CRIES)⁽¹²⁾ and NIPS⁽¹¹⁾ scale; while one (2%) nurse reported using only the CRIES⁽¹²⁾ scale. However, 36 (70.6%) nurses were not aware of what type of scale was used in the service.

Several intervals for pain assessment in neonates were mentioned by the nurses, with 19 (37.3%) reporting that pain assessment was verified along with newborns' vital signs; five (9.8%) reported that pain was sporadically assessed; three (5.9%) reported that the pain assessment interval was 2/2h; two (3.9%) reported that the assessment interval was 4/4h; two (3.9%) reported that pain was assessed at 4/4h in postoperative care; 18 (35.3%) stated that pain was not assessed; and

two (3.9%) did not respond this item. Professionals that most evaluated the pain and registered it in the nursing evaluation records were nurses – 43 (84.3%), followed by nursing technicians – 32 (62.7%), and nursing auxiliaries – six (11.8%). According to 24 (47.1%) nurses, the neonatal pain assessment score was recorded in the nursing evaluation records; 18 (35.3%) nurses registered it in nursing notes; 8 (15.7%) on the water balance forms; and one (2%) on their own printed sheet.

When using pain assessment scales in newborns, actions carried out by 41 (80.4%) nurses were using non-pharmacological measures; 29 (56.9%) used pharmacological measures; 26 (51%) discussed it with the team; 15 (29.4%) recorded it in the medical record and nine (17.6%) reported it to their manager. When pain assessment scales were not used in the NICU, actions taken by 41 (80.4%) nurses were medicating for pain relief; 24 (47.1%) discussed it with the team; 21 (41.2%) recorded it in the medical records; and 11 (21.6%) reported it to their manager.

Pharmacological and non-pharmacological interventions are used for treating pain in newborns hospitalized in NICUs. We found that 29 (56.9%) nurses used pharmacological measures, among them: paracetamol (24, 47.1%), fentanyl (24, 47.1%) and morphine (nine, 17.6%). Fortyone (80.4%) nurses used non-pharmacological measures for relief of neonatal pain, where the most cited among them were: oral glucose – 35 (68.6%), non-nutritive sucking – 30 (58.8%), and positioning – 29 (56.9%).

Results regarding the questionnaire on knowledge and practices are presented below in Tables 1 and 2, and reflect what the nurses knew and applied in their care practices.

Table 1 – Nurses' knowledge regarding management of neonatal pain in the NICUs of Curitiba and its Metropolitan Region – Curitiba, Paraná, Brazil, 2015.

| | | D | | PD | | [| OK | F | PA | | A | |
|-----|---|----|------|----|------|---|-----|----|------|----|------|--|
| | - | n | % | n | % | n | % | n | % | n | % | |
| 1. | PRNB feel pain | 4 | 8.0 | 1 | 2.0 | - | - | 2 | 4.0 | 43 | 86.0 | |
| 2. | Full-term NBs feel pain | 4 | 8.0 | = | - | - | - | 5 | 10.0 | 41 | 82.0 | |
| 3. | Pain can affect newborn's HR, RR, T, BP, SatO ₂ and IP | - | - | - | - | - | - | 3 | 5.9 | 48 | 94.1 | |
| 4. | Pain can affect newborn's facial expressions, limb movements and crying | - | - | - | - | - | - | 2 | 3.9 | 49 | 96.1 | |
| 5. | Light and noise may affect newborn's reactions to pain | - | - | 1 | 2.0 | 1 | 2.0 | 5 | 9.8 | 44 | 86.3 | |
| 6. | NB pain is not recognized by professionals | 13 | 26.0 | 7 | 14.0 | - | - | 23 | 46.0 | 7 | 14.0 | |
| 7. | NB pain is not considered by researchers | 21 | 41.2 | 12 | 23.5 | 1 | 2.0 | 17 | 33.3 | - | - | |
| 8. | NBs react to pain in a particular way | 2 | 4.0 | 3 | 6.0 | - | - | 11 | 22.0 | 34 | 68.0 | |
| 9. | Pain is considered as one of the VS in NBs | - | - | 1 | 2.0 | 2 | 3.9 | 7 | 13.7 | 41 | 80.4 | |
| 10. | Pain assessment in NBs must be systematized | - | - | - | - | - | - | 5 | 9.8 | 46 | 90.2 | |
| 11. | Pain assessment should be part of the NP | - | - | - | - | - | - | 1 | 2.0 | 50 | 98.0 | |
| 12. | NBs do not require painkillers due to immaturity of the nervous system | 38 | 74.5 | 7 | 13.7 | 2 | 3.9 | 3 | 5.9 | 1 | 2.0 | |
| 13. | Neonatal pain can be assessed without the use of scales | 20 | 39.2 | 10 | 19.6 | 1 | 2.0 | 8 | 15.7 | 12 | 23.5 | |
| 14. | The use of scales for pain assessment is important to the practice | - | - | - | - | - | - | 7 | 13.7 | 44 | 86.3 | |
| 15. | It is important to record pain on the newborn's chart | = | = | - | = | = | - | 1 | 2.0 | 50 | 98.0 | |
| 16. | Recording pain assessment is a prerequisite to its control | = | = | - | = | = | - | 4 | 7.8 | 47 | 92.2 | |
| 17. | Nurses have sufficient knowledge to assess pain in NBs | = | = | 2 | 3.9 | - | - | 23 | 45.1 | 26 | 51.0 | |
| 18. | Pain management in NBs depends on its assessment | 1 | 2.0 | 1 | 2.0 | - | - | 14 | 27.5 | 35 | 68.6 | |

continued...

...continuation

| | D | | PD | | DK | | PA | | A | |
|--|----|------|----|------|----|------|----|------|----|------|
| | n | % | n | % | n | % | n | % | n | % |
| 19. Recording newborn's pain assessment will result in relief | 8 | 15.7 | 7 | 13.7 | 1 | 2.0 | 20 | 39.2 | 15 | 29.4 |
| 20. Having knowledge of NPMs for pain relief helps its relief | 2 | 4.0 | - | - | - | - | 4 | 8.0 | 44 | 88.0 |
| 21. Using NPMs for pain relief is necessary | = | - | - | - | - | - | 4 | 7.8 | 47 | 92.2 |
| 22. Parents can help pain management in NB | 1 | 2.0 | - | - | - | - | 6 | 11.8 | 44 | 86.3 |
| 23. Despite feeling pain, NBs can sleep or not react to pain | 11 | 21.6 | 2 | 3.9 | 3 | 5.9 | 20 | 39.2 | 15 | 29.4 |
| 24. NBs submitted to repeated painful procedures may have harmful effects on their development | 3 | 6.0 | 1 | 2.0 | 5 | 10.0 | 8 | 16.0 | 33 | 66.0 |
| 25. The medical/clinical diagnosis of NBs influences pain management | 2 | 3.9 | 3 | 5.9 | 1 | 2.0 | 11 | 21.6 | 34 | 66.7 |
| 26. Professional's joint decisions are needed for pain management in NBs | = | - | 1 | 2.0 | - | - | 1 | 2.0 | 49 | 96.1 |
| 27. Sedatives relieve pain in NBs | 7 | 14.0 | 4 | 8.0 | - | = | 16 | 32.0 | 23 | 46.0 |
| 28. Opioid analgesics are appropriate to relieve pain in NBs | 2 | 3.9 | 4 | 7.8 | 6 | 11.8 | 26 | 51.0 | 13 | 25.5 |
| 29. Opioid analgesics are suitable for NBs undergoing MV | 1 | 2.0 | - | - | 9 | 17.6 | 17 | 33.3 | 24 | 47.1 |
| 30. Non-opioid analgesics are suitable for pain relief in NBs | - | - | 1 | 2.0 | 8 | 15.7 | 18 | 35.3 | 24 | 47.1 |

Table 2 – Nurses' practices regarding the management of neonatal pain in the NICUs of Curitiba and its Metropolitan Region – Curitiba, Paraná, Brazil, 2015.

| | N | | R | | 9 | ST | мт | | A | |
|--|----|------|----|------|----|------|----|------|----|------|
| | n | % | n | % | n | % | n | % | n | % |
| I assess NB pain through crying | - | - | - | - | 14 | 29.2 | 23 | 47.9 | 11 | 22.9 |
| 2. I assess NB pain through facial expressions | = | = | - | = | 12 | 24.5 | 17 | 34.7 | 20 | 40.8 |
| 3. I assess NB pain through body movement and agitation | - | - | 1 | 2.0 | 6 | 12.0 | 17 | 34.0 | 26 | 52.0 |
| 4. I assess NB pain through the VS | - | - | 1 | 2.0 | 11 | 22.0 | 7 | 14.0 | 31 | 62.0 |
| 5. I use scales to assess pain in NBs | 17 | 34.7 | 8 | 16.3 | 8 | 16.3 | 6 | 12.2 | 10 | 20.4 |
| 6. I record NBs pain scores on their medical chart | 7 | 14.0 | 4 | 8.0 | 9 | 18.0 | 11 | 22.0 | 19 | 38.0 |
| 7. I communicate and discuss the pain scores in NBs with the team | 3 | 5.9 | 4 | 7.8 | 5 | 9.8 | 14 | 27.5 | 25 | 49.0 |
| 8. I use NNS to relieve pain in NBs | = | - | - | - | 8 | 15.7 | 19 | 37.3 | 24 | 47.1 |
| 9. I encourage breastfeeding to relieve the pain in NBs | 9 | 17.6 | 10 | 19.6 | 20 | 39.2 | 5 | 9.8 | 7 | 13.7 |
| 10. I encourage skin-to-skin contact to relieve the pain in NBs | 3 | 5.9 | 13 | 25.5 | 17 | 33.3 | 13 | 25.5 | 5 | 9.8 |
| 11. I offer oral glucose or sucrose to relieve NB pain prior to painful procedures | 1 | 2.0 | 2 | 3.9 | 6 | 11.8 | 20 | 39.2 | 22 | 43.1 |
| 12. I offer oral glucose or sucrose to relieve NB pain during painful procedures | 2 | 3.9 | 3 | 5.9 | 8 | 15.7 | 18 | 35.3 | 20 | 39.2 |
| 13. I position the NB to relieve their pain | - | - | 1 | 2.0 | 6 | 11.8 | 17 | 33.3 | 27 | 52.9 |
| 14. I perform facilitated tucking in NBs during painful procedures | 3 | 5.9 | 2 | 3.9 | 11 | 21.6 | 21 | 41.2 | 14 | 27.5 |
| 15. I swaddle NBs before painful procedures | 2 | 4.0 | 5 | 10.0 | 11 | 22.0 | 18 | 36.0 | 14 | 28.0 |
| 16. I use more than one NPM to relieve the pain of NBs | 3 | 5.9 | 4 | 7.8 | 7 | 13.7 | 24 | 47.1 | 13 | 25.5 |
| 17. I use PMs and NPMs combined to relieve pain in NBs | - | - | 3 | 6.0 | 17 | 34.0 | 19 | 38.0 | 11 | 22.0 |
| 18. I discuss NPMs used for prevention and relief of pain in NBs with the team | 3 | 5.9 | 6 | 11.8 | 12 | 23.5 | 15 | 29.4 | 15 | 29.4 |
| 19. I record the pain scores on the newborn's medical chart | 6 | 11.8 | 3 | 5.9 | 5 | 9.8 | 16 | 31.4 | 21 | 41.2 |
| 20. I record NPMs for the prevention and relief of pain on the newborn's medical chart | 6 | 11.8 | 5 | 9.8 | 9 | 17.6 | 9 | 17.6 | 22 | 43.1 |
| 21. I record the complications in administration of NPMs used on the newborn's medical chart | 6 | 12.0 | 8 | 16.0 | 5 | 10.0 | 9 | 18.0 | 22 | 44.0 |
| 22. I inform parents/family about painful procedures to be performed | 1 | 2.0 | 1 | 2.0 | 8 | 15.7 | 14 | 27.5 | 27 | 52.9 |

D = disagree; PD = partially disagree; DK = don't know; PA = partially agree; A = agree; F = frequency; P = Percentage; NB = Newborn; PRNB = Pre-term newborn; HR = Heart rate; RR = Respiratory rate; T = Temperature; BP = Blood pressure; SatO₂ = Oxygen saturation; IP = Intracranial Pressure; VS = Vital signs; NP = Nursing prescription; NPM = Non-pharmacological measure; MV = Mechanical ventilation. Notes: (N = 51)

| | N | | R | | ST | | МТ | | | A |
|---|----|------|----|------|----|------|----|------|----|------|
| | n | % | n | % | n | % | n | % | n | % |
| 23. I ask parents/families to be part of the prevention and relief of pain in NBs | 3 | 6.0 | 6 | 12.0 | 16 | 32.0 | 13 | 26.0 | 12 | 24.0 |
| 24. I administer opioid painkillers, prescribed IN, to relieve the pain of NBs | 1 | 2.0 | 8 | 15.7 | 12 | 23.5 | 20 | 39.2 | 10 | 19.6 |
| 25. I administer opioid painkillers, prescribed IN, to NBs undergoing MV | 1 | 2.0 | 7 | 14.3 | 20 | 40.8 | 12 | 24.5 | 9 | 18.4 |
| 26. I administer non-opioid painkillers, prescribed IN, for pain relief in NBs | 1 | 2.0 | 10 | 20.0 | 19 | 38.0 | 13 | 26.0 | 7 | 14.0 |
| 27. I administer non-opioid painkillers, prescribed IN, for pain relief caused by painful procedures in NBs | 2 | 3.9 | 10 | 19.6 | 21 | 41.2 | 10 | 19.6 | 8 | 15.7 |
| 28. I administer sedatives prescribed IN for pain management in NBs | 10 | 19.6 | 14 | 27.5 | 13 | 25.5 | 9 | 17.6 | 5 | 9.8 |
| 29. I record the PMs used on the newborn's medical chart | 1 | 2.0 | 3 | 5.9 | 2 | 3.9 | 6 | 11.8 | 39 | 76.5 |
| 30. I record the complications from administration of PMs on the newborn's medical chart | 2 | 3.9 | 3 | 5.9 | 4 | 7.8 | 3 | 5.9 | 39 | 76.5 |
| 31. I discuss the PMs used with the team | 5 | 9.8 | 2 | 3.9 | 8 | 15.7 | 16 | 31.4 | 20 | 39.2 |

N = never; R = rarely; ST = sometimes; MT = most times; A = always; F = Frequency; P = Percentage;
NB = Newborn; VS = Vital signs; NNS= Non-nutritive suction; NPM = Non-pharmacological measures; PM = Pharmacological measures; IN = If necessary; MV = Mechanical ventilation. Note: (N = 51).

DISCUSSION

Most nurses believe that premature and full-term newborns are capable of experiencing pain. A similar result was found by studies on perceptions, knowledge and practices of health professionals on the management of neonatal pain (9,13-14). However, in this study we observed professionals who disagreed about the newborn's ability to feel pain. This fact can be attributed to the care provided, since neonatal pain was often inefficiently treated. Study results corroborate these data, indicating that newborns with gestational age less than 28 weeks are not able to perceive painful stimuli (14).

Neonatal pain is revealed through physiological and behavioral changes, as newborns manifest it non-verbally⁽¹³⁾. In this study we noticed that nurses used physiological and behavioral changes to assess newborn pain, and they also recognized that environmental factors are capable of modifying newborns' response to pain.

Thus, pain assessment in newborns can be carried out through specific instruments that allow professionals to obtain assessment scores and plan treatment. In this sense, nurses agree that the use of scales to assess neonatal pain is important for professional practice. However, nurses' responses were discrepant, revealing that 17 (34.7%) reported never using scales to assess newborn pain, and 32 (62.7%) reported using them. A similar result was observed in a study with the nursing team which recognizes the importance of assessing newborns' pain, however, they did not use pain assessment scales(15). Another study shows that out of 24 members of the multiprofessional team, 10 (41.6%) knew at least one scale for assessing neonatal pain despite not using them in their professional practice, while 14 (58.4%) reported not being aware of the existence of scales. Thus, pain assessment occurred in an unsystematic manner⁽¹⁶⁾. Regarding pain assessment intervals in newborns mentioned by nurses, conducting pain assessment concomitantly with verifying vital signs of the newborn was predominant, and nurses were the professionals who most evaluated and recorded the pain in the nursing evaluation records.

Neonatal pain assessment is as important to professional practice as its treatment. Thus, pharmacological and non-pharmacological measures are employed in order to control pain in hospitalized newborns in NICUs. Using these measures for neonatal pain therapy as well as minimizing invasive and stressful procedures should be part of care protocols in all NICUs (17).

Pharmacological measures reported by nurses for pain relief of newborns were Paracetamol – 24 (47.1%), Fentanyl – 34 (47.1%), and Morphine – 9 (17.6%). Other studies also mention these drugs in the treating of neonatal pain (9,14,18).

In this study, 38 (74.5%) of the nurses disagreed regarding the claim that newborns do not need analgesics due to the immaturity of their nervous system. However, two (3.9%) professionals reported being unsure and one (2%) agreed with this statement, thus demonstrating a lack of knowledge on newborn physiology. Thirty-three (66%) professionals acknowledged that newborns undergoing repeatedly painful procedures may experience deleterious effects in their development. Other authors point out that newborns have somatosensory system immaturity, and therefore they differ from adults in relation to pain perception. However, exposure to pain stimuli after 16 weeks has short and long-term consequences⁽¹⁹⁾.

We also found that 16 (32%) nurses partially agreed and 23 (46%) agreed with the statement that sedatives relieve pain in newborns. In professional practice, only 10 (19.6%) nurses answered never administering sedatives, prescribed "if necessary" for pain management in newborns, while nine (17.6%) administered them most of the time, and five (9.8%) always administered them. These results demonstrate a lack of knowledge regarding the action of the drugs and in multiprofessional consensus to perform pharmacological measures.

The most reported non-pharmacological measures by nurses was oral glucose/sucrose, reported by 35 (68.6%), data similar to those obtained from studies demonstrating its effectiveness for routine painful procedures⁽²⁰⁻²¹⁾. Non-nutritive sucking was cited by 30 (58.8%) nurses, as well as

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results from other studies in which nurses used it as an analgesic measure⁽²²⁻²³⁾. Positioning was reported by 29 (56.9%) nurses, corroborating results from other studies^(18,24). It can be noticed that nurses' practices in this study differ from the knowledge presented, since they did not make use of all known non-pharmacological measures.

Therefore, there is a range of pharmacological and nonpharmacological measures to be applied either alone or in combination to prevent and treat pain in newborns. In this study, we verified that professionals do not associate acquired knowledge to their practice in order to treat newborn pain effectively.

The literature offers guidelines that direct professional actions in implementing pharmacological and non-pharmacological measures for several painful procedures, and they should be used as a guide for professional practice^(17,25).

In addition to the need for managing neonatal pain, recording these actions is essential, and according to COFEN Resolution 429 from February 15, 2012, it is the responsibility and duty of the nursing team to record performed care activities related to the care process and work management on the patient's chart, thus guaranteeing quality and continuity of nursing care⁽²⁶⁾. The nurses in this study recognized the importance of recording pain assessment and treatments onto the newborn's chart, and such practice was often performed.

We note that there are gaps in nurses' knowledge in this study concerning recording the neonatal pain assessment and its relationship with relief, considering that recording the neonatal pain score alone does not guarantee its treatment. It is necessary that professionals take actions so that pain management is processed properly. Additional lacking knowledge with the nurses concerns the influence of the

medical diagnosis on pain management.

Despite the existence of technical knowledge about newborn pain management, this care practice is not a reality in all NICUs, thus impairing care quality. Transmitting and applying knowledge does not happen quickly, so in order for it to happen, it is necessary that pain management is regimented in the service, which can be achieved through educational strategies⁽²⁷⁾.

CONCLUSION

This study demonstrated that most nurses have knowledge about the importance of using and systematizing scales for assessing neonatal pain, but did not always use them. They are aware of the drugs available for treating neonatal pain, however they are unaware of their actions. A large number of professionals also pointed out that decisions about pain management conduct must be made by the multiprofessional team. Regarding practices used for pain control, nurses do not perform all the non-pharmacological interventions pointed out by themselves as important.

Still on implemented practices, nurses reported that crying, facial expressions, body movements and agitation were the signs they used to assess newborn pain.

The results of this study also highlight the importance and the need to implement knowledge translation strategies aimed at improving the recognition, assessment and control of neonatal pain. The authors suggest that future studies be performed involving professionals from different specializations working in hospitalized newborn care. We can consider the fact that this study was carried out in just six institutions as a limitation. We suggest that further studies with a larger sample be carried out.

RESUMO

Objetivo: Verificar o conhecimento e as práticas dos enfermeiros sobre o manejo da dor de recém-nascidos admitidos em Unidades de Tratamento Intensivo Neonatal. Método: Estudo descritivo e transversal. Os dados foram coletados com 51 enfermeiros, a partir de um questionário adaptado que visa avaliar o conhecimento e as práticas sobre o manejo da dor neonatal, em seis hospitais de Curitiba e Região Metropolitana. Resultados: Para a maioria dos enfermeiros (86,0%), os neonatos sentem dor. Um total de 34,7% afirmaram nunca utilizar escalas de avaliação da dor. O registro do manejo da dor foi realizado por 84,3% dos enfermeiros. As medidas farmacológicas realizadas foram Paracetamol e Fentanil (47,1%) e Morfina (17,6%); as não farmacológicas adotadas foram solução adocicada (68,6%), sucção não nutritiva (58,8%) e posicionamento (56,9%). Conclusão: Os enfermeiros consideraram a dor neonatal como um evento real, porém não realizavam avaliação ou tratamento da dor no recém-nascido de modo sistematizado. É necessário implementar estratégias de tradução do conhecimento para aprimorar o manejo da dor de recém-nascidos.

DESCRITORES

Dor; Manejo da Dor; Recém-Nascido; Enfermagem Neonatal; Unidades de Terapia Intensiva Neonatal.

RESUMEN

Objetivo: Verificar el conocimiento y las prácticas de los enfermeros sobre el manejo del dolor de recién nacidos admitidos en Unidades de Tratamiento Intensivo Neonatal. Método: Estudio descriptivo y transversal. Los datos fueron recolectados con 51 enfermeros, mediante un cuestionario adaptado que tiene el fin de evaluar el conocimiento y las prácticas acerca del manejo del dolor neonatal, en seis hospitales de Curitiba y Región Metropolitana. Resultados: Para la mayoría de los enfermeros (86,0%), los neonatos sienten dolor. Un total del 34,7% afirmaron nunca utilizar escalas de evaluación del dolor. El registro del manejo del dolor fue realizado por el 84,3% de los enfermeros. Las medidas farmacológicas realizadas fueron Paracetamol y Fentanilo (47,1%) y Morfina (17,6%); las no farmacológicas adoptadas fueron solución azucarada (68,6%), succión no nutritiva (58,8%) y posicionamiento (56,9%). Conclusión: Los enfermeros consideraron el dolor neonatal como un evento real; sin embargo, no realizaban evaluación o tratamiento del dolor en el recién nacido de modo sistematizado. Es necesario implantar estrategias de traducción del conocimiento a fin de perfeccionar el manejo del dolor de recién nacidos.

DESCRIPTORES

Dolor; Manejo del Dolor; Recién Nacido; Enfermería Neonatal; Unidades de Cuidado Intensivo Neonatal.

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