

## THE NEW-BORN WITH PAIN: THE ROLE OF THE NURSING TEAM

O recém-nascido com dor: atuação da equipe de enfermagem

El recién nacido con dolor: el papel del equipo de enfermería

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### ABSTRACT

It's a quantitative, descriptive and cross study conducted with the nurse team working in the field of neonatology at the three hospitals, Alfenas-MG. Aimed to describe the forms of pain assessment of the newborn used by nurse team and analyze the practice of nursing as pain management of neonates. Data were collected through a semi-structured formulary, from August to September 2008, of 42 nurses working. The analyze was performed using SPSS software using descriptive statistics and correlation test. It was observed that the respondents recognize that the newborn is capable of feeling pain and evaluated by physiological and behavioral changes and that there isn't pain assessment scales standardized in the institutions. For the management, carry out pharmacological and nonpharmacological interventions. There is need to train professionals contributing to the assessment and management of pain, promoting of holistic care of the neonate.

**Keywords:** Infant; Newborn; Pain; Nursing; Neonatology.

### RESUMO

Estudo quantitativo, descritivo e transversal realizado com profissionais de enfermagem que atuam em neonatologia nos três hospitais de Alfenas-MG. Objetivou descrever as formas de avaliação de dor do recém-nascido utilizadas pela equipe de enfermagem e analisar a prática da enfermagem quanto ao manejo da dor do neonato. A coleta de dados foi feita por meio de formulário semiestruturado, de agosto a setembro de 2008, com 42 profissionais. A análise foi feita pelo *software* SPSS utilizando estatística descritiva e teste de correlação. Os entrevistados acreditam que o recém-nascido é capaz de sentir dor e a avaliam por meio de alterações fisiológicas e comportamentais, e que não há utilização de escalas de avaliação algica padronizadas nas instituições. Para o manejo, realizam intervenções farmacológicas e não farmacológicas. Há necessidade de capacitar os profissionais, contribuindo para a avaliação e o manejo da dor, e promovendo o cuidado integral ao neonato.

**Palavras-chave:** Recém-nascido; Dor; Enfermagem; Neonatologia.

### RESUMEN

Estudio cuantitativo, descriptivo y transversal realizado con profesionales de Enfermería que actúan en el área de Neonatología en los tres hospitales de Alfenas, Minas Gerais. Se objetivó describir las formas de evaluación del dolor del recién nacido utilizados por el personal de enfermería y analizar la práctica de la enfermería como el manejo del dolor del neonato. La recolección de datos fue hecha por medio de un formulario semiestructurado, entre agosto y septiembre de 2008, con 42 profesionales. El análisis fue hecho con el *software* SPSS, utilizando la estadística descriptiva y la prueba de correlación. Los entrevistados reconocen que el neonato es capaz de sentir dolor y esto se evalúa a través de alteraciones fisiológicas y de comportamiento, no hay utilización de escalas de evaluación del dolor estandarizadas en las instituciones. Para el manejo, realizan intervenciones farmacológicas y no farmacológicas. Hay necesidad de capacitar profesionales contribuyendo para la evaluación y manejo del dolor, para la promoción del cuidado integral al neonato.

**Palavras-clave:** Recién nacido; Dolor; Enfermería; Neonatología.

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## INTRODUCTION

The fact that neonates do not verbalize the pain they feel compounded the belief held, until the mid-seventies, that the new-born (NB) is incapable of feeling pain, due to her neurological immaturity, the nerve pathways not being totally myelinated, or the absence of cortical function sufficiently integrated to interpret or register the experiences of pain. Recent studies, however, show that the incomplete myelination is compensated for by the lower distance between neurones, which increases the average velocity of nervous conduction, and that the NB has all the anatomical, functional and neurochemical components necessary for the reception and transmission of pain stimuli<sup>1</sup>.

Even nowadays, however, one finds health professionals who still doubt the NB's ability to feel pain, or who assess the pain phenomenon empirically, which is reflected in the care given to the neonates<sup>2</sup>. Thus it is believed that this divergence between scientific knowledge and behavior in practice is owed, probably, to the difficulty of assessing and measuring pain in new-borns. This fact indicates the necessity of investing in further studies on the issue, as well as expanding routines/protocols for assessing and managing pain in this population.

In working with pre-verbal patients, in different phases of cognitive development, and who express their reactions to the most varied stimuli in similar ways, one may encounter difficulties in assessing the responses to pain, which can impede appropriate and efficient care, bearing in mind that the pain stimulus can have organic and emotional consequences affecting these patients' future quality of life<sup>1</sup>.

Nurses perform a fundamental role in the control of pain and the minimization of suffering in NBs, given that they remain with the patients for a large proportion of the time spent hospitalized, as well as being directly responsible for invasive - and consequently painful - procedures, so present in the environments of neonatal intensive care units (NICU)<sup>2</sup>.

In this way, it is understood that quality and humanized assistance and treatment which is appropriate to the new-born's needs depend, to a large extent, on the nursing team's sensitization, which must use strategies for the comprehensive care for the NB who is potentially subjected to suffering pain.

Some studies have shown that in a neonatal intensive care unit, a new-born may be submitted during the everyday care to around one hundred potentially painful procedures per day<sup>2-3</sup>. Thus, an understanding of the pain process and attention to the manifestation of pain by the NB must be part of the routine care carried out by the nursing team, as this attitude would minimize the pain's harmful effects on the neonate's development.

The care strategies for identifying neonatal pain consist of physiological and behavioral parameters. The behavioral responses to be assessed are: crying, facial expression, body movement, agitation, irritability and alterations in sleep<sup>1,2</sup>.

The NBs' physiological responses are evidenced by cardio-respiratory changes (increase in cardiac frequency and blood pressure and reduction in oxygen saturation levels); sweaty palms; increase in intracranial pressure and hormonal changes (liberation of catecholamines, cortisol, glucagon and blood glucose, among others) and metabolic changes (increase in lactate, pyruvate, ketone bodies and some fatty acids). These measurements, although objective, are not specifically related to pain, as similar changes can occur after a nociceptive or unpleasant stimulus which is not, however, painful<sup>1</sup>.

As a result of this, the physiological parameters are useful for assessing pain in clinical practice, but may not be used in isolation. Thus, the behavioral assessment of the neonate in the face of a procedure, based on the changes in specified expressions, such as the motor response, the facial expression and crying, is predominant for observing pain processes<sup>2</sup>.

Growing importance is attributed to the behavioral measurements, as they appear to represent a more specific response to the NB's manifestations of pain. However, the lack of objectivity and better, more precise observation on the part of the caregiver can hinder the measuring of behavioral responses, as a result of which they must be evaluated in conjunction with the physiological responses<sup>4</sup>.

Thus, allied with these observations, instruments for assessing pain phenomena have been developed with the aim of decoding the language of pain in neonates<sup>3</sup>. These instruments - the scales - contribute to more effective communication between the NB and the nursing team, making it possible to recognize, quantify and manage the pain.

The scales most used currently are: the Neonatal Facial Coding System (NFCS), which evaluates the pain through observation of the facial expression with eight parameters quantified as zero or one, and the maximum score of eight points; it considers pain to be present when three or more facial movements appear in a consistent way during the assessment. The Neonatal Infant Pain Scale (NIPS) has also been widely adopted. It is made up of seven behavioral and physiological parameters, scored as zero or one, and the total score can vary from 0 to 7, in ascending order of pain<sup>3</sup>.

Health professionals' sensitization of the NB's capacity to feel pain, and its correct assessment through appropriate instruments affirms the need for adopting steps for management of the pain phenomenon. For analgesia in neonates, pharmacological and/or non-pharmacological steps may be taken<sup>1,2</sup>.

Non-pharmacological interventions are strategies which aim, principally, to prevent the intensification of the pain process, the neonate's disorganization, stress and agitation - that is, to minimize the pain's repercussions. These steps are efficient with the majority of new-borns when used individually with pain of mild intensity; however, in the face of moderate or severe pain, pharmacological interventions must be added to them<sup>2,5</sup>.

The pharmacological methods, that is, analgesic drugs which aim to stop the pain phenomenon, are used in clinical practice when one intends to control the pain arising from painful and invasive procedures which cause severe and intense pain. The literature reports the non-opioids and the opioids as the most used<sup>6</sup>.

The control of the new-born's pain is essential for quality care to be provided by the nursing team, which must have sufficient knowledge to assess and promote adequate pain management through pharmacological and non-pharmacological means, along with their correct use in accordance with each patient's condition.

In the light of some situations experienced during academic practice in neonatology services, and with the aim of contributing to improvement in the nursing care given to the NB in neonatal units, interest arose in researching this issue.

Thus, the present study aimed to describe the ways of assessing pain in the new-born used by the nursing team, and to analyze the nursing practice regarding pain management in neonates.

## **MATERIAL AND METHOD**

The study has a quantitative methodological approach, and is exploratory and cross-sectional. The quantitative method was chosen because of the fact that the researchers consider it most appropriate to meet the objectives proposed in the study, because it enables them to quantify the population's opinion on the topic, as well as provide the description of the care practice for the hospitalized NB as carried out by the nursing team.

The investigation was undertaken in the three hospitals in the municipality of Alfenas in the state of Minas Gerais (MG), which is considered the center of teaching in health in the southern region of that state, possessing services which include care for healthy neonates right through to high complexity care for the ill NB.

Data was collected through a semi-structured questionnaire, which had as its principal variables: general and professional data on the participants (identification data such as: name, age, sex, length of service since graduation, length of service in the neonatal area, and institution graduated from); beliefs on pain in the new-born; assessment parameters of the pain phenomenon, that is, the use of scales;

and use of pharmacological and non-pharmacological methods for pain relief in neonates. The instrument was developed and administered by the researchers themselves to the professionals from the nursing team who worked in the neonatology area, in the period August -September 2008, after approval from the respective administrations of the hospitals and authorization from the Committee for Ethics in Research Involving Human Beings of the Federal University of Alfenas (UNIFAL-MG) - Protocol n° 23087.001170/2008-60, in line with Resolution 196/96 of the National Health Council (NCS).

As inclusion criteria for the participants in the research, it was necessary for them to have a minimum of six months' experience in the neonatology services providing direct care to the NB, which ensured total involvement with the routine care for the hospitalized neonate. As exclusion criteria, there was to be a professional carrying out exclusively administrative work.

All the professionals in the municipality who satisfied these criteria were invited to participate in the study, totalling 47 professionals, of whom 05 declined to participate.

Thus, the study population was made up of 42 professionals from the nursing team. After the subjects had been informed about the research's objectives, rationale and methodology, they received and signed the Terms of Free and Informed Consent.

Because it was a single instrument for three distinct professional categories with different levels of schooling, a pilot test was held with professionals from the three categories, so as to note the suitability of the form, the content and the interpretation of the questions by the interviewees, these being excluded from the study.

Following data collection, a database was built using an Excel spreadsheet (Windows 2007). Double keying and the validation of data were carried out for the identification of possible errors.

The statistical analysis was undertaken using the Statistical Package for the Social Sciences software (SPSS), version 15.0, using descriptive statistics and the correlation test.

## **RESULTS**

In relation to the profile of the population studied, with the exception of 01 (2.4%) nurse, all the informants were female 41 (97.6%). In relation to the professional category, the nurses totalled 14 (33.3%), the nursing technicians 18 (42.9%) and the auxiliary nurses 10 (23.8%).

Regarding the hospital sectors where they were allocated, 10 (23.8%) worked in the nursery, 12 (28.6%) nursery and Neonatal Intensive Care Unit (NICU), 16 (38.10%) in NICU and the Neonatal Intermediate Care Unit (NInCU) and 4 (9.5%) in pediatrics. It should be noted that the ill NBs in one of the institutions researched are hospitalized in the pediatric sector.

In relation to age, 01 (2.4%) professional was in the age range of 20 to 25 years old; 11 (26.2%), from 25 to 30 years old; 03 (7.1%), from 30 to 35; 9 (21.4%), from 35 to 40; 07 (16.6%), from 40 to 45 and 11 (26.2%) professionals were aged 45 or over.

For length of time since graduation, 19 (45.2%) of the professionals responded that it was less than 05 years; 11 (26.2%) from 05 to 10 years; 05 (11.9%) from 10 to 15 years; 03 (7.1%) from 15 to 20 years; and 04 (9.5%) had graduated 20 years or more previously.

In relation to length of service in neonatology, 03 (7.1%) of the professionals responded that they had worked there for between six months and one year, 20 (47.6%) from 01 to 05 years; 08 (19.0%) from 05 to 10 years; 04 (9.5%) from 10 to 15 years; 02 (4.8%) from 15 to 20 years; and 05 (11.9%) had 20 years' work experience there or more. Two (4.8%) of the professional nurses had specific training in neonatology.

Initially, the participants were questioned whether, in their opinion, the NBs are able to feel pain: 42 (100%) responded that they are.

In relation to assessing pain, only 01 (4.2%) stated that he/she did so using an assessment scale specifically for measuring pain in NBs; 11 (26.0%), do so from the facial expression; 15 (35.0%), from the crying; 11 (26.0%), observing body movement; 04 (9.0%), assessing physiological parameters.

The interviewees mentioned which non-pharmacological methods they resort to for managing the NB's pain, with touch therapy - 15 (35.7%); nesting 12 (28.6%); the use of non-nutritive suction 06 (14.3%); use of glucose solutions 02 (4.8%); music therapy 04 (9.5%); massage 03 (7.1%); none of them reported using pure glucose administered orally, an option which appeared in the data collection instrument.

Among the drugs used in the neonatal phase, the responses indicated that those most prescribed in the service were the analgesics (72.6%); opioids 08 (19.6%) and the benzodiazepines 03 (7.8%).

In the Pearson's analysis, the item 'possesses specific training in neonatology' was positively correlated ( $r = 0.308$ ;  $p = 0.47$ ) with the method of assessing pain through the use of scales.

## DISCUSSION

Women predominated, with 41 (97.6%) of the professionals. This result corroborates other studies undertaken with nursing professionals, as women are the majority in this professional category<sup>7</sup>.

The nursing technicians make up the majority of the professionals (42.9%). With this, one can verify the importance of guidance given by nurses regarding the nursing

assistance provided, as it is the medium-level professionals who are mainly responsible for the direct care for the neonate<sup>8</sup>.

The predominant length of service was equal to or less than five years. In general, the length of service specifically in neonatology is recent in the majority of the health institutions in rural areas of Brazil, as it is a speciality until recently restricted to the large urban centers. In recent years, however, with the aim of decentralizing health, with governmental investment in physical structures, in technological resources and in the strengthening of the hospitals, it has appeared in hospital institutions in more rural areas of the country<sup>9</sup>.

All the health professionals 42 (100%) responded that they believe that the NB feels pain. Such a result has also been found in other studies<sup>1,2</sup>, which indicates a paradigm shift, as until the 70's, the concept prevalent among professionals in the health area was that the neonate does not feel pain. The probable explanation for this change in thinking has been attributed to the research published on the issue, which led to greater knowledge on the part of health professionals in respect to the presence of pain in the neonatal period.

Regarding the use of scales which guide the detection and grade the intensity of pain, only 01 (4.2%) professional answered that he/she used one, referring to the Neonatal Infant Pain Score (NIPS scale). This finding is highlighted, as the scales for assessing pain in the newborn have been available since the end of the 80's and have been widely mentioned and recommended in the literature, although as can be observed in this study, their use remains limited in these institutions. This fact may have contributed to the non-use of the scales by the professionals interviewed, as there is no institutional policy for encouraging their use, and the use of the scales is not covered in care protocols. This data was also found by the authors of the study<sup>9</sup> which investigated the assessment of pain in premature NBs in the NICU of a public hospital in a city in the interior of Bahia.

Thus, the need is emphasized for implantation of standardized use of scales which make it possible to appropriately assess pain in the NB, as the introduction of an instrument for assessing neonatal pain reflects a concern with developing a systematized and effective control of this phenomenon.

Only 02 (4.8%) of the professionals answered that they had post-graduate qualifications in neonatology. This variable had a statistically-significant correlation ( $r = 0.308$ ;  $p = 0.47$ ) when compared with the method of assessing pain through the use of scales, that is, specific qualification favors the identification of pain in neonates.

This data corroborates the findings of other studies and reflects the need for the training of the professionals,

and the wide dissemination in the health institutions of the standardized methods which help the caregiver in her conduct with neonates with pain<sup>2,9</sup>.

The pain scales have been developed in recent years with the aim of mitigating the subjectivity of the behavioral measurements as parameters for assessing pain and facilitating their clinical use. These scales attribute points to specified behavioral parameters, described in the most objective manner possible, resulting in a final score which can help the team assisting the patient to decide if there is a need for analgesic intervention<sup>3</sup>.

Of the professionals, 37 (88.0%) assess the presence of pain based on the NB's behavioral changes. This fact is worrying, as a stressful event is not always painful.

Thus, the main behavioral parameters cited were crying (35.0%), facial expression (26.0%) and body movement (26.0%). This finding corroborates other authors who have shown, in their studies, the high value attributed to crying at the time of pain assessment in the pre-verbal patient<sup>10</sup>.

In practice, however, the use of crying is questionable, bearing in mind that in isolation it does not provide enough information, possibly indicating hunger and/or discomfort - in addition to the fact that neonates who are pharmacologically compromised and intubated are incapable of vocalizing crying<sup>4</sup>.

Researchers<sup>10,11</sup> have undertaken studies to verify the characteristics of crying and its relationships with pain. It is known that the crying of a neonate, generally speaking, has a defined expiratory phase, followed by a brief inspiration, a period of relaxation, and, again, an expiratory phase. In addition to this, it has a melodic pattern and a frequency of 80 db (decibels).

Thus, in spite of the majority of the interviewees mentioning crying at the time they assess the NB's pain, it is important for the professionals to be duly trained to evaluate with accuracy when it reflects the neonate's pain.

Crying, therefore, as a means of assessing the pain, seems to be a useful instrument, when analyzed in the context in which it is happening with the child, and associated with other means of assessing pain. In this way it does not provide isolated information for the therapeutic decision in respect of the need for analgesia in clinical practice.

The facial expression is a non-invasive method for assessing pain, sensitive and useful in routine practice and also specific for assessing pain in premature and full-term NBs<sup>2</sup>.

Changes in facial expression, however, do not provide information in relation to the quality or the intensity of the painful phenomenon. The use of the movement of the face is therefore problematic in taking therapeutic decisions. In addition to this, it is known that changes in facial expression can occur in response to acute painful stimuli, but it is not known what happens in the event of a prolonged or repetitive stimulus<sup>1,12</sup>.

The analysis in isolation of body movement, mentioned by the health professionals (26.0%), can be a sensitive method of pain assessment, as neonates show an organized repertoire of movements after sensory stimulation. However, when motor activity is analyzed in conjunction with other physiological and behavioral variables, the evaluation of the pain becomes more secure and permits one to discriminate between pain and other, non-painful, stimuli. In addition to this, there seems to be individual variation in each new-born in the scale of its motor response<sup>1</sup>.

To a lesser degree, of the total of professionals, (9.0%) mentioned basing their assessment of the NB's pain in physiological parameters. In the physiological assessment, one verifies cardiac frequency, systemic blood pressure, respiratory frequency, increase in body temperature and a drop in oxygen saturation level, among others<sup>13</sup>.

However: the variations in the physiological parameters can only be used for assessing the NB's pain when they are placed in the NB's environmental context, and necessarily accompanied by behavioral or multidimensional methods, that is to say, scales of pain assessment<sup>14</sup>.

There are various behavioral (non-pharmacological) measures which can be carried out with the aim of preventing pain in the neonatal units, and also to make the environment more humanized for the patients and their relatives.

Touch therapy, which corresponded to the highest percentage of responses (35.7%), directly linked to humanized care, benefits the NB in various dimensions, including growth and development. Hence, touch is important for healthy emotional development and for communication between parents and neonates because it also promotes the affective links, providing comfort and security<sup>2</sup>.

Touch, coziness and a welcoming environment must be part of neonatal units, and it falls to the nurses to promote these, seeking to enable their team such that, at the right time, they can implement non-pharmacological pain management strategies, so as to contribute to the NB's well-being<sup>8</sup>.

For the professionals (28.6%), the 'nest' was the non-pharmacological measure adopted for managing pain. The nest (wrapping a blanket around the NB) is described in the literature as an approach which has been implemented several times in neonatal units as a comforting strategy for promoting the NB's body organization. Studies show the NB's indication of containment in an improvised nest, made of sheets which facilitate the placing of the limbs in flexion, bring the hands close to the mouth, improving tone and posture<sup>2,15</sup>.

Thus, this non-pharmacological pain control intervention assists in the maturation of the brain functions through promoting the NB's physiological and behavioral

organization, reduces unnecessary agitation and stress, avoiding the directing of her energy reserves into crying and irritability, and using them for her growth and development. In the authors' academic and professional practice, it has been noticed that the children who are provided with nests are generally calmer, require less analgesic medication, and have faster weight gain.

The administration of non-nutritive suction (14.3%) constitutes a supporting measure for pain treatment. This non-pharmacological strategy refers, in the institutions studied, to a pacifier or gloved finger, used by the health professional. In spite of not having intrinsic analgesic properties, it can reduce the neonate's agitation and help her to re-organize<sup>1,2,6</sup>.

On the other hand, the pacifier can influence excessively early weaning. A multidisciplinary literature review carried out with the aim of providing health professionals with support for the use of the pacifier revealed more detrimental effects than benefits in the use of this non-pharmacological measure. The parents must be offered the right of a choice, however, this decision must be directly advised by a qualified professional, following explanation of its risks. Stimulation given with the gloved finger can be an alternative, so as not to risk use of another baby's pacifier, and hence, cause cross contamination (of candidiasis, for example), but there is a shortage of studies using this technique. One must consider the risk of the latex breaking and the asphyxiation of the NB<sup>16</sup>.

For NBs, the stimulation of non-nutritive suction is indicated in the transition from gavage feeding to feeding via mouth<sup>16</sup>. Its use, therefore, must be undertaken by a trained professional, who can monitor and encourage this practice in selected populations of neonates.

In the last few years, the use of water with sugar taken by mouth as an analgesic has been discussed, as this inhibits hyperactivity and modulates discomfort, liberating serotonin during the rhythmic sucking movements, and the sugar, through the action in the taste buds, can promote analgesia through the liberation of endogenous opioids<sup>6,13</sup>. In this study, the reporting of its use was not predominant (4.8%).

Music therapy (9.5%) and giving massage (7.1%) were mentioned as strategies for pain management. Some studies emphasize that sensory stimulation and massage constitute effective measures for alleviating pain in NBs<sup>2,10,16</sup>. However, in the cases of neonates who have potentially painful illnesses and who are submitted to invasive procedures, whether surgical or not, the use of pharmacological agents must be considered<sup>1,17</sup>.

For the pharmacological therapy, the analgesics total the largest number of responses among the professionals (72.6%). The analgesics are indicated for mild pain, and as adjuvant in the treatment of moderate or intense

pain, or when the pain is associated with some inflammatory process<sup>6</sup>. Thus, their use is not restricted to the NICU, being administered in the NInCU as well, where this study's professionals were placed.

Corroborating the literature, the opioids obtained a considerable percentage of the responses in this study (19.6%). These substances, derived from opium, are classified as natural or synthetic, according to their chemical nature. In relation to the intensity of their pharmacological action, they are classified as weak or strong, the former being indicated for moderate pain and the latter for intense or severe pain<sup>6,17</sup>.

The opioids have side effects, among which respiratory depression is the most serious. They also induce tolerance, which corresponds to a progressive increase in the dose in order to achieve the same analgesic effect, and to physical dependency, which occurs through the continued use of the drug for a period exceeding one week. It has been considered that these facts also may contribute to its use on a smaller scale than the non-opioid analgesics<sup>18</sup>.

These effects, however, can be minimized with appropriate adjustments in the dose, with a gradual and careful reduction of the daily dose, respecting the pharmacokinetic and pharmacodynamic characteristics for the neonatal period<sup>1</sup>.

The benzodiazepines, with (7.8%) of the professionals' responses, are the drugs indicated for sedation, anxiolysis and hypnotic induction. They have no analgesic activity whatsoever and can, even, exercise an anti-analgesic effect. They can lead to respiratory depression, to airway obstruction, to arterial hypotension, and to paradoxical excitation, with its effects being strengthened by the opioids<sup>6</sup>. Their use in NICU is limited to the promotion of sedation, being associated with opioids so as to promote analgesia, which explains its mention by the health professionals in this study even though they are not classified as analgesics.

The principal pre-condition for use of sedation and analgesia in NBs is monitoring, without which they must not be used, for which requirement nursing must separate special attention. For indicating sedation, the following must be taken into consideration: the type of procedure (whether painful or not), the procedure's duration, (so as to choose the appropriate sedative) and the patient's clinical condition.

Although the nurses may not prescribe medications, unless it is through the existence of clinical protocols already instituted, the knowledge of these essential principles helps in the appropriate implementation of the analgesic medications prescribed, and in discussing with other professionals the possible strategies for the better management of the pain, without negative consequences for the NBs' health. Irrespective of the method of pain relief used

by the multiprofessional team, the humanization of the care must be the principal focus of the care activities, seeking to minimize the traumas caused by the process of hospitalization.

In order to achieve quality care of the hospitalized NB, the preparation of the team is also necessary, as well as its engagement and its sensitization of the importance of correct assessment of the behavioral and physiological responses expressed by the neonates.

## CONCLUSIONS

It is concluded that in spite of believing in neonates' ability to feel pain and adopting behaviors with NBs with pain, the nursing team still lacks a genuine awareness of the importance of their role in assisting the neonate, and continues to assess the NB's pain based on personal beliefs, in an empirical way, unaware of scientific advances in the area.

In this study, it was observed that there is no standardization in the assessment and management of pain in neonates in the institutions studied. That is, the pain control continues to be undertaken in an empirical and individual way by the nursing professionals. In spite of various studies on the issue, care practice still needs changing, for which it is important to provide formal training for all the nursing professionals, irrespective of their level of qualification, and to adopt routines and protocols.

Further studies are therefore necessary to bring together knowledge on the issue and support practice in the effective control of pain, which is so necessary for the quality and humanization of the nursing care.

It follows that the nursing team performs an important role in this process, bearing in mind that these are the professionals who spend the most time at the patient's side. The creation of care routines and protocols, as well as the adoption of validated instruments for assessing pain in NBs, can contribute to the systematization of the nursing care, and to the improvement of the quality of the care provided to neonates.

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