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PERIPHERAL VENIPUCTURE IN PREMATUROS: NURSING CARE FOR PATIENT **SAFETY**

VENOPUNÇÃO PERIFÉRICA EM PREMATUROS: O CUIDADO DE ENFERMAGEM PARA SEGURANÇA DO PACIENTE

VENOPUNCIÓN PERIFÉRICA EN PREMATUROS: EL CUIDADO DE ENFERMERÍA PARA SEGURIDAD DEL **PACIENTE**

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Objective: to identify patient safety measures in nursing care before, during and after peripheral puncture of preterm newborns. Method: qualitative, descriptive study conducted with 42 professionals of the nursing team, at neonatal units. Semi-structured interview and the Content Analysis technique were applied. Results: two categories emerged: << Nursing care before, during and after peripheral venipuncture >> and << Aspects related to the promotion of patient safety in venipuncture >>. Conclusion: nursing care is based on technicalscientific knowledge, empirical experiences and safety measures before, during and after peripheral venipuncture. There have been practical implications for patient safety through prevention and reduction of adverse events, and the nursing care that permeates this assistance is identified. Scientifically, actions emphasizing patient safety need to occur through continuing in-service education guidelines and programs. Descriptors: Nursing Team; Nursing Care; Patient Safety; Newborn; Premature; Peripheral Catheterization.

Objetivo: identificar medidas de segurança do paciente nos cuidados de enfermagem, antes, durante e após a punção periférica do recém-nascido prematuro. Método: estudo qualitativo, descritivo, com 42 profissionais da equipe de enfermagem, em unidades neonatais. Aplicou-se entrevista semiestruturada e a técnica de Análise de conteúdo. Resultados: emergiram-se duas categorias << Os cuidados de enfermagem antes, durante e após a venopunção periférica >> e << Aspectos relacionados à promoção da segurança do paciente na venopunção >>. Conclusão: os cuidados de enfermagem pautam-se nos conhecimentos técnico-científicos, experiências empíricas e medidas de segurança antes, durante e após a venopunção periférica. Demonstramse implicações práticas para segurança ao paciente, mediante prevenção e redução de eventos adversos, identificados os cuidados de enfermagem permeando esta assistência. Cientificamente, revela-se que ações enfatizando a segurança do paciente precisam ocorrer mediante diretrizes e programas de educação permanente em serviço. Descritores: Equipe de Enfermagem; Cuidados de Enfermagem; Segurança do Paciente; Recém-Nascido; Prematuro; Cateterismo Periférico.

RESUMEN

Objetivo: identificar medidas de seguridad del paciente en los cuidados de enfermería, antes, durante y después de la punción periférica del recién nacido prematuro. Método: estudio cualitativo, descriptivo, con 42 profesionales del equipo de enfermería, en unidades neonatales. Se aplico entrevista semi-estructurada y la técnica de Análisis de contenido. Resultados: surgieron dos categorías << Los cuidados de enfermería antes, durante y después de la venopunción periférica >> y << Aspectos relacionados a la promoción de la seguridad del paciente en la venopunción. *Conclusión:* los cuidados de enfermería se pautan en los coonocimientos técnico-científicos, experiencias empíricas y medidas de seguridad antes, durante y después de la venopunción periférica. Se demuenstran implicaciones prácticas para seguridade al paciente, mediante prevención y reducción de eventos adversos, identificados los cuidados de enfermería permeando esta asistencia. Cientificamente, se revela que acciones enfatizando la seguridad del paciente precisan ocurrir mediante diretrices y programas de educación permanente en servicio. Descriptores: Grupo de Enfermería; Atención de Enfermería; Seguridad del Paciente; Recién Nacido; Recién Nacido Prematuro; Cateterismo Periférico.

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INTRODUCTION

Assistance aimed at patient safety is reflected in health care quality indicators. Thus, changes have been implemented, based on the National Program on Patient Safety, with emphasis on promoting a safety culture based on the articulation of organizations, professionals and patients.¹

According to the World Health Organization, patient safety involves reducing risks and damages associated with health care to an acceptable minimum given the complexity of procedures, treatments and the actual potential for harm.² In this sense, the decisions involving the care practice of the nursing team require the evaluation of the risks and benefits for the patient,³ especially those aimed prevention and reduction of adverse events related to health care.

Nursing professionals should rethink care processes to identify the occurrence of failures before they cause harm to patients, since the incidents associated with health care represent a high morbidity and mortality in health systems.

In the scenario of the neonatal intensive care unit, the comprehensive care of the newborn (NB) is the focus of the professionals of the health team, especially the nursing team, because, in addition to the vulnerability intrinsic to the newborn, the hospitalization requires careful assistance in the face of the diversity of therapies and possible complications.

Among the nursing care for the Preterm Newborn (PTNB), the peripheral venipuncture stands out, which is a routine practice associated to several procedures necessary to neonatal health support. It is one of the most frequently performed nursing interventions in a hospital, since 80% of patients use the intravenous catheter at some point.⁴ However, it is not risk-free and requires expertise and knowledge by the professional.

Venipuncture involves the insertion of a device into the vessel, based on indications and techniques, as well as the choice and use of material suitable for this invasive procedure. It is associated with neonatal pain and changes in several organic systems that are immature in PTNB, which interferes in the homeostatic balance.⁵

Prolonged hospitalization in intensive care units, associated with therapeutic demands and fragility of the venous

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network, especially in low-weight PTNB, predisposes patients to multiple peripheral punctures, stress, pain and a higher risk of infection. In addition, the constant need for drug therapy with irritant and/or vesicant solutions also raises the importance of managing peripheral venipuncture in a safe way.⁶

The decision to research on this subject came from the need to answer the question: peripheral the nursing care in venipuncture in PTNB performed according to patient safety measures? This question permeates the interest in the study, since it is believed that the nursing team plays an extremely important role in safe care and in the prevention of adverse events and traumatic consequences resulting procedures and hospitalization.

Faced with this issue, the impact of patient safety on the quality of nursing care is emphasized, so that the reduction of risks and damages and the incorporation of good practices favor the effectiveness of care and its management in a safe way.⁷

OBJECTIVE

• To identify patient safety measures in nursing care before, during and after peripheral puncture in preterm newborns.

METHOD

This is a qualitative and descriptive study.8 The research development site was a tertiary-care teaching hospital located in Maceió (AL), Brazil, with capacity for 200 beds, of which 60 belong to the maternity ward, being as a reference for care of pregnant women and high-risk NB. The scenario was the neonatal hospitalization which consists of the Neonatal Intensive Care Unit (NICU) and the Neonatal Intermediate Care Unit, with a capacity of 10 and 19 beds, respectively. It is also multidisciplinary composed of composed of nurses, technicians and nursing assistants, physicians, psychologists, social workers and physiotherapists, who seek care practices during the hospitalization process of the neonate and the family.

According to the inclusion criteria, the participants were the nursing team members who perform peripheral venipuncture in hospitalized PTNBs, except those who were on vacation or under medical leave. Therefore, the sample

consisted of 42 professionals, who worked in the three shifts (morning, afternoon and evening), and it was pertinent that the researcher adopted the necessary measures to schedule the meetings and clarifications regarding the purpose, methods and Consent Form of the research.

Data collection took place in the period from April to September 2014, by applying the semi-structured interview, individually, in a private place, with guarantee of privacy and an average duration of 20 minutes. The choice for the interview made possible a greater understanding and deepening of the meanings of the practice of professionals. Therefore, we started with the identification of the professional (sex, age, marital status, time since graduation, employment relationship, length of working time, professional qualification), as well as 20 open questions concerning the practice of peripheral venipuncture (indications, advantages, disadvantages), preparation of the PTNB for the procedure, inherent care, difficulties, challenges and improvements in the care of hospitalized newborns. In this stage, an mp4 recorder was used to record the conversation with subjects.

Another strategy for the collection of information non-participant the was which the researcher observation, in assumes an external role in the said unit without interfering in the context observed and in the way, it is revealed.8 This observation occurred during the performance of the peripheral venipuncture, which allowed observing the impressions presented by the NB, as well as contemplating the professional's performance during the whole procedure, through records in field diaries.

From these records, a database was elaborated and then content analysis was performed, which comprises three stages: pre-analysis (floating reading, hypotheses, objectives, elaboration of indicators that support interpretation); exploration of the material by categorization; and interpretation of the results.9

For the presentation of the narratives, anonymity was adopted by identifying the initial letters for Nursing (N), Nursing Technician (T) and Nursing Assistant (A), followed by Arabic numerals, according to the succession of interviews.

The study complied with the formal requirements contained in the national and international regulations on research

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involving human beings, and was approved according to Approval Number: 30178514.3.0000.5013 of the Research Ethics Committee (REC) of the Federal University of Alagoas (UFAL)/Plataforma Brasil.

RESULTS

The data allowed outlining the profile of the participants and identifying the nursing care that permeates the safe care to the neonate hospitalized in a neonatal unit, which gave rise to the construction of two categories: Nursing care before, during and after peripheral venipuncture; and Aspects related to the promotion of patient safety in peripheral venipuncture.

Participants consisted of 42 nursing practitioners: 11 (26.2%) nursing assistants; 25 (59.5%) nursing technicians and 6 (14.3%) nurses. The age range varied from 27 to 60 years, with prevalence of the ranges of 30-39 years and 40-49 years, both comprising 38%. In relation to marital status, 21 (50.0%) were single and 17 (40.5%) were married. Regarding the employment relationship, 20 (47.6%)workers were civil servants, and have been working in the unit for less than 60 months (33.3%), of which 16 (38.1%) were working in both units. This professional profile has undergone modifications since the hiring of new workers by the Empresa Brasileira de Serviços Hospitalares (Brazilian Company of Hospital Services - EBSERH), from 2014 on.

♦ Category 1: Nursing care before, during and after peripheral venipuncture

This category addresses the expressions of nursing professionals in demonstrating knowledge, skills and attitudes in the care practice. It was identified the concern and care of these professionals with the use of standard precautionary measures, such as hand hygiene and use of alcohol gel. In addition to these attitudes, we can mention the observation and attention to the reactions manifested by the PTNB, which imply interventions directed towards pain relief:

I wash my hands, I soothe the baby, I offer glucose, I gather the material, I puncture the vein, I watch his little face, I keep him clean, I gather everything, and I watch the access. (T8) I observe more and study the venous network before any attempt. (T17)

This care offered by the professionals before the peripheral venipuncture to the PTNB, whose emphasis is the careful observation, refers to the provision of humanized care, thus promoting care to the baby in a conscious and responsible manner, as demonstrated in the speeches:

> I let them rest a little; I make them warm and try again. (T17)

> During venipuncture, I pay more attention to the vein, and as I always make the puncture with another person, it is she who observes him more. (T24) I try to clean the place using alcohol at

70%. (A1)

I use suitable material. (A2)

I puncture when they are heated. (N2)

The aforementioned practices evidence the sensitivity of the nursing professional, which encompasses the tranquility and the interpersonal relationship with the baby and the mother during that moment, in which comfort, the adequate position and the exposed area, limited to that to be punctured, are also appreciated. approach refers to the provision of quality care, as described in:

> First, we should pay close attention to what we are doing. (N1)

> [...] it is not enough to have all the resources. (T14)

> The way we put them in the crib or incubator, to protect them, warm them, in a comfortable position, so that they can breathe better. (T16)

> When they are on the oximeter, I feel safer. (T1)

In these circumstances, the professionals emphasize the exposure of the PTNB when subjected to painful and stressful stimuli. During such procedure, they mentioned and observing physiological behavioral reactions and, in order to alleviate pain, they mentioned interventions, as verified:

[...] they present facies of pain. (N3)

[...] Their forehead wrinkles. (T8)

It is very important to observe the manifestations, as it can cause cyanosis, pause [...] or regurgitate. (T25)

I offer drops of glucose, for their wellbeing. [That] makes them suck and they do not feel the pain of the puncture so much. (A5)

After the painful stimulation of peripheral venipuncture, the participants referred to the vulnerability of this patient regarding the risks of skin lesion, infection and other complications, such as:

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Phlebitis, abscess, pain, extravasation.

Inadvertent puncture of an artery, causing vasospasm. (N3)

Bruise. (T18)

[...] hyperemia, hot skin. (A4) Burn by gluconate. (T13)

Ulcers. (A5)

About the care to be performed after the peripheral venipuncture, the professionals emphasized their practice, showing to be able to contribute to the prevention of complications:

> Observing the dressings and changing punctures every 72 hours. (N4)

> I try to leave the access point outside, to observe better. (T8)

asked about the possible When complications in the peripheral venipuncture, several interventions adopted by the professionals were highlighted, as evidenced:

> I hold the cotton wool by pressing until it stops bleeding. (N1)

> The first conduct is to withdraw, change venipuncture. For phlebitis, compress; in the hematoma, medication to decrease it. (N2)

> [there is] infiltration and withdraw extravasation, 1 the peripheral venous access and apply on the skin a cold compress with sodium bicarbonate. (N3)

> I make compress in the place and put essential fatty acids. (T8)

> If I have "reparil gel", I pass and leave it in the place, then I redo the compress. (T12)

Due to the therapeutics and the caring process, it should be emphasized that these events have the potential to cause damages and losses during the hospitalization of the neonate. Thus, it is essential to know the critical factors that imply in the care to develop effective prevention and promotion actions to improve the quality of care.

Category 2: Aspects related to promoting patient safety in peripheral venipuncture

In the approach regarding aspects related to the promotion of patient safety in peripheral venipuncture, nursing professionals emphasized their practice with simple and effective measures to promote a safe environment, as reported:

> I seek a comfortable environment and use all the material that provides me with safety: procedure glove, mask and

cap, which we already have to use in the sector. (T16)

I always try to adopt a comfortable position, both for the baby and for me. (A2)

For our safety and for them, I leave them restrained. (N5)

The attitude towards patient safety refers to the care process and, in turn, has been increasingly incorporated into the use of good practices by professionals. One of the participants in the study referred to the need for an adequate place to perform the procedure as crucial, as verified below:

Because they are newborns, we always need an appropriate place to provide safety, which must be heated, with oxygen, an aspirator. (T19)

In this speech, it is verified the relevance of performing the procedure under discussion at the intervention site by using technique in correct patients.

In addition, it was emphasized the importance of minimizing the exposure of the PTNB to risks, with highlight to measures that promote safety related to venipuncture:

I do the puncture with calm, safety and really knowing what I am doing. (T2)
I try not to contaminate. Thank God, I am aware of not reusing the material, and if I touch anything, I do not use it.

(A4)

These measures, when conducted in a safe and correct manner, are relevant to prevent adverse events related to health care for the neonate as well as to reduce risks and damages. Hand hygiene for the prevention of infections, for example, is paramount for achieving better results for health service users.

The practice acquired in the workplace has occupied a prominent position during the interviews, highlighting the knowledge and technical empowerment of professionals. In this respect, there was an exchange of experiences, knowledge and technical improvement, according to the statement:

The greater the knowledge of the procedure, the lower the risk of causing injury to the patient. (A3)

Nevertheless, the therapeutic and technological advances in the field of neonatology and nursing care are recognized. lt should be noted professionals have emphasized the need for its use in order to improve the patient's Peripheral venipucture in prematuros: nursing...

quality of life by using safety measures, according to the speeches:

For them not to suffer so much, I make the puncture only once. (T5)

[...] taking responsibility, being aware of what happens to them. (T4)

The safety of the patient depends on the safety of the professional. (T2)

Another aspect addressed by the interviewees relates to verbal communication with the baby in the daily routine of their activities, allowing continuity of affectionate care, although the procedure is painful, through a safe technique, as revealed in this conversation:

[...] I will look for a good vein. We make them very tight, to keep them calm. I do antisepsis with alcohol, use a tourniquet and make the puncture. Before this, we put gauze with a little glucose, so they calm down. The pleasure of sucking is greater than the pain of the puncture, some babies do not even cry. Then I talk to them: I did not want to do this, but it was necessary. (A9)

Given this scenario, it is recognized that professionals' attitudes that involve patient identification, improved communication among health professionals, correct technique of the procedure and hand hygiene demonstrate the applicability of safe practices to the PTNB in health services.

DISCUSSION

Some limitations of this study have been identified regarding the experiences of nursing professionals and knowledge about the procedure of peripheral venipuncture in PTNB, especially when technicians and nursing assistants reported difficulties in describing concepts related to this care and to the use of scientific language. Despite this, the records in field journals and the observations of the care context involving this practice have demonstrated convergent nursing care for good neonatal practices, reinforced with implementation of the Stork Network, by the Ministry of Health, in order to guarantee a care to the NB based on the principles of humanization and scientific evidence.

The discussion was based on aspects that guide a humanized care to the PTNB in relation to the importance of knowing the indications and techniques for performing peripheral venipuncture in premature

infants, choosing and using appropriate material and specific behaviors in each case, requiring careful assessment of the risks and benefits of the procedure. Another important aspect involved the prevention of infection and the need for pain management.

Care approaches that approximate the dimensions of nursing practice appreciated, considering limiting aspects involve the high demands that attributions in these critical care units and the overload of the professionals, evidence the systematization of nursing care during the stages of this procedure and its safe handling.

Even if the professionals in the present study perform a care practice that is convergent to the culture of patient safety, the use of protocols in the NICU was not mentioned for the identification of adverse effects related to venipuncture in preterm infants, or even to improve the monitoring of this procedure and its evaluation, considering the work processes of the nursing team and the specificities of this patient.

A systematic review that sought to identify adverse events and care practices related to patient safety in demonstrated, from the analysis scientific articles, a variety of multifactorial occurrences. The actions that refer to the culture of safety are focused on prevention, involving continuing education, training of professionals and support of the managers, these being aspects that strengthen the diffusion of knowledge and training of the team.10

In neonatal units, there are many stimuli and procedures directed to the PTNB, mainly regarding intravenous therapy. The peripheral venipuncture in this group is a common procedure in the routine of care, aggravated by the greater limitation of its venous network, limited by organic immaturity, besides the specific aspects of absorption, distribution, metabolism and excretion of drugs.¹¹

As part of the guidelines of the Program for Humanized Care of Low-weight Newborns, professionals should perform care with a focus on pain and stress prevention, although it is still a challenge and a strong paradigm related to the humanization of care, in which professionals seek, in the context of health care, the quality of care in a comprehensive way,

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with a view to promoting the development of PTNBs, comfort and support for their families.¹²

When it comes to nursing professionals, the care they perform is intrinsically related safety. When patient necessary, venipuncture may be performed from the peripheral or central insertion. peripheral has been more used in current clinical practice. 13 However, another device used in the context of PTNB care refers to the Peripheral Insertion Central Catheter (PICC) by trained professionals, which presents prolonged stay time, easy insertion and reduced risk of causing complications. 14

Focusing on the peripheral venipuncture procedure, the success of this intervention implies the development of human and technical skills, aiming at the lowest risk to the patient and the optimization of safe and quality nursing care¹, with little prevalence of the nursing care with a humanistic aspect.

The first step towards the humanization of neonatology is the relief of pain in the newborn. The stressful environment of the ICU can interfere in the maturation of cerebral functions, which results physiological and behavioral disorganization, inducing the crying and irritability of the NB,15 therefore, nonpharmacological analgesia has been strongly used in the presence of invasive procedures PTNB, especially in peripheral venipuncture. This is because it is effective in the context of NICU care and in the minimization of acute pain, besides being low cost and easy to use by professionals.

These considerations are relevant when it comes to performing invasive and painful procedures. The identification of neonatal pain encompasses an action by the nursing team for the well-being of the NB, which interferes directly in the reestablishment of health. The simple understanding that the baby can feel pain is the decisive element in recognition, intervention by non-pharmacological measures and evaluation. ¹⁶

It is understood, therefore, that the evaluation of the PTNB behavioral preponderant finding to the of algic includes processes, which the response, facial mimicry, crying, and sleep and wakefulness patterns. Even in those with a gestational age less than 37 week, the study sought to identify ways of assessing pain used by nursing professionals and pointed the following reactions as the

main parameters: crying, forehead and eyes squeezed, flexion and extension of the extremities and specific movements of the hands.¹⁷

In this perspective, a widely cited measure in the literature is the application of scales, such as the NIPS (Neonatal Infant Pain Score). Results were found¹⁸ identifying suggestive signs of pain in PTNB of a NICU in the interior of Bahia during peripheral venipuncture. Of the 29 NB, with a mean gestational age of 31.9 weeks, mean birth weight of 1,718 g and 93.1% of female NB, 69% presented suggestive signs of no pain related to puncture by the application of the scale, as well as evaluation and management of pain with emphasis on comprehensive nursing care.

study¹⁹ Another that investigated venipuncture in PTNB and its relationship with pain assessment, performed with 12 nurses from the NICU of a university hospital in Rio de Janeiro, identified the care to minimize pain before, during and after venous puncture in PTNB, characterizing the non-pharmacological analgesia highlighting the suction and use of glucose; positioning of the RN and accommodating them comfortably; promoting warmth and careful handling, besides the technical care on venipuncture in the newborn.

Corroborating this fact, a quasi-experimental study²⁰ highlighted the positive effect of oral glucose at 10% for pain relief during venipuncture when comparing groups before, during and after the procedure. The association of the aforementioned measures is mentioned in another study²¹, such as the use of sucrose and NSS in a safe and effective manner to reduce pain during painful procedures.

The care practices involving peripheral venipuncture in preterm infants by the nursing team professionals in the investigated reality of a NICU in a school hospital in Alagoas converge to results identified in other regions of Brazil; however, it also presents organizational and human resource limitations.

In 2013, the National Patient Safety Program (PNSP)² was established in Brazil, with the dissemination of six basic protocols to priority areas: 1. patient identification; 2. communication among health professionals; 3. safety in the prescription, use and administration of medicines; 4. safe

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surgery; 5. hand hygiene; minimizing the risk of falls; and 6. pressure ulcers.

One of the most discussed measures in the literature is the hand hygiene protocols, since it involves direct contact with the patient, and the hands are the main means of transmission of microorganisms. The quality of care is directly related to adherence or not, by professionals, to this care. However, in practice, it has not been fully incorporated into work routines, a fact that exposes nursing professionals and patients to biological risk.²²

The impact of patient safety should reflect on the quality of nursing care in such a way that risk and harm reduction and the incorporation of good practices favor the effectiveness of care and management in a safe way. To avoid injuries and promote the safety of preterm infants undergoing intravenous therapy, the nursing team should periodically evaluate peripheral access with emphasis on interventions related to the presence of signs and complications.²³

Considering the aspects related to the promotion of patient safety in venipuncture, the characteristics of the PTNB, such as gestational age, weight, clinical conditions, diagnosis, venous network, type duration of intravenous therapy, characteristics of the drugs (pH, osmolarity, compatibility), availability of material and personnel, vulnerability to infection and manipulation, and specific knowledge for the safe development of this practice should be considered.²⁴

The best location of the vessel to be punctured remains controversial and dividing opinions among health professionals, 23 since they are high-risk patients who undergo numerous procedures requiring primordial care for safe vascular access.

In the analysis of the risks inherent to the procedure with premature infants, it is the responsibility of the nurse to choose the appropriate place and the least traumatic device for the patient. During puncture, they should evaluate and choose a site without injury/trauma and/or other devices, as these could increase the chances of infection, giving preference to the upper limbs and avoiding skin folds. In addition, the hand, back of the foot and/or scalp may also be chosen.²⁴

Therefore, the adoption of good practices and the reduction of errors during health

care are crucial to guarantee patient safety in care settings, as well as the accreditation processes, which are commonly associated with the prevention of infection related to health care and injury prevention.

Regarding the possible complications related to peripheral venipuncture in PTNB, a study identified as risk factors associated 63.1% of infiltration and extravasation, followed by phlebitis and obstruction.²⁵

In addition, to ensure a safe and free-of-harm care for the patient, the whole team, the managers and the institution should be committed to this purpose, since the issue of safety does not only consider the human factor for the occurrence of error, but the entire network of health care, working conditions, the environment, staffing and other related aspects.²⁶

It is important to emphasize the need for continuing education in health services to develop these capacities in their teams, stimulating their professional development and establishing specific routines based on scientific evidence.²⁷

The risks to patient safety in the neonatal context are directly related to issues that lead to morbidity and mortality and that could be avoided, thus generating economic, social costs to the NB, family and professionals, and impacting patient safety and quality of care.²⁸

Thus, the present study addressed the theoretical-practical knowledge on peripheral venipuncture of nursing professionals; on the preparation of the premature newborn for painful procedures and the approach of venipuncture complications, focusing on patient safety.

CONCLUSION

This study approaches nursing care in peripheral venipuncture in PTNBs admitted in the neonatal unit, with emphasis on the national policy for patient Therefore, it was verified that nursing professionals develop their practice with technical-scientific foundation, they also value the empirical experiences of daily life. Because it is an invasive and painful procedure, the team considers pertinent the applicability of measures in the care before, during and after the peripheral venipuncture, addition to emphasizing, vehemently, the aspects that refer to the humanization of neonatal care.

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It was possible to recognize the profile of the professionals who participated in this study, as well as the nursing care related to the safe care of the premature newborn, with the consequent construction of two categories.

It is worth mentioning that the creation of this new and broad perspective in the practice of NB care culminated in changes in nursing care, impacting neonatal survival rates. It is recognized, therefore, that the acquisition of technical and scientific knowledge about safety measures peripheral venipuncture has favored the prevention and reduction of the incidence of adverse events related to neonatal care. Therefore, this demonstrates the practical implications of this research regarding the provision of nursing care in a neonatal unit guided on patient safety.

In addition, it is believed that, scientifically, this process of evaluation and implementation of actions, in relation to the complexity of the neonatal units, must occur systematically, through national and international guidelines, as well as through in-service continuing education programs.

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