ASSISTANCE PRACTICES FOR NURSING OF NEWBORNS WITH HYDROCEPHALUS

PRÁTICAS ASSISTENCIAIS DE ENFERMAGEM AO RECÉM-NASCIDO COM HIDROCEFALIA

Neri Eleika Candido da Silva¹, Jocelly de Araújo Ferreira², Ana Carolina Dantas Rocha Cerqueira³, Irys Karla Cosmo Pereira⁴, Luana Carla Santana Ribeiro⁵

ABSTRACT

Objective: to analyze Nursing care for the newborn with hydrocephalus in Intensive Care Units and Neonatal Intermediate Care Units. Method: this is a quantitative, descriptive, cross-sectional study conducted at a maternal-infant reference institute. The sample was composed by 20 nurses and 55 nursing technicians from these neonatal units. The questionnaire was used as the data collection technique, and were stored and analyzed using the EPI INFO 7.1.5. Results: it is revealed that of the nurses interviewed, only 27.78% have a postgraduate course in Neonatology and Pediatrics and only 6.67% of the interviewees affirmed that they had received training in relation to the qualification for the care of newborn born with hydrocephalus; only 38.67% of respondents answered that "always" carry out the Systematization of Nursing Assistance; 86.67% referred to comfort and safety and 78.67% reported bed rest every three hours as essential interventions for these infants. Conclusion: in the present study, there was a lack of capacity to provide assistance to the newborn with hydrocephalus and that care is generally not systematized and not always adequate to the full needs of these infants.

RESUMO

Objetivo: analisar a assistência de Enfermagem ao recém-nascido com hidrocefalia em Unidades de Terapia Intensiva e de Cuidados Intermediários Neonatais. Método: trata-se de estudo quantitativo, descritivo, transversal, em um instituto materno-infantil de referência. Compôs-se a amostra por 20 enfermeiras e 55 técnicos de Enfermagem. Utilizou-se, como técnica de coleta dos dados, o questionário, armazenados e analisados pelo EPI INFO 7.1.5. Resultados: revela-se que, dos profissionais enfermeiros entrevistados, apenas 27.78% possuem curso de pós-graduação em Neonatologia e Pediatria e somente 6,67% dos entrevistados afirmaram que haviam recebido capacitação em relação à qualificação para os cuidados ao recém-nascido com hidrocefalia; apenas 38,67% dos participantes responderam que “sempre” realizam a Sistematização da Assistência de Enfermagem; sobre a assistência, 86,67% referiram o provimento de conforto e segurança e 78,67% deles, a mudança de decúbito a cada três horas como intervenções essenciais para esses neonatos. Conclusão: evidenciaram-se, no estudo, um déficit de capacitação para prestar assistência ao recém-nascido com hidrocefalia e que a assistência é, geralmente, não sistematizada e nem sempre adequada às necessidades integrais desses neonatos.

RESUMEN

Objetivo: analizar la asistencia de Enfermeria al recién nacido con hidrocefalia en Unidades de Terapia Intensiva y de Cuidados Intermedios Neonatales. Método: se trata de un estudio cuantitativo, descriptivo, transversal, realizado en un instituto materno-infantil de referencia. Se compuso la muestra por 20 enfermeras y 55 técnicos de Enfermería de esas unidades neonatales. Se utilizó, como técnica de recolección de los datos, el cuestionario, y almacenados y analizados a través del software estadístico EPI INFO 7.1.5. Se presentaron los resultados en tablas y figuras. Resultados: se revela que, de los profesionales enfermeros entrevistados, sólo el 27,78% poseen curso de post grado en Neonatología y Pediatria y solamente el 6,67% de los entrevistados afirmaron que habían recibido capacitación en relación a la calificación para los cuidados al recién- nacido con hidrocefalia; sólo el 38,67% de los participantes respondieron que “siempre” realizan la Sistematización de la Asistencia de Enfermería; sobre la asistencia, el 86,67% refirieron la provisión de conforto y seguridad y el 78,67% de ellos, el cambio de decúbito cada tres horas como intervenciones esenciales para esos recién nacidos. Conclusión: se evidenció, en el estudio, un déficit de capacitación para prestar asistencia al recién nacido con hidrocefalia y que la asistencia es generalmente no sistematizada y no siempre adecuada a las necesidades integrales de esos neonatos.

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English/Portuguese

INTRODUCTION

The excessive accumulation of cerebrospinal fluid (CSF) due to inadequate resorption or production imbalance results in the dilation of the ventricles known as hydrocephalus. The brain is compressed by this excess of CSF, causing an increase in intracranial pressure, which is potentially harmful to brain tissues, since it can considerably increase patients' morbidity and mortality. It is estimated that an incidence that can vary from 6.2 / 10 thousand to 50.3 / 10 thousand births in the Brazilian population. In the year 2013, in Paraíba, 43 cases of live births with some malformation of the nervous system

The following are among the clinical manifestations: the abnormally rapid head enlargement and the bulging of the fontanelles; distention of the veins of the scalp; stretching of the skin; divergence or separation of cranial sutures; increase and tension of fontanelles; looking "from the setting sun", characterized by the look conjugated downwards; seizures; retarded neuropsychomotor development; difficulty feeding; vomiting, irritability, lethargy.

It is known that the treatment by means of surgical procedures, with the use of a valve, is the most important and common way to proceed with the effective treatment, reducing and normalizing the pressure exerted by the brain in the cranial cavity and providing the drainage of the excess of CSF to a site in the body, from where it can be absorbed, since the pharmacological treatment only allows, in a short time, the relief of the symptoms, pending a surgical procedure.

This involves removing the obstruction or creating a new path to divert excess CSF. This deviation is performed with the insertion of a deviation or a ventriculoperitoneal bypass tube (VBT), which leaves the ventricles out of the skull and passes under the skin to the peritoneum; Another alternative is ventroatrial deviation, which drains the fluid from the ventricles into the right atrium of the heart, but is used less frequently.

The care provided to a baby with some congenital malformation and his / her family is a major challenge for the health professional and, in this sense, the Nursing care should go beyond the execution of procedures, since it covers periodic, integral and continuous evaluation of the patient, with detailed records, as well as the provision of information and the encouragement of parents' participation in the treatment, not only in the hospital environment, but also in Primary Health Care, establishing humanization and scientific. It is understood that the newborn (NB) with hydrocephalus has not only biological needs to be met, but also psychosocial needs, with emphasis on caregivers responsible or parents. In this perspective, the importance of Nursing care to the NB with hydrocephalus, which consists of caring for the patient in a holistic and integral way, attending to the multiple needs of the NB and its caregivers or parents, has a fundamental role in the procedures, techniques and care throughout the hospitalization period.

The Nursing team should be technically and scientifically capable of delivering this care skillfully and efficiently in intensive care and in hospitalization units, however, Nursing does not always play its role correctly, since the interventions that be carried out by the team are not always systematically systematized and based on scientific evidence.

Among the challenges faced by the Nursing team in relation to the care of neonates with hydrocephalus, the Nursing interventions are carried out in a humanized and resolutive way, since the implementation of care in a mechanistic way is observed, without individual evaluation and which do not achieve satisfactory objectives.

OBJECTIVE

- To analyze the nursing care to the newborn with hydrocephalus in Intensive Care Units and Neonatal Intermediate Care Units.

METHOD

This is a quantitative, descriptive, cross-sectional study carried out at the Cândida Vargas Institute (CVI), a reference in maternal and child care in the State of Paraíba, located in João Pessoa, capital of Paraíba. This institute is a Neonatal Intensive Care Unit (NICU) with 12 beds to receive high-risk newborns and a Neonatal Intermediate Care Unit (NICU) with 18 beds.

The population of this study was constituted by the nurses and nursing technicians who render service in the NICU and in the NICU of the CVI. It is reported that the number of personnel working in the neonatal sector of the CVI, during the period of data collection, was of 24 nurses and 74 nursing technicians, totaling 98 professionals.

The following inclusion criterion was used for the delimitation of the sample: professionals who had already attended one or
more newborns with hydrocephalus. They were listed as exclusion criteria: professionals who were away from work due to health leave or vacations during the period of data collection. Ten professionals were refused to participate in the study, of which 98 were professionals, eight of whom did not meet the inclusion criterion, since they stated that they had not provided care to NB with hydrocephalus, four were on leave of absence and one was dismissed from the service during the period of the survey. Thus, the sample of the study was constituted by 75 participants, being 20 professional nurses and 55 nursing technicians.

The data were collected through a questionnaire prepared by the authors of the research and composed of open and closed questions, dichotomous, categorical and Likert scale. The questionnaire was composed of four parts: general information of the participants; professionals' knowledge about hydrocephalus; Nursing assistance to the NB with hydrocephalus and Nursing assistance to parents or guardians of neonates with hydrocephalus.

Data collection was carried out from May to June 2016, after approval of the project by the Research Ethics Committee (REC). It is detailed that the questionnaires were self-administered in a place that promoted the privacy to the participants of the research, in the work environment, from their agreement to collaborate with the study.

Data was collected and analyzed using EPI INFO 7.1.5 statistical software, and the collected indicators were submitted to statistical treatment using relative, absolute and accumulated frequencies. The results obtained were represented by tables and graphs, discussing them according to published literature on the subject.

In compliance with Resolution NHC 466/2012, the project was submitted to the REC of the Alcides Carneiro University Hospital (ACUH), by means of the Brazil Platform, approving it under Opinion n. 1,520,283. The participation of the professionals was supported by the Free and Informed Consent Term, being guaranteed the anonymity of the participants of the study, as well as their freedom and autonomy in giving up, as provided by the resolution.

RESULTS

The profile of the research participants with characteristics related to their training and professional performance is identified in Table 1.

Table 1. Professional characterization of the research participants. João Pessoa (PB), May to June 2016 (n = 75).

<table>
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Another important issue in this study related to the recognition of the health needs of the NB with hydrocephalus was evidenced. Figure 1 presents the basic needs of this newborn from the perspective of the professionals interviewed, and the health needs most scored by the study participants were: support for head and neck; promoting comfort and controlling pain. Other health needs, such as psychosocial factors, defined by skin-to-skin contact with parents or family support were also pointed out by the interviewees, however, a third of them did not consider these needs.

![Figure 1. Needs of NB with hydrocephalus identified by Nursing professionals interviewed. João Pessoa (PB), May to June, 2016 (n = 75).](image)

It can be pointed out, in figure 2, the interventions performed by the Nursing team in the care of neonates with hydrocephalus.
Figure 2. Nursing Interventions implemented by the interviewees in the care provided to the neonate with hydrocephalus. João Pessoa-PB, May to June 2016 (n = 75).

Figure 3 shows the care taken in Nursing care in the postoperative period of these patients, the main ones being: the monitoring of the water balance; administration of analgesics if necessary; observation of signs of localized infection; support for neck and daily HP check.

Figure 4 shows the strategies to provide analgesia and comfort for neonates with hydrocephalus, according to professionals interviewed. It should be noted that more than a third of the participants did not point out, as strategies, to speak softly, to act with kindness and skin-to-skin contact with parents.

DISCUSSION

It is noted that the lack of specific professional qualification of nurses working in neonatal care was a cause for concern in this study, because nurses are constantly being asked to update themselves through specializations after basic training due to

Figure 4. Strategies used to ameliorate discomfort and provide analgesia to neonates with hydrocephalus by the interviewed Nursing professionals. João Pessoa-PB, May to June 2016 (n = 75).
constant changes and developments in scientific knowledge in the area. It is pointed out that the professional qualification by means of post-graduation has the function of enabling the workers to attend to demands that are increasingly complex in the health sector, aiming at the construction of scientific and technological knowledge increasingly relevant and innovative.

It is understood that, in the area of health, Pediatrics is the specialty in which the child starts to be seen in a specific way, with its singularities and peculiarities, diseases and specific treatments. The importance of always offering treatment that benefits the child in the long term, especially with regard to neuropsychomotor development, is highlighted. In this way, professionals are challenged to constantly update and specialize in a judicious way, based on scientific knowledge to offer quality assistance and meet the increasingly complex demand.

Another fragility was identified in the lack of job stability experienced by the majority of the professionals surveyed. It should be noted that in the services provided under contract, there are instabilities, which may interfere with the assistance provided, as well as inducing professionals to look for other jobs, generating fatigue and overwork and emotional exhaustion. They offer themselves, in relation to the social and the economic, by the stable bond with the institution, tranquility and a possible permanent salary.

The professional affinity for the area in which it acts as a determining factor for the quality of the care provided was also constituted. It was verified in this research that all the interviewees identify with the area of neonatal care, and Nursing professionals who work in a pleasurable way associate work satisfaction with characteristics peculiar to the profession, such as care, pleasure and the pride of exercising it.

It becomes the permanent qualification of the professionals involved in the assistance to the NBs with hydrocephalus fundamental for the excellence of the care provided, however, in this study, most of the professionals never received specific training for such. Competencies are developed when the management prioritizes the results and invests in the human resources, causing transformations in the work process of the nurses resulting from investments in the qualification of the professionals considering that, in addition to the assistance, the hospital is the place of teaching and learning, research and extension, being necessary the investment in the training or the educational training, generating new knowledge, attitudes and abilities for the improvement of the service and provision of the assistance.

On the other hand, a potentiality found in this research was the high level of satisfaction with the service among study participants. It is generally pointed out the work done in the team by the professionals as a potential tool that increases job satisfaction and that helps to improve relationships between professionals and in the care provided. It is essential to enjoy what is done, especially when it involves care and assistance to the human being. Satisfaction is demonstrated in the joy of carrying out their activities, as well as in the affinity and identification by the area during the training process, and the Nursing professionals present these feelings in the moment of acting with the patient, because they feel important in the process of rehabilitation experienced by them.

In contrast, the dissatisfaction of the team members in the patients' dissatisfaction with the care provided, which is related to the conditions, the dynamics and the work place, is reflected. It is feasible, in this context, when all these needs are met, the involvement of the team in the activities, generating a quality assistance and better performance. Thus, the quality of the assistance to the physiological states, the safety and the psychological integrity of the professionals is related, and the dissatisfaction of the team compromises the development of the quality in the work.

In the process of caring for NB with hydrocephalus, the relevance of NCS, defined as a planned and organized process, of the nurse's responsibility, is emphasized, which will bring more meaning to its performance and enable the development of determinant plans in the health / disease process, providing benefits for patient recovery.

The contribution of Nursing to the health of the population through the Nursing process is evident, and with its operationalization and documentation, professional visibility and recognition are increased, since it is a guiding tool for the care process. The Nursing process must be carried out in a deliberate and systematic way, in all the environments, public or private, where Nursing professional care takes place. This assistance instrument is organized into five interrelated, interdependent and recurrent stages, which are performed through the collection of data on Nursing (or Nursing history), Nursing...
diagnosis, Nursing planning, Nursing implementation and evaluation.14

It is believed that NCS is a relevant tool for the improvement of Nursing practice, which has a significant and fundamental importance for the accomplishment of a quality Nursing service, providing a structured, organized, planned and individualized assistance, according to the needs of patients.13

The patient can be characterized as a unique and indivisible human being, with the capacity to adapt to the environment and people and with needs that encompass the individual, the family and the community, but with different forms of expression. Nursing should be assisted by considering the patient as a being with feelings and reactions of his own, with individual and basic needs for interaction, self-care and referring to the biopsychosocial and spiritual dimensions. It is assumed, due to the limitations, particularities and differences of each individual, the need for holistic care for the maintenance of the equilibrium state.15

It helps, in this sense, through the support and support offered to the family, in the recovery of the patient, intensifying the bonds that exist between the professionals and the family and helping to overcome the difficult moments and the recovery of the patient.16

It is considered that the care provided is the essence of health services, since the object of health is not the cure or promotion and protection of health, but the production of care, to achieve the possible cure and recovery of health with different strategies. For that to happen, technologies in health work are used, which are classified as: mild, characterized by technologies of relationships such as link production, reception and autonomization; mild-to-severe, defined as the structured knowledge that operate in health work, such as the Medical Clinic and Epidemiology; and hard, which are the equipment used at work, such as machines.17

It is noted that, in this way, to be in health is to be with balanced needs and, consequently, the state of illness is the imbalance of the necessities that, consequently, generates problems that need the professional assistance of Nursing, according to the theory of Basic Human Needs.15

Therefore, biopsychosocial needs are presented by NBs with hydrocephalus, with psychobiological characteristics such as head and neck support, comfort promotion and pain control being the most scored by participants in the study. Head and neck support are needed because of the increased head circumference, because the cervical muscles become fragile and can not support the head;5 thermoregulation, another physiological function pointed out in this research, is related to the transition of the head. Intrauterine environment, and neonates must be adapted to this relatively cold environment; thus, the care related to the control and maintenance of the body temperature of the newborn are essential care for their survival.18

It is through pain that neonatal morbidity and mortality increases, making it difficult to restore health and, possibly, to affect future experiences with pain. It therefore becomes their essential control to ensure human and qualified care, presenting itself as a biological necessity.19 It is added, besides the above, that NBs have social and safety needs, such as skin-to-skin contact with parents, which generates comfort and strengthens the bond of the newborn with their parents or guardians.

Nursing professionals should seek to develop their own Nursing knowledge to systematize and organize their actions and care, developing a complete and systematized care.1 The most common findings of hydrocephalus, irritability, lethargy, vomiting and abnormal and rapid growth of head circumference are confirmed in the RN. Thus, the periodic monitoring of the head perimeter (HP) is essential for suspecting hydrocephalus and after diagnosis for follow-up,20 which was corroborated by the participants of this study.

The change of decubitus is also considered a relevant care for the neonate with hydrocephalus, since it is a simple and preventive measure that avoids the development of skin lesions caused by the decrease of the blood flow. Comfort is provided by repositioning and repositioning performed every two hours in bedridden patients, avoiding tissue lesions.21

Another important nursing intervention that is important in the care of the NB with hydrocephalus is the reduction of their mortality by the control of vital functions, guaranteeing their survival and combining the scientific knowledge and the technical ability for this control.22

There is the elaboration and application of a model for care as a form of technology, since it consists of a method of action for care. In this way, it is possible to associate the model of assisting the patient as a technological process, being able to be characterized as a light-hard technology.23
is possible, for the work in the health area, a meeting of the professional with the patient, where there is opportunity of expression of intentions, exchange of knowledge and interaction.\textsuperscript{17}

It is important to note that neurological functions may be present in neonatal patients, which may vary according to the age and the speed with which hydrocephalus is installed, resulting in loss of neuronal tissue as well as lesions and complications resulting from treatment, and severe cases may cause neuropsychomotor impairment.\textsuperscript{21} In view of this, the importance of neurological function and neurological impairment.

The monitoring and control of the water balance as a fundamental care for the NB with hydrocephalus in this study was also pointed out, as the body exchanges liquids with the external environment and between the different compartments of the body, thus, the fluid intake is balance by eliminating them, avoiding the increase or decrease of the amount of liquid in the body. Proper recording of ingestion and elimination is important for patient assessment and for therapeutic and care decision making. It is necessary, therefore, the professional nurse to watch for the results, to interfere and to communicate to the doctor, observing the signs of water retention or dehydration.\textsuperscript{24}

The intracranial hypertension with noncommunicating acute hydrocephalus is generated by the failure of the balance between the production and the absorption of CSF, and there is an excess of fluid in the parts of the brain. In this condition, the insertion of a drainage catheter for CSF shift is required for the decompression and reduction of intracranial hypertension, which allows instillation of medications and continuous monitoring of intracranial pressure.\textsuperscript{25}

The consequences of hydrocephalus from aesthetics to neuropsychomotor functions can be minimized by early diagnosis and surgery, and nurses mediate the relationship between the production of knowledge in Nursing and its use, not only to better assist the patient, but mainly to provide the quality of life. In this way, the nurse professional must assume the responsibility for the pre- and postoperative care.\textsuperscript{7}

It was identified, in this research, that the main care performed in the Nursing care in the postoperative period of these patients were the monitoring of the water balance, administration of analgesics if necessary, observation of signs of localized infection, support for the neck and daily HP check.

It is noted that HP verification is an intervention that should be performed daily to observe any abnormal increase in the circumference of the cranium of these infants, by nurses, as well as by parents after discharge, to evaluate the functioning of the catheter, in addition to maintaining head supported to avoid extra strain on the neck as a form of Nursing intervention.\textsuperscript{26}

It is also reported that infection, considered one of the most common complications among patients submitted to shunt implantation, has high morbidity and mortality, and about one third of the children are infected, more frequently caused by Staphylococcus aureus.\textsuperscript{3} It is suggested that care should not only occur in the neuroanesthetic and neurosurgical processes, but, in an integral way, always taking into account the prolonged hospitalization time and the significant number of complications, and there is a need to target Nursing care to the neurosurgical patient, since these treatments may generate some nursing problems, such as the appearance of pressure ulcers, neurogenic bladder, risk of infection and acute pain.\textsuperscript{1}

It is described, on the use of pharmacological measures for the control of pain, commonly, that Nursing professionals know the drugs most used in the sectors, as well as the association of sedation and analgesia in own cases as in the postoperative period.\textsuperscript{19}

Some behavioral and non-pharmacological activities of prevention and control of pain by professionals, related to the humanization of the environment, tone of voice, control of lights and noise for the prevention and reduction of pain can be performed. In cases of apparent pain or even after painful procedures, the use of non-nutritive sucking, the use of glucose, and measures of comfort and orientation.\textsuperscript{19}

One should individualize the decision regarding pain relief in the newborn that needs intensive care, but never neglect it. It is necessary to consider the analgesia in the NBs that carry painful diseases or when they need to undergo invasive or painful procedures. Some non-pharmacological measures with proven efficacy and low risk for infants, such as breastfeeding and skin-to-skin contact, especially with parents, can be used.\textsuperscript{2} The attachment to the infant is intimate with the parents, exerting effects in the future on the growth and development of the child, besides creating experiences for the neonate.\textsuperscript{22}
It was evidenced in the results of this research that, in the majority of the cases, the nursing professionals offer family support to the parents of the newborn with hydrocephalus, as well as guidelines to them after the neonatal hospital discharge.

Nursing care should be considered for the relatives of newborns with hydrocephalus since the discovery of the pregnancy, since the parents generate future expectations for the child and understand the need for change in their life, but when they discover some malformation in their child, the manifestation of sadness and family tension, in which the idealized expectations throughout the gestation are undone seeing that their baby has characteristics different from those imagined. A burden of mourning and adaptation is superimposed, as well as the need for learning in regard to the care of the neonate. Thus, the dream of the idealized child is discovered and coexist with hydrocephalus, generating disappointments and feelings of incapacity, guilt and fear of loss.

It is explained that, commonly, when parents are diagnosed with their children, their reaction is shock and fear of possible brain damage, and these reactions can be potentialized with the uncertainties and feelings of helplessness and inability to deal with the life of your child, because it is a permanent condition that has an impact on the family life.

It is suggested that, in this perspective, parents need support and encouragement to adapt to the child and the problems she may encounter. Families for psychological support and community agencies can be referred to orientation.

It is noticed, however, that some health professionals are not willing to develop dialogue with the parents or guardians about the need of their newborn children, which causes in the parents the behavior of not knowing how to deal without a direct support of the professionals, making the treatment more difficult and painful for them, since they need support, encouragement and communication between both.

It is inferred that professionals working in the intensive care and intermediate care sectors should be able and willing to alleviate the emotional damage caused to the family due to the health situation of the child, through the humanization of care, not only for the child, but also for the families, in a comprehensive way, offering support, encouragement and participation in care, as well as bringing the family closer to the care and promoting the warmth through the touch between parents and children.

It is believed that the family is part of the care within Nursing, and it is essential to elucidate the meanings present in the confrontation of the child's hydrocephalus situation with the purpose of obtaining elements of implementation for an effective assistance that meets the expectations and needs of the family and the patient.

It is assumed, as a link is not built with the parents, and the Nursing team only focuses on technical care, which leaves aside the various possibilities of collaborating for the well-being and learning of those involved. The family is stressed and distressed and has difficulty knowing how to deal with the sick child when there is no relevant information from the professionals. It is thus essential to provide care for these families, to clarify the doubts and to live with the infant with hydrocephalus.

**CONCLUSION**

It is concluded that NBs with hydrocephalus have unique needs and need integral nursing care aimed at their rehabilitation and survival. In this study, it was proposed to analyze Nursing care for these newborns with hydrocephalus in the NICU and NICU sectors, based on the apprehension of the professionals' vision about the needs of these NBs and, in addition, they were identified weaknesses and potential of nursing care to these patients, according to the objective proposed in this research.

It was verified that the NCS is not always performed by nurses, which is an important indicator to measure the quality of the care, since directed, individualized and integral care makes the difference for the patients.

It is believed that scientific knowledge should be practiced in the care, providing these babies with greater comfort and quality of life, as well as effective and qualified attention to both the parents and the parents.

It should be emphasized that the results of this research can contribute to the implementation of a more humanized and resective assistance to the neonate with hydrocephaly, taking into account the needs and peculiarities of the hydrocephalus, besides providing the professionals’ reflection on their way of caring for these patients.

**REFERENCES**

1. Cestari VRF, Carvalho ZMF, Barbosa IV, Melo EM, Studart RMB. Nursing care to the child with hydrocephalus: an integrative approach.


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