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# Systematization of nursing assistance to a newborn with congenital malformation – Experience report

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Abstract— Objective: to report the experience of applying nursing care systematization to a Newborn with congenital malformation. Methods: This is a descriptive study, like an experience report. The sample selection followed the non-probabilistic criterion, where the participant was included in the study for convenience. The Nursing Care Systematization was applied to a Newborn with indication for cesarean delivery due to premature amniorrexis and polydramnium and presenting congenital malformation mainly in the face region and who was admitted to the Neonatal Intensive Care Unit in a teaching hospital reference in maternal

<u>www.ijaers.com</u> Page | 174

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and child health in the City of Belem-PA/ Brazil. To build this report, if needed-five times: at first, there was a knowledge of the pregnancy story acts I of the mother, the second time, created a care plan, not the third time, were applied the Nursing Diagnostics of the North American Nursing Diagnosis Association International (NANDA-I), in the fourth moment, the Expected Results were demonstrated, finally, in the fifth, the pertinent nursing prescriptions were scored. Results: Patient followed in critical condition, monitored, sedated and under the care of a multidisciplinary team in palliative care because his clinical picture with anomalies incompatible with life after the end of the stage, it was reported that the infant died. Conclusion: The Systematization of Nursing Assistance made it possible to plan the creation of a care plan geared specifically to meet the user's demands, through the listed nursing problems, providing quality in the development of care and user satisfaction.

## I. INTRODUCTION

The nursing process is a scientific method that is designed to take care of in the best way of human being, based on a care individualized and systematized that provides user observation altogether. In this scenario, use the systematization of nursing care as an essential nursing action to strengthen health care (MARINELLI, SILVA, SILVA, 2015).

Good nursing care is provided by the use of SAE; this tool helps organization of services by providing quality in the care management and work organization process to be developed by the nursing team (SILVA, GARANHANI, PERES, 2015).

Thus, nurse faces a great challenge when structuring and implementing their care practice. Perform nursing actions in perspective of maintaining, restoring and promoting quality of life, is influenced by the organization of activities and services to be developed, besides being weakened by a line of fragmented care by a multidisciplinary team heterogeneous with a predominance of curative and medication practices. (SOARES, 2015).

Furthermore, the cost of care for children with malformation and who need special attention to their needs is a process that requires competence and skill on the part of health professionals, especially nurses, as it requires humanized and resolute assistance that guarantees quality and satisfaction. (VEIGA, NUNES & ANDRADE, 2017).

Congenital anomalies are caused by morphological defects that are present at birth and occur by a number of errors in morphogenesis, is characterized by malformations, ruptures, deformations and syndromes. Given

these circumstances, it is essential that nursing care is carried out with quality and provided according to the needs of each individual, regardless of their health-illness condition. (MELO, PACHECO, 2013).

In Brazil, congenital malformations are the second leading cause of neonatal death, with a rate of approximately 22.8% of deaths. Thus, this research is justified given the need to encourage health practices, by all professionals, especially nursing, in humanized care for newborns with malformation. (FONTOURA *et al.* 2018).

The objective of this study is to report the application of the experience of systematization of nursing assistance (SAE) to a Newborn with bad training congenital.

# II. METHODS

This is a descriptive study, with a qualitative approach, an experience report type. The study was carried out through the monitoring and daily volume of a newborn with congenital malformation. The sample selection followed the nonprobabilistic criterion, where the participant was included in the study for convenience. SAE was applied to a newborn with an indication for cesarean delivery due to premature amniorrhexis and polydramnium and presenting congenital malformation mainly in the face region and who was admitted to the neonatal Intensive Care Unit (NICU) in a teaching hospital that is a reference in health maternal and child in the City of Belem-PA / Brazil.

Applied to the SAE clinical nurse the Obstetric Center, along with students from the 9th period of the course Bachelor Nursing a Higher Education Institution who were experiencing supervised in that hospital. The consultation took place on 07/23/2020, shortly after the indication of cesarean delivery of the child's mother.

In order to construct the present report, five specific moments were needed, namely: in the first moment, there

was a knowledge of the history of gestation of the pregnant woman by the academics, presented by the nurse in the hospital's ward sector. The interns had the opportunity to carry out the client's admission to the infirmary and get to know her background in depth and, then, plan and systematize the nursing care to the client.

Then, in the second moment given the indication of transfer to the Surgical Center, where the delivery took place in a cesarean section, the students were able, together with the whole team and mainly with the help of the nurse, to build a care plan that was carried out by providing transoperative care to better serve the mother and child binomial.

In the third moment, the Nursing Diagnostics of the North American Nursing Diagnosis Association International (NANDA-I) were applied. In the fourth moment, the expected results were designed according to the demand of each problem found during the expenses of nursing care. Finally, in the fifth moment, persistent nursing interventions and prescriptions were scored.

# III. RESULTS

It is reported that all available and possible nursing care was carried out, with a view to providing students with learning and showing interest, respect and commitment to the Systematization of Nursing Care for the newborn. The user's SAE is then reported: newborn, born on 7/25/2020, cesarean delivery with cephalic presentation, 39 weeks, weighing 2,888 grams and APGAR 9/9 at birth, 39-week, height of 49 centimeters, head circumference of 33 centimeters, thoracic of 30 centimeters and abdominal of 31 centimeters. He was admitted to the NICU due to the diagnostic impression that, in addition to the congenital malformation, he had neonatal seizure and the Infection Related to Late Health Care by Klebsiella pneumoniae bacteria found by blood culture and Pressure Injury in the Occipital region. Waiting for the Karyotype result to determine the malformation.

# First evolution of Nursing:

Lactente Serious infant with congenital malformation, Ramsay 6. On physical examination: clean and intact scalp, with pressure injury in the occipital region. Clean and integrated nostrils and ear. Absence from the eye. Asymmetrical face, pale oral mucosa, cleft palate. Intubated in mechanical ventilation. Ventilatory mode: Invasive mechanical ventilation: Inspiratory pressure:18, Positive and expiratory pressure: 0.6 centimeters/h2O, Inspiratory oxygen fraction: 50% progressive respiratory

fraction: 35 repetitions per minute, Partial Respiratory rate, Peripheral Oxygen saturation: 91%. Symmetrical chest. Lung auscultation: vesicular murmurs present and snoring. Cardiac Ausculta: 2 – stroke normophonetic heart sound with improved murmur, heart rate: 114 beats per minute. Temperature: 37.4 Celsius, satisfactory peripheral perfusion. Receiving infusions for left axillary phlebotomy: human albumin, Lasix, caloric intake 8.6 milliliters/hour. Makes use of ciprofloxacin, phenobarbital. Clean and well fixed dressing Central venous access. Flaccid and normotensive abdomen. Receiving enteral diet by orogastric infusion pump of 15 milliliters in 3/3 hours, clean and jaundiced skin. Lower limbs with edema. Spontaneous diaper elimination functions. Follow the care of the team.

# **Second evolution of Nursing:**

Severe labile infant, intubated in support of Invasive mechanical ventilation, maintaining ventilatory parameters. Hipoactive, hyporeactive, pale, acyanotic, letified perfusion, kept in heated isolette, protective nest, continuous parameterization of vital signs. Tolerating an orogastric tube diet, with a volume of 14 milliliters. Flaccid and normotensive abdomen. Receives caloric intake for functioning left axillary phlebotomy. Using oxacillin and piperacillin. Occlusive dressing at the former CLD site. Change dressing in the occipital region installed CGF hydrocolloid plate, next change on 07/16 or before saturation. Intensify air change in decubitus.

# IV. DISCUSSION

Were applied for each nursing problem found A Nursing Diagnosis, calling Standard Affected and the Basic Human the newborn need, as well as its SAE with results Expected and Nursing Interventions. There is, then, the following Assistance Plan.

1st EP: Orotracheal intubation. NHB: Oxygenation. DE: Aspiration risk, related to mechanical ventilation. RE: it is expected to avoid accumulation of secretions in the airways. IE: Monitor level of consciousness, cough reflex, nausea and ability to swallow. Keep vacuum available. Perform aspiration once every shift or when necessary, using aseptic measures.

2nd EP: Invasive Devices. NHB: Skin integrity Mucosa. DE: Risk of infection. Related to the presence of Invasive devices. Results Expected: It is expected that newborn does not develop Infections will predict levels. Nursing interventions: Assess condition at the catheter incision site every 6

hours. Monitor signs and symptoms of infection (edema, hyperemia, heat, flushing, hyperthermia). Hand

wash with alcoholic gel before and after each procedure. Perform disinfection with 70% alcohol in intravenous devices (equipment, burette), before administering medications. Apply the fever scale and when administering medications.

3rd PE: Orogastrica probe. NHB: Nutrition. A: Standard ineffective infant feeding, associated with the m l congenital malformation and characterized by inability to coordinate sucking. Results Expected: It is expected to maintain the appropriate Nutritional parameters. Nursing Interventions: Monitor and evaluate the presence of intestinal noises every four hours or as needed. Monitor the hydro electrolytic condition every six hours; monitor the change in height and weight every 48 hours; monitor the presence of edema or dehydration.

4th EP: Pressure Injury. NHB: Security / protection. DE: Impaired skin integrity, characterized by Pressure Injury, related to the long stay in bed. Results Expected: Expected adequate wound healing in at fourteen days and prevent infection. Nursing interventions: Perform adequate dressing; Observe signs and symptoms related to infection; perform decubitus changes every three hours and use a pyramidal mattress while in bed.

5th EP: Jaundice. NHB: Nutrition. DE: Neonatal hyperbilirru binemia characterized by related abnormal blood profile Bacterial infection. RE: expected to ensure the safety of the infant IMP therapy I emended in order to prevent possible complications. Nursing interventions: Perform phototherapy on the newborn. Check the light intensity daily. Monitor vital signs according to the protocol or whenever necessary. Change the newborn's position every four hours or according to the institution's protocol. Monitor serum bilirubin levels according to the institution's protocol or at the request of the responsible professional.

6th EP: Neurological damage. NHB: Nutrition. Results Expected: Ineffective infant feeding pattern characterized Inability to coordinate sucking, swallowing and breathing R related to congenital malformation. Nursing interventions: Raise the decubitus position by 30°; observe tolerance to the offered diet.

The patient remained in critical condition, monitored, sedated and under the care of the multidisciplinary team in palliative care, as his clinical condition with anomalies were incompatible with life, after the end of the internship, he was informed that the infant died.

## V. CONCLUSION

The Nursing Care Systematization made it possible to plan and create a care plan aimed specifically at meeting the user's demands, through the listed nursing problems, providing quality in the development of care and user satisfaction.

This study raises reflections on the importance of SAE in the care of pediatric patients who live with congenital malformation, since these anomalies require differentiated care, with specific care, often at the hospital level, in which nursing care it's essential.

For this to happen, it is necessary to exercise theoretical bases that support nursing actions in their practice, supported by nursing theories, humanization, excellence and indissociation between the theory and practice of care, which have as their starting point the Nursing Process to elaborate the SAE giving quality to the assistance.

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