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CARE ACTIONS AT MATERNITY WARDSFOR LATE PRETERMS

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ABSTRACT

Objective: To reflect about care actions toward late preterms and their mothers, based on good practices for newborn care. **Methods**: Reflexive-theoretical essay that discusses care actions in the first 24 hours of life of late preterms and the connection of said actions with good practices for newborn care. **Results**: It is worth highlighting the importance of care in the first hour of life of late preterms, especially stimulation through skin-to-skin contact, breastfeeding and thermoregulation. **Further Considerations**: Informing families about late prematurity is an aspect of great relevance to these newborns' health, along with including assistance-oriented actions to be taken by several professionals in view of the specific care needs of late preterms.

Keywords: Breast feeding. Preterm Newborn. Perinatal Care. Neonatal Nursing. Maternity Wards.

INTRODUCTION

Late preterm birth is a risk condition, given the metabolic and neurological immaturity of preterm infants. Late preterms are newborns with gestational age between 34 and 36 full weeks[1]. Late preterm births account for 3/4 of premature births[2]. In the United States, between 2014 and 2016, late prematurity was the subgroup of births that most increased, considering prematurity as a whole, representing 7% of all births in said country[3].

Obstetric causes that determine the birth of late preterms include high rates of labor induction, elective c-sections, assisted reproduction technology and increase of multiple gestations, advanced maternal age and pathologies prior to gestations[4]. In this sense, more interventions during labor and birth may cause the delivery of late preterms.

Researchers have been reporting significant risks as to morbidity and mortality for late preterms and indicate that mortality is three to six times higher in late preterms compared to term newborns[2].

Late preterms may need to be hospitalized right after birth due to respiratory disorders, hypoglycemia, eating problems caused by sucking difficulties, in addition to bradycardia, jaundice, thermal instability and sepsis, leading to need for intensive neonatal care and, short-term, for hospital readmissions[4-6]. Long-term, the literature reports that these newborns may have their development affected, as well as difficulties at pre-school and school stages, which may further impact their professional development in adulthood[4].

This reflection is supported by the results of a research on breastfeeding in late prematurity[7] conducted through a prospective cohort study that followed up infants from birth to their first month of life. Some pieces of data referring to birth conditions at the delivery room and relating to the characterization of late preterms in the investigation called the researchers' attention. Thus, the objective of this essay was to reflect about care actions targeting these children and their mothers, based on good practices for newborn care, which comprehend care and breastfeeding in the first hour of life and skin-to-skin contact starting at the delivery room[8].

METHOD

This is a theoretical, reflexive essay[9] stemmed from studies and debates around the development of the doctoral research titled "Factors Associated with Exclusive Breastfeeding in the First Month of Life of Late Preterms" [*Fatores Associados ao Aleitamento Materno Exclusivo no Primeiro Mês de Vida de Prematuros Tardios*], of the Federal University of Rio Grande do Sul. The doctoral thesis that resulted from the research was presented in

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2018. The proposed reflections were based on the international and national literature covering the theme, in addition to analysis of the research data and the authors' own experience. The material used for founding this reflection was the good practices guide for newborn care of the Brazilian Health Ministry[8].

The explanations and reflections to compose this paper will be presented in the form of guiding axes on the theme, resulting from interpretations of the international literature around the topic, given the scarce national literature, complemented by the authors' reflexive impressions. These interpretations were guided by the comprehension of the theme and geared toward reflection upon it.

Moreover, since there was no direct/applied research interaction, the study did not need to be subjected to ethical proceedings.

The First Hour of Life

The cohort study conducted in 2017 identified that 82.7% of newborns presented Apgar scores equal to or higher than 7 in the first minute of life, indicating good vitality at birth. However, in the first hour of life, only 54% of those newborns remained in skin-to-skin contact with their mothers and for no longer than thirty minutes[7]. These results show the difficulty that professionals have in establishing adequate care actions in the first hour of life and valuing skin-to-skin contact.

Although some late preterms may require immediate referral to intensive neonatal care, a higher percentage of these babies are considered healthy at birth and do not present respiratory issues, infections or need for stomach tubes so they can be fed[10]. Thus, taking the first care actions along with the mother is a way of keeping these newborns' temperature and metabolism regulated.

The first hour of life is oftentimes called the golden hour, or the sacred hour, given its importance to the newborn's life[11]. It is a crucial moment within the six hours that comprehend the neonatal transition period, in which there is an adaptation from the fetal to the neonatal or extrauterine environment. A series of physiological events in this first hour will demand responses from the newborn's respiratory, cardiovascular and metabolic systems, as well as temperature regulation, which will show their ability or lack thereof to adapt to the extrauterine life, and their independence from the mother and the placenta[12].

Authors recommend drying and keeping the newborn warm during this first hour. Drying in warmers contributes to a quicker temperature regulation[11,12], which, combined with an adequate temperature in the delivery room, between 23 and 26 Celsius degrees[13], helps keep the newborn warm. To dry, late preterms can be put into skin-to-skin contact on their mothers' thorax. After drying, their heads must be covered with a cap in order to prevent their bodies from cooling, given its large extension area. When newborns cool down, their glucose and oxygen consumption rises, which thus contributes to hypoglycemia and respiratory dysfunction[10,12,14].

Skin-to-Skin Contact

Skin-to-skin contact between mother and baby at birth, as of the very first minutes of life, must be maintained during the newborn's first hour of life at least. This stabilizes respiration and oxygenation, raises glucose levels, reduces stress hormones, regulates blood pressure, lessens crying and the alert state, so the newborn stays calmer. Skin-to-skin contact during the whole first hour of life provides newborns with a more progressive and gentle adaptation, consequently causing them to be more interested and adapted to start being breastfed. In addition to these events, skin-to-skin contact promotes thermal synchrony, in which the mother's thorax may warm up or cool down according to the newborn's thermal needs, a fact evidenced in kangaroo care[11].

The benefits of skin-to-skin contact are important to the mother-baby bond, which promotes facial recognition, maternal relaxation, and allows the mother to massage the newborn through touch, favoring oxytocin production; some authors highlight the long-term effects of skin-to-skin contact in the first hour of life on children and adolescents[11,12].

It is recommended that skin-to-skin contact be established by parents, that is, by the fathers

and mothers of late preterms, regardless of the infants' weight at birth, as a way of reaching earlier the stability of their vital parameters in the first hours of life, especially thermal stability, and that this skin-to-skin contact be extended for as long as the late preterm stays in the maternity ward[10].

Breastfeeding

Another important aspect is little sucking stimulation in the late preterm's first hour of life. A cohort study[7] that analyzed breastfeeding rates for late preterms reported 23.7% for sucking in the first hour of life. This percentage could be higher, considering that the research was conducted at a maternity hospital that holds the title of Children-Friendly Hospital. Although most late preterms present difficulties with the suck-breath-swallow coordination, putting the newborn in contact with the mother's nipples helps the baby recognize her through smell, besides the fact that the massage itself or the newborn's hands touching the mother's nipples stimulates breastfeeding by producing oxytocin[11]. Premature birth at this age compromises the suck-breath-swallow coordination, hindering the beginning of breastfeeding and its maintenance. Researchers state that the benefits of breastfeeding on prematurity go beyond weight gain. Maternal milk is a valuable indicator for the neonatal growth of a child born prematurely[6].

The immaturity of late preterms, especially as to sucking, in combination with somnolence, causes delays in lactogenesis and an insufficient ingestion of maternal milk, which may lead to hypoglycemia, insufficient weight gain, dehydration, jaundice and hospitalization, as short-term consequences. Hypoglycemia tendency in late prematurity seems to stem from a delay in the activity of glucose-6-phosphate, an enzyme that participates in the final stage of glycogenesis and glycogenolysis, coupled with sucking difficulties and consequent insufficient ingestion of maternal milk[16].

Thus, there is recommendation for uninterrupted breastfeeding stimulation through skin-to-skin contact, breastfeeding the newborn 10 to 12 times a day, instructing mothers as to the first breastfeeding and evaluating another breastfeeding daily while mother and late preterm stay in the maternity ward, and providing as dairy complement, if necessary, the milk of the late preterm's mother[2,16]. During the daily breastfeeding evaluation, the professional must be attentive to the suck-breath-swallow coordination, milk ingestion, and breast emptying, in addition to solving doubts and encouraging mothers and fathers faced with the challenge of breastfeeding their late preterm newborns[10,16].

It is imperative that mothers learn how to pump their breasts, whether manually or using electric devices, still in the maternity ward, since the emptying of the breasts is determinant to milk production and breastfeeding maintenance through the days and weeks following birth. This recommendation is so important that authors consider that mothers of late preterms should only be discharged from the maternity ward after learning how to pump[2,15].

Information to Parents about Late Prematurity

Parents of late preterms are frequently not informed about the characteristics of late preterm birth and its implications to the care of their children[2,10].

Parents need to know the prematurity conditions of their babies soon in the delivery room. For them to properly care for their late preterms, parents need to understand that their newborns were delivered before the thirty-seven weeks of gestation and that this anticipation hindered the completion of their growth and development. They also need to know that their infants have characteristics that lead to difficulties related to body temperature, sucking, somnolence and predisposition to jaundice and respiratory disorders caused by anticipated birth. Access to this knowledge by parents is of paramount importance for an adequate follow-up of late preterms after discharge from the maternity ward and to prevent future morbidities. Likewise, parents must be included in newborn care in the maternity ward [2,10,17].

FINAL CONSIDERATIONS

It is necessary to implement specific routines

for late preterms, allowing for a longer hospitalization time, until the mother is prepared to take, on her own, the actions that late prematurity conditions require, and until the newborn has clinical conditions to be discharged. Other helping measures would be adopting the Kangaroo Method, revising blood sugar parameters to introduce dairy formula, greater sucking stimulation through non-nutritive sucking, as well as specific orientations to the mothers and families of these newborns.

Still concerning assistance-oriented practices, healthcare professionals, especially those in the nursing field, must be qualified to meet the specific demands and needs of late preterms and their families. When it comes to breastfeeding, the milk of the mother's baby must be offered first, before feeding the newborn a dairy formula, until breastfeeding is established.

Other investigations are necessary, especially in Brazil, to approach breastfeeding for this population, which presents unique characteristics compared to other groups of newborns.

AÇÕES DE CUIDADO NA MATERNIDADE PARA PREMATUROS TARDIOS

RESUMO

Objetivo: Refletir acerca das ações de cuidados aos prematuros tardios e suas mães apoiado nas boas práticas para a atenção ao recém-nascido. **Métodos**: Ensaio teórico-reflexivo, o qual discute as ações de cuidado nas primeiras 24 horas de vida dos prematuros tardios e sua relação com as boas práticas para a atenção ao recém-nascido.**Resultados**: Destaca-se a importância do cuidado na primeira hora de vida de prematuros tardios, especialmente o estímulo ao contato pelea pele e à amamentação, e a termorregulação. **Considerações Finais:** Fornecer informação à família sobre a prematuridade tardia é um dos aspectos de grande relevância no cuidado a estes recém-nascidos e incluir ações assistenciais de diversos profissionais frente à necessidade dos cuidados aos prematuros tardios.

Palavras-chave: Aleitamento materno. Recém-Nascido Prematuro. Assistência Perinatal. Enfermagem Neonatal. Maternidades.

ACCIONES DE CUIDADO EN LA MATERNIDAD PARA PREMATUROS TARDÍOS

RESUMEN

Objetivo: reflexionar acerca de las acciones de cuidados a los prematuros tardíos y sus madres, basado en las buenas prácticas para la atención al recién nacido. **Métodos**: ensayo teórico-reflexivo, el que discute las acciones de cuidado en las primeras 24 horas de vida de los prematuros tardíos y su relación con las buenas prácticas para la atención al recién nacido. **Resultados**: se señala la importancia del cuidado en la primera hora de vida de prematuros tardíos, especialmente la estimulación al contacto piel a piel y a la lactancia, y la termorregulación. **Consideraciones finales:** proveer información a la familia sobre la prematuridad tardía es uno de los aspectos de gran relevancia en el cuidado a estos recién nacidos e incluir acciones asistenciales de diversos profesionales frente a la necesidad de los cuidados a los prematuros tardíos.

Palabras clave: Lactancia materna. Recién nacido prematuro. Atención perinatal. Enfermería neonatal. Maternidades.

REFERENCES

1. Ananth CV, Friedmann AM, Gyamfi-Bannerman C. Epidemiology of moderate preterm, late preterm and early term delivery. Clin Perinatol 2013; 40:601-610. doi: http://dx.doi.org/10.1016/j.clp.2013.07.001.

2. Bennet CF, Galloway C, Grassley JS. Education for WIC Counselors about breastfeeding the late preterm infant. J Nutr Educ Behav .2018; 50(2):198-202. doi: http://dx.doi.org/10.1016/j.jneb.2017.05.364.

3. United States of America. Departament of Health and Human Services.Centers for Disease Control and Prevention. National Center for Health Statistics. NVSS- National Vital Statistics System. Births: Provisional data for 2016. 2017, Report n.2, june 2017; 1-21.

4. Garcia-Reymundo M, Demestre X, Calvo MJ, Ginovart G, Jimenez A, Hurtado JA. Prematuro tardio en Espana: experiência del grupo SEN34-36. Pedriatr 2018, 88(5):246-252. doi: http://dx.doi.org/10.1016/j.anpedi.2017.05.006.

5. Celik IH, Demirel G, Canpolat FE, Dilmen U. A common problem for neonatal care units: late preterms infants, a prospective study with term controls in a large perinatal center. Journal of Maternal-fetal & Neonatal Medicine, 2013; 26(5):459-462. doi: http://dx.doi.org/10.3109/14767058.2012.735994.

6. Moudi Z, Molashahi B, Imani M, Ansari H. Effects of a feasible supportive care program on breastfeeding behaviors and neonatal outcomes among the late preterm newborns in the south east of Iran. J Neonatal Nurs, 2017; 23(5):238-241. doi: http://dx.doi.org/10.1016/j.jnn.2017.02.008.

7. Teles, JM. Fatores Associados ao Aleitamento Materno Exclusivo no Primeiro Mês de Vida de Prematuros Tardios. Tese (Doutorado). Universidade Federal do Rio Grande do Sul, Escola de Enfermagem, Porto Alegre, BR-RS, 2018, 82f.

8. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Atenção à saúde do recém-nascido: guia para os profissionais de saúde / Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Ações Programáticas Estratégicas. – 2. ed. atual. – Brasília: Ministério da Saúde, 2014. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/atencao_saude_recem_nascido_v1.pdf.

9. Oliveira JLC, Toso BRGO, Matsuda LM. Advanced practices for care management: reflections on the Brazilian Nursing. Rev Bras Enferm [Internet]. 2018; 71(4):2060-5. doi: http://dx.doi.org/10.1590/0034-7167-2017-0115.

10. Nyqvist KH, Rosenblad A, Volgsten H, Funkquist EL, Mattsson E. Early skin-to-skin contact between healthy late preterm infants and their parents: an observational cohort study. PeerJ. 2017; 5:e394. doi: http://dx.doi.org/10.7717/peerj.3949.

11. Phillips R. The sacred hour: uninterrupted skin-to-skin contact immediately after birth. Newborn Infant Nurs Rev, 2013; 13(2):67-72. doi: http://dx.doi.org/10.1053/j.nainr.2013.04.001.

12. Wright K, Byers JF. Factors related to birth transition success of late preterm infants. Newborn Infant Nurs Rev, 2012; 12(2):97-105. doi: http://dx.doi.org/10.1053/j.nainr.2012.03.009.

13. Branco MF,Guinsburg R. Reanimação do recém-nascido≥ 34 semanas em sala de parto: Diretrizes 2016 da Sociedade Brasileira de Pediatria, 26 de janeiro de 2016. Sociedade Brasileira de Pediatria [internet]. Disponível em: www.sbp.com.br/reanimacao.

14. Pedron CD; Teles JM; Bonilha ALL. Prematuridade tardia: riscos associados a morbidade e mortalidade. In: Programa de Atualização em Enfermagem: Saúde Materna e Neonatal: Ciclo 9. Porto Alegre: Art Med Panamericana; 2018, p.115-37.

15. Morgan JC, Boyle EM. The late preterm infant. Paediatrics and Child Health. 2017; 28(1):13-17. doi: http://dx.doi.org/10.1016/j.paed.2017.10.003.

16. HurtadoSuazo JA, García Reymundo M, Calvo Aguilar MJ, Ginovart Galiana G, Jiménez Moya A, Trincado Aguinagalde MJ, et al. Recomendaciones para el manejo perinatal y seguimento del recién nacido prematuro tardio. Anales de Pediatría. 2014; 81(5):327.e1-327.e7. doi: http://dx.doi.org/10.1016/j.anpedi.2014.06.006.

17. Tronco CS, Rodrigues AP, Paula CC, Souza IEO, Padoin SMM. The significance of a newborn stay in the ICU after the mother's discharge: a heideggerian phenomenological study. Cienc Cuid Saude. 2019;18(2):e45015. doi: http://dx.doi.org/10.4025/cienccuidsaude.v18i3.45015.

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