# Nursing performance in planning assistance to the newborn with congenital anomalies

RESUMO | Objetivo: destacar a importância da atuação da enfermagem no planejamento da assistência ao recém-nascido de alto risco com anomalia congênita. Método: Revisão integrativa formada por conteúdos analisados e pesquisados na base de dados SciELO e na plataforma BVS, utilizando os descritores "recém-nascido"; "anomalias congênitas"; "assistência de enfermagem". Como critérios de inclusão foram usados idiomas inglês e português e recorte temporal de 10 anos, foram excluídos estudos disponíveis apenas em resumos e temática insatisfatória à pesquisa. Os dados foram categorizados e analisados por pares para a construção da discussão. Resultados: foram encontrados 67 estudos, destes 10 foram incluídos para a elaboração da pesquisa. Conclusão: A assistência de enfermagem ao recém-nascido de alto risco requer estudo, capacitação e atualização do conhecimento, a maior ferramenta que a enfermagem possui é a SAE, que deve ser realizada por meio de consultas criteriosas primordiais para as condições de detecção precoce de anomalias congênitas em recém-nascidos.

Descritores: Recém-nascido; Anomalias congênitas; Assistência de Enfermagem

ABSTRACT | Objective: to highlight the importance of the role of nursing in planning care for high-risk newborns with congenital anomalies. Method: Integrative review consisting of content analyzed and researched in the SciELO database and in the VHL platform, using the descriptors "newborn"; "congenital anomalies"; "nursing assistance". As inclusion criteria, English and Portuguese language and a 10-year time frame were used, studies available only in abstracts and unsatisfactory research topic were excluded. Data were categorized and analyzed by pairs for the construction of the discussion. Results: 67 studies were found, of which 10 were included for the development of the research. Conclusion: Nursing care for high-risk newborns requires study, training and updating of knowledge, the greatest tool that nursing has is the NCS, which must be performed through careful consultations, essential for the conditions of early detection of congenital anomalies in newborns.

**Keywords:** Newborn; Congenital anomalies; Nursing Assistance

RESUMEN | Objetivo: destacar la importancia del papel de la enfermería en la planificación de la atención al recién nacido de alto riesgo con anomalías congénitas. Método: Revisión integrativa consistente en contenidos analizados e investigados en la base de datos SciELO y en la plataforma BVS, utilizando los descriptores "recién nacido"; "anomalías congénitas"; "Asistencia de enfermería". Como se utilizaron los criterios de inclusión, idioma inglés y portugués y un período de tiempo de 10 años, se excluyeron los estudios disponibles solo en resúmenes y temas de investigación insatisfactorios. Los datos fueron categorizados y analizados por pares para la construcción de la discusión. Resultados: Se encontraron 67 estudios, de los cuales 10 fueron incluidos para la elaboración de la investigación. Conclusión: La atención de enfermería al recién nacido de alto riesgo requiere de estudio, formación y actualización de conocimientos, la mayor herramienta con la que cuenta la enfermería es la ENC, la cual debe realizarse mediante consultas cuidadosas, imprescindibles para las condiciones de detección precoz de anomalías congénitas en el recién nacido.

Palabras claves: Recién nacido; Anomalías congénitas; Asistencia de enfermería

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#### INTRODUCTION

he World Health Organization (WHO) warns that Brazil is in 2nd place of childhood cause of death for congenital malformations. These anomalies can appear at any time during pregnancy and compromise healthy development, enabling the termination of pregnancy. 1 Thanks to scientific technological development in the area of health sciences, there have been considerable improvements in Neonatal Intensive Care Units (NICUs), for the survival and healthy development of newborns born with congenital anomalies. In this perspective, the knowledge of nurses who provide

care to newborns with congenital anomalies allows them specific skills in the area, such as: "clinical experience, competence and responsibility with care". <sup>2</sup> Because congenital anomalies can debilitate the fetus' organism for abnormal development and one of the causes is prematurity of birth resulting in low birth weight (LBW), but early detection of problems arising from congenital anomalies and performing exams through the collection of amniotic fluid. <sup>3</sup>

Children born with congenital anomalies must receive comprehensive care at health services. Therefore, the availability of adequate conditions for the steps from diagnosis to treatment are essential for the child and his/her family. Nursing must be surrounded by scientific and technical knowledge, with the ability to offer qualified and humanized care because congenital anomalies present multifaceted clinical signs and symptoms that require cooperative actions from the health team to improve their quality of life and their families. 4,5,6,7

The nursing process through nursing care planning becomes essential for the implementation of actions that enable qualified care, allowing care for newborns with congenital abnormalities, with a focus on identifying problems. Thus, it improves the newborn's health and still provides full continuity of care. 8 In order to mitigate the damage caused by the presence of congenital anomalies and enhance nursing actions and knowledge regarding the disease, the research answered the question "how the nursing team works in the planning of care for high-risk newborns with congenital anomalies?". Thus, the objective was to highlight the importance of the role of nursing in planning care for high-risk newborns with congenital anomalies.

#### METHOD

This is an integrative literature re-



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view, which first had the choice of studies made available on online platforms. The searches were carried out in the Scientific Electronic Library Online (SciELO) database and in the Virtual Health Library (VHL) platform, through the Health Science Descriptors (DeCS): newborn, congenital anomalies, nursing care with the use of the Booleans "or" and "and" in free joining of the descriptors in a group, or two by two, resulting in the content that enabled the construction of this study. The selection of studies was carried out from July to October 2020, considering Portuguese and English as a 10-year time frame. As exclusion criteria were the articles presenting only abstracts, not providing the full text and the research topic being unsatisfactory. The evaluation of the studies took place first by the titles and abstracts which, after being read, resulted in 67 studies, of which, after reading the method, 10 remained, which were read in full and included in the research. Data were then analyzed by pairs, following the Ursi method for their categorization and discussion.

#### **RESULTS**

Through the reviews, the characterization of the results was obtained according to the synthesis presented in Table 1.

## DISCUSSION

Congenital malformations in the past led to the death of countless children and newborns, <sup>9</sup> therefore, regardless of the type of anomaly, early diagnosis and treatment are important for the prognosis. <sup>2</sup> As a result evidenced by the study by Moreira et. al. (2004), high-risk newborns need immediate care, but their effectiveness depends on nursing knowledge and training. <sup>3</sup> Nursing makes up the majority of health professionals and, as they are responsible for providing quality care throu-



Quadro 01. Representação dos artigos incluídos para o estudo				
N°	Title / Year	Author (s) / Journal	Nursing Actions	Conclusion
01	The high-risk newborn: theory and practice of care	Maria Elisabeth Lopes Moreira et al. / SciELO		• The high-risk newborn requires immediate care. Requires nursing knowledge and training
02	Congenital diaphrag- matic hernia	Maria Elisabeth Lopes Moreira et al (Org.) - Jen-Tien Wung / SciELO	⋈ Nursing actions are configured in the prenatal period so that there can be means of ultrasound examinations and early detection of HDC, ensuring the health of mothers and newborns.	CDH can lead to death if there is no qualified care for the newborn born with this congenital anomaly.
03	Gastrointestinal Tract Atresia: assessment by imaging methods	Sizenildo da Silva Figueirêdo et al. / Revista Brasileira	☑ It is nursing that can alert pregnant women about the importance of consultations, referring them to exams and to the obstetrician to ensu- re the full development of the pregnancy.	• Intestinal atresia is part of the Gastrointestinal Tract Atresia group. Imaging exams such as ultrasounds are important.
04	Caregiving practices that favor comprehen- sive care for high-risk newborns: systematic review / 2010	Elysangela Dittz Duarte; Roseni Rosângela de Sena; Tatiana Silva Tavares / Rev Tavares / Rev. Eletr. Enf. [Internet].		• The care provided to high-risk neonates must be carried out holistically, favoring the practice of humanization.
05	The care of newborns with congenital anoma- lies: coping strategies for nurses / 2012	Micheli Marinho Melo; Sandra Teixeira de Araújo Pacheco / Revista Pesq.: Cuid. Fundam.	☑It is important to evaluate the team that provides first care to high-risk newborns and to develop ways of integrating this group to provide improvements in qualified care.	• The tools that nurses can use in the treatment of newborns with congenital anomalies are the NCS.
06	Newborn checklist: main nursing diag- noses according to complications and their susceptibility in the neonatal / 2017	Iel Marciano de Moraes Filho et al. / Revista de Divulga- ção científica Sena Aires — REVISA	☑ Nursing needs to combine the technical scientific knowledge that advances "daily" to the practices that high-risk neonates need.	• There are challenges to be faced by nurses who work in the NICU on a daily basis, if training is necessary.
07	The malformed newborn and nursing / 2017	Cristiane Duarte Bar- bosa; Fernando Porto / Jornal de Dados	☑ Nursing can promote care favorable to the care of high-risk newborns and parents, a relevant part of this set.	• The care of nursing towards newborns with congenital anomalies must be exercised with technical knowledge combined with the humanization of this practice.
08	Management of omphalocele and gastroschisis in the newborn / 2018	Fernanda Osorio Alves et al. / BVS	☑ Congenital anomalies require nurses to be prepared to receive pregnant women in the face of tests that can detect each pathology early and proceed to promote health.	Omphalocele and gastroschisis require that the neonate who has developed any of these conditions is treated immediately, with in-depth knowledge of each condition.
09	Nursing in the family context in the pre- vention of congenital anomalies: integrative review / 2019	Ana Paula Moreira Brito et al. / BVS	☑The work of nursing during the prenatal period is of great importance for the early detection of congenital anomalies in the fetus, helping the family to understand the needs of the newborn.	• Serving not only the newborn, but the family needs support to understand the baby's needs and be encouraged to proceed positively.

Esophageal atresia in a 10 newborn: a case report / 2020

Maila dos Santos Fernandes et al. / Brazilian Journal of Development

☑ Nursing actions can be very useful in the period of prenatal consultations, detecting the congenital anomaly at an early stage.

• Esophageal atresia can have complications. The NICU must be equipped and nursing professionals with knowledge to care for the newborn.

Source: Elaborated by the authors (2020).

gh the Systematization of Nursing Care (SNC), they must have ongoing training and be offered by the health service during their working hours. Working conditions, the environment where nursing provides care are important because qualified care prevents deaths from congenital anomalies. 3

Thus, the need for knowledge of the care process is highlighted, and that from the first results of clinical and diagnostic tests there is monitoring by the nursing and health teams, enabling the application of the SAE with the pregnant woman with the necessary care, in the pregnancy, childbirth and puerperium through nursing consultations, 10 in which, in order to perform a screening with criteria, the nurse can request requests for exams such as ultrasonography according to the recommendations of the Federal Council of Nursing - COFEN - Resolution No. 627/2020, which present the competence of nursing in the care provided. 11

In this sense, Figueiredo, et. al. (2005) emphasizes the importance of imaging tests for the diagnosis of intestinal atresia, which may be present in newborns with congenital anomalies, demonstrating that the organization of the service by the management and health teams provides for the early diagnosis of congenital anomalies and effective treatment. 12

Knowing about the early diagnosis enables nursing consultations during the gestational period, signaling to the pregnant woman the importance of attending prenatal consultations, 12 in which nursing must attend not only the newborn, but the family, as they need support to understand the baby's needs and must be encouraged to continue positively, always respecting the time and the will of the family nucleus. 13

The work of the nursing team in screening during the pregnancy period can be extremely relevant when monitoring mother and child, allowing for better survival conditions for newborns with congenital anomalies. 14 Nursing consultations are very useful tools and are effective to accompany the pregnancy throughout the process until the puerperium. The number of consultations in triages with nurses, referrals to obstetricians, imaging tests such as ultrasounds and echo, laboratory tests, hospital guidance with NICUs and professionals trained to receive mothers and newborns should be explained to the family. 9

After birth, the health team works together in the delivery room when there is confirmation of the occurrence of congenital anomalies previously. <sup>3</sup> Nursing actions must be started in the first hours of birth, providing a favorable prognosis and nurses are responsible for following the guidelines for the continuous care of the newborn in the NICU. 3;15 It is important to know the functioning of the equipment and the interpretation of the results of the newborn's exams, 16 as there are challenges to be faced by nurses who attend the NICU on a daily basis, requiring training and knowledge to promptly assist the newborn. 17

Another fundamental aspect is the reception of parents and family members, which must be carried out by the nursing staff, clarifying doubts and explaining the steps of treatment. 16 This results in a humanized care that must be provided by the health team, aligned with the same purpose, holistic according to a study by Duarte; Senna; Tavares (2010) who emphasizes that the care provided to high-risk neonates is holistic, favoring care and humanization. 18

Currently, the nursing team has demonstrated its importance to the world with the coronavirus pandemic that causes covid-19, which has resulted in thousands of deaths of affected individuals and, among frontline health professionals, prompt nursing, capacity and humanization remains committed to "caring". This commitment and effort must also be applied to the care of newborns with congenital anomalies using the main tool for care is the NCS.

NCS can be combined with technical-scientific knowledge and practices that are increasingly imbued with humanization. 16 The practice of care allows the creation of more advanced and efficient tools that can help interpret data about the patient and their needs. It is noteworthy that the effectiveness and effectiveness of nursing are one of the results of the application of this process. 19

#### CONCLUSION

Nursing care for high-risk newborns requires study, training and updating of knowledge to unveil care that can result in the promotion of their health. Thus, in the period related to prenatal care, the greatest tool that nursing has is the SAE, which must be carried out through careful and accurate consultations, in order to promote, for the necessary time, pregnancy with routes of a birth in time of development of the fetus, without occurring in the interruption.

# References

- 1 Pinheiro JMF, Tinoco LS, Rocha ASS, Rodrigues MP, Lyra CO, Ferreira MAF. Atenção à criança no período neonatal: avaliação do pacto de redução da mortalidade neonatal no Rio Grande do Norte, Brasil. Ciência & Saúde. Coletiva. 2016; 21(1): 12-25.
- 2 Carmo CMA, Oliveira EM, Pontes KAES, Martins TBB, Cabral TCLG. Procedimentos de enfermagem em UTI Neonatal. In. Moreira MEL, Lopes JMAL, Carvalho M (Org.). O recém-nascido de alto risco: teoria e prática do cuidar. Rio de Janeiro: Editora FIOCRUZ, 2004. 564 p. (Coleção Criança, Mulher e Saúde). Disponível em: <a href="https://static.scielo.org/scielobooks/wcgvd/pdf/mo-">https://static.scielo.org/scielobooks/wcgvd/pdf/mo-</a> reira-9788575412374.pdf>. Acesso em: 28 mai 2020.
- 3 Moreira MEL (Org.) O recém-nascido de alto risco: teoria e prática do cuidar. / Organizado por Maria Elisabeth Lopes Moreira, José Maria de Andrade Lopes e Manoel de Carvalho. Rio de Janeiro: Editora FIOCRUZ, 2004. 564 p. (Coleção Criança, Mulher e Saúde). Disponível em: <a href="https://static.scielo.org/scie-">https://static.scielo.org/scie-</a> lobooks/wcgvd/pdf/moreira-9788575412374.pdf>. Acesso em: 28 mai 2020.
- 4 Toulokian RJ. Diagnosis and treatment of jejunoileal atresia. World J Surg. 1993; 17: 310-317.
- 5 Luquetti DV, Koifman RJ. Qualidade da notificação de anomalias congênitas pelo Sistema de Informações sobre Nascidos Vivos (SINASC): estudo comparativo nos anos 2004 e 2007. Cadernos de Saúde Pública. 2010; 26(9): 1756-1765.
- 6 Reis AT, Santos RS, Mendes TAR. Prevalência de malformações congênitas no município do Rio do Janeiro, Brasil, entre 2000 e 2006. Revista de Enfermagem UERJ. 2011: 19(3): 364-368.
- 7 Nhoncanse GC, Melo DG. Confiabilidade da Declaração de Nascido Vivo como fonte de informação sobre os defeitos congênitos no Município de São Carlos, São Paulo, Brasil. Ciência e Saúde Coletiva. 2012; 17(4): 955-963.
- 8 Miranda AM, Cunha DIB, Gomes SMF. A influência da tecnologia na sobrevivência do recém-nascido prematuro extremo de muito baixo peso: revisão integrativa. remE - Revista Mineira de Enfermagem. 2010; 14(3): 435-442.
- 9 Barbosa CD, Porto F. O recém-nascido malformado e os cuidados de enfermagem. [Internet]. Rio de Janeiro (BR). 2017. [Online]. Disponível em: < https:// journaldedados files wordpress.com/2017/05/o-recc3a9m-nascido-malformado-e-os-cuidados-de-enfermagem.pdf>. Acesso em: 27 mai 2020.
- 10 Nóbrega L, Lima Silva K. Fundamentos do cuidar em enfermagem. 2nd ed. Belo Horizonte: ABEn; 2009.
- 11 Conselho Federal de Enfermagem. Resolução n. 524, de 4 de outubro de 2016, que Altera a Resolução Cofen nº 516/2016 e dá outras providências.

- Brasília, 2016. Disponível em: < http://www.cofen.gov.br/resolucao-cofen--no-627-2020\_77638.html>. Acesso em: 12 out 2020
- 12 Figueirêdo SS, Ribeiro LHV, Nóbrega BB, Costa MAB, Oliveira GL, Esteves E, Monteiro SS, Lederman HM. Atresia do Trato Gastrintestinal: avaliação por método de imagem. Radiologia Brasileira. 2005; 38(2): 141-150.
- 13 Brito APM, Ribeiro KRA, Duarte VGP, Abreu EP. Enfermagem no contexto familiar na prevenção de anomalias congênitas: revisão integrativa. J. Health Biol Sci. 2019; 7(1): 64-74. Disponível em: <a href="https://docs.bvsalud.org/biblio-">https://docs.bvsalud.org/biblio-</a> ref/2019/07/1005498/10-2202.pdf>. Acesso em: 02 set 2020.
- 14 Cass DL, et al. Cystic lung lesions with systemic arterial blood supply: a hybrid of congenital cystic adenomatoid malformation and bronchopulmonar sequestration. Journal of Pediatric Surgery. 1997; 32: 986-990.
- 15 Fernandes MS, Dias NM, Oliveira SG, Coutinho ACO, Nery RV, Silva LMG, Gryko Junior W. Atresia de esôfago em recém-nascido: um relato de de caso. Braz. J. of Develop. Curitiba. 2020; 6(8): 55216-55221. ISSN 2525-8761. Disponível em: <a href="https://www.brazilianjournals.com/index.php/BRJD/articule/">https://www.brazilianjournals.com/index.php/BRJD/articule/</a> view/14558/12076>. Acesso em: 02 set 2020.
- 16 Fontoura FC, Fontenele FC, Cardoso MVLML, Nobre KSS, Dodt RCM. Assistência de enfermagem ao recém-nascido com malformação congênita. In: Ciência da Enfermagem em tempos de interdisciplinaridade. 16° SENPE; 2011 jun. 19-22; Campo Grande. Trabalho 163. Disponível em: <a href="http://www.">http://www.</a> abeneventos.com.br/16senpe/senpe-trabalhos/files/0163.pdf>. Acesso em: 28 mai 2020.
- 17 Morais Filho IM, Souza GB, Nascimento FNN, Santos JLA, Carvalho MR. Checklist do récem-nascido: principais diagnósticos de enfermagem mediante intercorrências e susceptibilidade das mesmas no neonatal. Rev. Cient. Sena Aires. 2017. Jan- Jun; 6 (1): 30-48. Disponível em: <a href="http://revistafacesa.senaai-">http://revistafacesa.senaai-</a> res.com.br/index.php/revisa/article/view/276/178> Acesso em > 29 set 2020.
- 18 Duarte ED, Sena RR, Tavares TS. Práticas cuidadoras que favorecem a integralidade do cuidado ao recém-nascido de alto risco: revisão sistemática. Rev. Eletr. Enf. 2010 12(3):539-46. Disponível em: < https://revistas.ufg.br/fen/ article/view/7509/7874>. Acesso em: 10 out 2020.
- 19 Melo MM. Pacheco STA. O desvelar do cuidado ao recém-nascido com anomalia congênita: percepções de enfermeiros neonatologistas. Revista de Enfermagem da UFPE. 2013. 7 (8):5176-5182.
- 20 Alves FO, Naujorks CC, Azenha MVS, Bastos JC. Manejo da onfalocele e da gastroquise no recém-nascido. Acta méd. (Porto Alegre); 36: [9], 2015. Artigo em Português | LILACS | ID: biblio-879756. Disponível em: <a href="https://pesquisa.">https://pesquisa.</a> bvsalud.org/portal/resource/pt/biblio-879756>. Acesso em:02 set 2020