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REVIEW

Sacred hour in neonatology: benefits, challenges, and health interventions

Hora sagrada en neonatología: beneficios, desafíos e intervenciones en salud

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ABSTRACT

Introduction: the sacred hour after birth is a key moment to strengthen the bonding between mother, baby and family, favoring breastfeeding and emotional well-being; therefore, we sought to analyze the scientific evidence on the benefits of the sacred hour in neonatology services, as well as the challenges that hinder its compliance and interventions implemented for its application.
Method: a qualitative, descriptive and literature review study, with a sample of 30 articles selected by convenience. A search in indexed databases in Scopus, SciELO, Pubmed, and Latindex was used; the selected studies were classified in a matrix for analysis using the CASPe method to guarantee the quality and validity of the results.
Results: the sacred hour in neonatology strengthens mother-child bonding, improves neurodevelopment and reduces neonatal mortality through practices such as skin-to-skin contact and breastfeeding. However, comorbidities, institutional limitations and lack of training hinder its implementation.
Conclusion: family-centered care in the first hour of life is a key moment for the integral wellbeing of the mother, the newborn and the father. Therefore, it is an inherent need to establish policies that guarantee family integration, marked by initiatives such as mother and newborn friendly institutions, as well as the continuous training of the health professional as a real need in health systems for the promotion of care to the trinomial.

Keywords: Humanized Care; Family; Neonatology; Neonatology.

RESUMEN

Introducción: la hora sagrada tras el nacimiento es un momento clave para fortalecer el vínculo afectivo entre madre, bebé y familia, favoreciendo la lactancia y el bienestar emocional; por lo que, se buscó analizar la evidencia científica sobre los beneficios de la hora sagrada en los servicios de neonatología, así como los retos que dificultan su cumplimiento e intervenciones implementadas para su aplicación.
Método: estudio de enfoque cualitativo, descriptivo y de revisión bibliográfica, con muestra de 30 artículos seleccionados por conveniencia. Se utilizó una búsqueda en bases indexadas en Scopus, SciELO, Pubmed, y Latindex; los estudios seleccionados fueron clasificados en una matriz para su análisis mediante el método CASPe para garantizar la calidad y validez de los resultados.
Resultados: la hora sagrada en neonatología fortalece el vínculo afectivo madre-hijo, mejora el neurodesarrollo y reduce la mortalidad neonatal mediante prácticas como el contacto piel con piel y la lactancia materna. Sin embargo, comorbilidades, limitaciones institucionales y falta de capacitación dificultan su implementación.
Conclusión: los cuidados centrados en la familia en la primera hora de vida, es un momento clave para el bienestar integral de la madre, el recién nacido y el padre. Por lo que, es una necesidad inherente de establecer políticas que garanticen la integración familiar, marcado por iniciativas como instituciones

amigos de la madre y el recién nacido, así como la formación continua del profesional de la salud como una necesidad real en los sistemas sanitarios para el fomento del cuidado al trinomio.

Palabras clave: Cuidado Humanizado; Familia; Neonatología.

INTRODUCTION

The World Health Organization (WHO) points out that the sacred hour is a transforming moment in the family, centered on the birth of the newborn and the incorporation of a new member; therefore, the integral wellbeingwellbeing of the mother during labor, puerperium and postnatal period should be articulated in policies that promote care centered on the mother, baby and father or companion; as well as pain management, reducing fears and strengthening the emotional bond.[1]

In the same way, the first 1000 days of life have great notoriety in public health for their implications in the present and future of nutritional epidemiology and in the prevention of some diseases that increase the risk of maternal and neonatal morbidity and mortality, as well as the loss of care in the first hour of life affects the neurodevelopment of infants.[2]

In addition, emergency care of newborns is a frequent practice in delivery rooms, considering that this may prevent early contact and initiation of breastfeeding. In Brazil, about 300 thousand interventions are performed annually to ensure the care of the infant's breathing at birth, which indicates that approximately 10 % of live newborns require some form of resuscitation in the first hour.[3]

On the other hand, from the first hour of life is considered a crucial moment within the first 1000 days of life in human development, where the basis for the health and growth of the newborn is promoted; however, maternal and neonatal complications do not facilitate and interrupt breastfeeding, as well as weaken the bonding between the baby and its environment. Upon arrival in the world, the newborn instinctively seeks skin-to-skin contact, the warmth, and smell of its mother, as these elements awaken the infant's capacity to adapt to life outside the womb, thereby generating affective bonds with the family.[4]

It should be noted that the experiences of patients hospitalized in the ICU (intensive care unit), in the case of women with gestational hypertensive disorders, generate complications that increase the rate of morbidity and mortality.

Complications that increase the maternal and neonatal morbidity and mortality rate; consequently, hospitalization in these areas during the postpartum period, together with the separation of the newborn, has a profound impact on the physical and emotional well-being of the mother.[5]

On the other hand, the first meeting between the newborn and its parents becomes a crucial moment, as it marks the beginning of a new life; therefore, it is considered a significant act for the members of the household. For this reason, the first hour of life is substantial, as it represents a sacred moment of deep connection and mutual recognition, which is an experience that profoundly influences the affective bond between parents and child, facilitating active participation by the couple and emotional accompaniment by the healthcare personnel.[6]

For this reason, the application of good labor practices, as recommended by government initiatives to improve care and reduce the use of interventions considered unnecessary, is crucial. The Baby Friendly Hospital Initiative (BFHI) outlines ten steps for successful breastfeeding, encouraging breastfeeding within the first hour after delivery, with early contact immediately after delivery for at least one hour, thereby avoiding disengagement and the risk of environmental exposure.[7,8,9,10]

The previous literature reviewed highlights the need to delve deeper into this problem; therefore, the objective was to analyze the scientific evidence on the benefits of the sacred hour in infants.

Benefits of the sacred hour in neonatology services, as well as the challenges that hinder its implementation, and the interventions implemented to facilitate its application.

METHOD

The study employed a qualitative approach, which allowed for the deepening of understanding and interpretation of complex phenomena related to the sacred hour, from a holistic and contextualized perspective. Similarly, it features a descriptive design that enables a detailed and organized presentation of the selected articles.[11]

Likewise, a literature review made it possible to identify, characterize, and analyze the characteristics of existing studies, which facilitated the identification of patterns and common trends, providing a solid basis for answering the questions raised.[12]

The population consists of Research obtained through an exhaustive search in indexed databases, comprising 90 articles. Through convenience sampling focused on accessibility, availability, and compliance with the

selection criteria, a sample of 30 studies was obtained that responded to the posed questions.[13]

Inclusion Criteria

- Original scientific articles.
- Articles in Spanish, English, and Portuguese languages
- Time frame within the last 5 years
- Research on the sacred hour between mother and newborn.

Exclusion Criteria

- Essays
- Books
- Theses
- Review articles
- Institutional repository studies

The information was obtained from indexed databases, including SCOPUS, SciELO, CINALH, PubMed, and REDALYC. Keywords were used in English (sacred hour, neonatology, benefits, neonatal care services, interventions), Spanish (hora sagrada, neonatología, beneficios, servicios de cuidado neonatal, intervenciones) and Portuguese (hora sagrada, neonatología, benefícios, serviços de cuidados neonatais, intervenções), as well as Boolean operators (AND and OR).

Subsequently, another researcher validated this information, ensuring that the established selection criteria were met. In addition, the data were organized in an Excel spreadsheet, where details on authors, year of publication, abstract, method, findings, conclusions, and references were recorded. This facilitated the structuring of the studies according to the questions posed.

The CASPe method was used to carry out the analysis, since it details the information that is collected based on a set of studies whose purpose is to determine the quality and validity of the different results that were obtained, based on the fulfillment of a checklist; it should be noted that another researcher validated these.

DEVELOPMENT

Benefits of the sacred hour in neonatology services

Care in neonatology services is marked by a scenario of family suffering, even more so with premature infants who present high mortality, because their initial adaptation, maturation and loss of space are significantly compromised, mainly affecting brain growth and generating cognitive, conductive, emotional and visual deficits; therefore, interventions such as the kangaroo method in the first hour of life enable the involvement of the family in the care, as well as in the follow-up of clinical evolution.[14]

In addition, skin contact during breastfeeding provides timely physiological, social, and psychological benefits for both mother and child, enabling neurodevelopment in neonates and the recovery of maternal health in the puerperium. This focuses on the family's involvement.[15,16]

It should be noted that early attachment and breastfeeding constitute an innate process of maternal connection, in which human milk represents the primordial food for neonates and infants due to its nutritional and immunological characteristics, which are fundamental for optimal infant growth and development; its application is essential in premature birth, which represents a critical risk factor that significantly increases neonatal morbidity and mortality.[17,18]

On the other hand, the global emergence of the SARS-CoV-2 virus has impacted all population groups, requiring health professionals to implement new support paradigms based on limited scientific evidence, with continuous emerging adaptations in new circumstances. However, it is activated by the effects of viruses on neonates, their transmission mechanisms, and preventive and therapeutic strategies, and relies on medications to prevent viral transmission through birth, personal health, simultaneously promoting informed parental involvement in clinical decisions related to neonatal care during the pandemic.[19]

In another context, the practice of skin-to-skin contact in the immediate postpartum period is based on the formal responsibility of the WHO for several psychological, physiological and social effects for the mother and neonate, this relevant is the initial period of birth, called golden hour, reduces neonatal mortality associated with infectious processes, constituting one of the most significant health indicators to assess excellence in breastfeeding practices, as well as prevents postpartum depression.[20]

Similarly, perinatal care protocols have contributed significantly to increasing the survival rate without severe morbidities in this population, focusing on interventions such as early attachment, breastfeeding, immunizations, and family accompaniment; therefore, this facilitates the development of family bonding.[21,22]

Consequently, these actions favor the well-being of both mother and baby, providing benefits such as strengthening the affective bond, regulating the newborn's body temperature, improving lactation, and

preventing postpartum depression, all centered on the care of the family that enables the trinomial union of the family.[23]

Therefore, the sacred hour strengthens the affective bond between father, mother, and child, which favors neurocognitive development and decreases the risk of affection; this fosters a humanized care that guarantees the safety and quality of care in obstetric-neonatal services, respecting the ontological dignity of each person.

Challenges presented in neonatology services that hinder compliance with the sacred hour

The holy hour fosters affective bonding between mother and child, as well as that of the family member; however, comorbidities increase the risk of postpartum complications that make it challenging to comply with these, separating co-housing, early attachment, and breastfeeding.[24]

In this sense, compliance with this is made difficult when there is the presence of pathologies such as hypertensive disorders in gestation, which hinders postpartum bonding, centered on admission to critical units to ensure the recovery of maternal health.[25]

Likewise, neonatal complications during labor and birth, such as sepsis, gestational disorders, and problems in fetal development, lead to admission to neonatal intensive care, which interrupts early attachment and the promotion of breastfeeding.[26,27]

Likewise, prematurity caused by obstetric-fetal complications makes it impossible to intervene in the first hour of life, focused on guaranteeing survival, considering that admission to critical services presents restrictions, as well as limitations on visits, in addition to the lack of open-door policies that promote family participation.[28,29]

It should be noted that the lack of infrastructure and resources, as well as limitations in the continuous training of health professionals makes it challenging to implement strategies that promote the sacred hour, this centered on the lack of standardized norms and updated practice guidelines under the framework of women's rights, family and reproductive health.[30,31]

On the other hand, obstetric violence, centered on the lack of humanistic interventions in care, provokes negative experiences that mark mental health negatively on the aspect of birth and the conformation of the family, which fragments the affective bond, taking into account that postpartum depression makes the mother-child relationship, family involvement and the development of breastfeeding impossible.[32,33]

Therefore, the separation of the trinomial bond between mother, father, and child from the baby is marked in institutional aspects and health policies, as well as in the development of maternal-neonatal health, which, combined with other factors, hinders the adequate implementation of practices fundamental for humanized and family-centered care.

Interventions carried out by health professionals and institutions to ensure compliance with the sacred hour

Skin-to-skin contact (SSC) at birth involves placing the baby naked on the mother's bare chest, a practice that promotes breastfeeding, helps stabilize the newborn's breathing and heart rate, as well as helps regulate their body temperature, and decreases stress by reducing cortisol levels and strengthens the bond between mother and child.[34,35]

In addition, the implementation of standardized guidelines through training programs is essential to reduce maternal-neonatal health risks, focused on family care, which involves the promotion of breastfeeding, goes beyond just transmitting technical information, but integrates the social and emotional context of mothers; this is achieved through constant professional accompaniment that responds to these dimensions. In this process, nursing plays a crucial role by establishing bonds of trust that enable effective educational, preventive, and supportive interventions.[36,37]

Similarly, family-centered interventions favor physiological adaptation from intrauterine to extrauterine life, which allows the regulation of pulmonary respiration and thermoregulation through attachment and early contact; likewise, it promotes effective breastfeeding, protection and neurodevelopment, which increases the affective bond in the trinomial that decreases the risk of postpartum depression, as well as reduces perinatal and neonatal morbidity and mortality.[38,39]

Therefore, interventions such as skin-to-skin contact and breastfeeding during the first hour of life are fundamental practices to reduce neonatal morbidity and mortality.

These actions favor the newborn by stabilizing cardiopulmonary functions, reducing the risk of hypoglycemia, hypothermia, and infections, and increasing the continuity of breastfeeding, thus ensuring humanized care during labor and the puerperium.[40,41]

It should be noted that these actions should be initiated during gestation, delivery and puerperium, essential interventions that, through the development of programs, protocols and regulations, allow the design of services with emphasis on the family; at the same time, training and professional development make it possible to address barriers that hinder these actions that prevent the separation of the trinomial in the first

hour of life.[42,43]

In this sense, humanization implies an approach that combines scientific knowledge with human values, generating person-centered care, as well as institutional and professional co-responsibility with future fathers, mothers, and newborns, thereby improving the quality, safety, and satisfaction of their needs.

CONCLUSIONS

The sacred hour represents a crucial and transformative moment, as it marks the arrival of a new member, integrating the well-being of the mother, newborn, and father.

During labor, delivery, and puerperium, under the framework of policies that promote person- and family-centered care, it is an inherent need to establish policies that guarantee family integration in the first hour of life.

Therefore, the lack of uniformity in the application of family-centered practices during the sacred hour, as well as the variability in access to resources and specialized support continue to be challenges that hinder an effective management of the triad of affective bonding of the family constitution, marking that initiatives such as mother and newborn friendly institutions, as well as the continuous training of the health professional is a real need in health systems.

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