



Repercussions of the Covid-19 Pandemic on the Use of the Kangaroo Method in Premature Newborns: A Integrative Review

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Abstract

The COVID-19 pandemic, a disease caused by the new coronavirus, has caused an intense change in the dynamics of relationships around the world. In terms of neonatal health care, this change was expressed in the most diverse ways, especially in the use of the Kangaroo Method as a care strategy for newborns. Therefore, the present study aimed to recognize the implications for the application of the Kangaroo Method during the pandemic and the repercussions for premature newborns. For the theoretical basis, it opted for the Integrative Literature Review. Conducted between January 2021 and August 2021 and guided by the question: What are the repercussions of the COVID-19 pandemic on the use of the Kangaroo Method in premature newborns? It was observed that because it is a care tool that requires contact and bonding, the Kangaroo Method suffered direct and indirect repercussions of the COVID-19 pandemic, mainly due to the measures of restriction and social isolation. The humanization of neonatal units, the time of hospitalization of the newborn and the strategies of family involvement in the care of the baby, were widely impacted by the pandemic and it is necessary to evaluate and reformulate ways to transcend the barriers imposed by this new scenario.

Keywords: Kangaroo Method; Premature; Neonatal Intensive Care Units; COVID-19; Coronavirus infections

Introduction

The COVID-19 pandemic, a disease caused by the new coronavirus, has caused an intense change in the dynamics of relationships around the world. The impacts on public health in the face of a virus that is easily and rapidly spread in the population led to an abrupt change in the routines of health services, observing a scenario of intensification of hospitalizations due to respiratory complications, with consequent influence, also, on the health of care teams [1].

In terms of neonatal health care, the changes caused by the COVID-19 pandemic were expressed in various ways, especially in the use of the Kangaroo Method as a care strategy for newborns.

The Kangaroo Method is a type of neonatal care aimed at the care of newborns, which implies putting the baby in contact skin to skin with its mother or surrogate, starting early and continuing after hospital discharge [2]. It is a proven method that promotes important physiological benefits and better

neuropsychomotor development [3].

Therefore, the present study aimed to reflect on the implications of the COVID-19 pandemic for the application of the Kangaroo Method in premature newborns.

Methodology

For the theoretical basis, it opted for the Integrative Literature Review. The integrative review emerges as a methodology that provides the synthesis of knowledge and the incorporation of the applicability of results of significant studies in practice [4].

For the development of the review, searches were carried out in the following databases: Latin American Literature of Health Sciences (LILACS), Nursing Database (BDENF), Analysis of Medical Literature and Online Recovery System (MEDLINE), SciVerse Scopus (Scopus) and Scientific Electronic Library Online (SciELO). In addition to other materials related to the theme studied.

Conducted between January 2021 and August 2021 and guided by the question: What are the repercussions of the COVID-19 pandemic on the use of the Kangaroo Method in premature newborns?

The following descriptors were used for this purpose: Kangaroo Method; Premature; Neonatal Intensive Care Units; COVID-19; Coronavirus infections.

The inclusion of the articles used for the construction of the corpus followed the criteria: initially to be published between the time interval between 2016 and 2021, but to consolidate the research this temporal gap was expanded to 2013 to 2021. To be presented in Portuguese, English and Spanish languages and contemplate topics that favored a reflection on the issue of the guide.

Results

Among the literatures explored, 7 studies were selected that presented adequacy and adequate methodological rigor for the construction of a reflection on the theme presented.

Discussion

The SARS-CoV-2 coronavirus, the etiologic agent of the disease known as COVID-19, is a virus that has undergone zoonosis-like mutation and causes respiratory infections of different severity, ranging from asymptomatic to acute respiratory syndrome. The high capacity for contagion of people and spread of the pathogen, led the World Health Organization (WHO) to declare a public health emergency of international interest, on January 30, 2020 [5].

For health services, the challenge is immense, since in addition to treating patients infected with COVID-19, they need to establish effective measures so that the disease does not spread among other patients and professionals of the institution. For this, it is essential that prevention measures are carried out with extreme rigor [6].

In view of this, added to the lack of specific therapies for the virus, non-pharmacological prevention and control tools were determined, such as social distancing measures, whose term refers to efforts aimed at reducing or interrupting the transmission chain of the disease by the physical distance between individuals who may be infected and healthy, in addition to protecting those individuals at risk of developing the severe form of the disease [7].

However, although effective in containing the pandemic, these measures have largely changed the dynamics of relationships, whether affective, social or work. Forcing the population to readapt and formulate coping strategies not only with the virus, but with the new imposed living conditions.

About the kangaroo method, this refers to a modality of care and attention, which is based on principles that involve the reception of premature and low birth weight newborns and their families in the Neonatal Intensive Care Unit, respecting singularities, promoting skin-to-skin contact and encouraging parents to participate in the care. Among the main benefits of the method, the formation of a mother-child bond, sensory stimulation, breastfeeding, temperature control, hospital infection, reduction of morbidity and hospital stay stand out. In addition to the humanization of care, being the most effective intervention to complement neonatal technologies [8].

For better development, the method is divided into 3 steps. The first, held within the Neonatal Intensive Care Units, focuses on welcoming the family, reducing stressful stimuli to premature infants and establishing bonds through skin-to-skin contact. The second occurs after the baby has been stabilized, where the mother will be hospitalized with her child in the Kangaroo Intermediate Care Wards, making skin-to-skin contact through the kangaroo position, in order to establish breastfeeding, in addition to providing greater confidence to parents in care. The third stage occurs after hospital discharge and consists of intensive outpatient follow-up, with the aim of remedying the main difficulties encountered at home and assisting the family, until the premature child reaches 2500 grams or until he/she presents conditions of outpatient discharge [9].

Thus, when observing the deleterious effects of the pandemic on the development of relationships, it is noted that, in the context of hospitalization of a premature child, the

repercussions of social isolation can be enhanced as a result of the contingency plan adopted, both by the municipality and by the institution where the baby is hospitalized, with frequent restriction in the number of people circulating in health services, limiting or suspending visits. In these cases, the mother, who remains in the institution accompanying the hospitalized baby, distances herself from living with family members, which may negatively impact her psychological condition and, consequently, the baby's clinical evolution [10].

For health professionals, the restrictive measures interfere in their way of operating care and in the practices previously used to promote the health of the newborn and family, such as the Kangaroo Method, which is hampered by the spatial and social limitations of the new conjuncture.

It was also noted that, in addition to the difficulties imposed by the pandemic, the lack of knowledge and experience with this model of care on the part of professionals, in addition to an organizational structure that promotes this practice, are barriers to the application of the method. It was identified that for a further development of this tool, there is a need for the commitment of the institution and the professionals involved [11].

Conclusion

It was observed that because it is a care tool that requires contact and bonding, the Kangaroo Method suffered direct and indirect repercussions of the COVID-19 pandemic, mainly due to the measures of restriction and social isolation. The humanization of neonatal units, the time of hospitalization of the newborn and the strategies of family involvement in the care of the baby, were widely impacted by the pandemic and it is necessary to evaluate and reformulate ways to transcend the barriers imposed by this new scenario.

It is noteworthy how much is necessary the formulation of new studies that address issues related to coping and managing the health crisis and the improvement of neonatal care practices, in order to maintain the quality of care provided to premature newborns even in the face of such an atypical moment.

References

- Gallasch CH, Cunha ML, Pereira LAS, Silva Jr JS (2020) Prevention related to occupational exposure: COVID-19. *Rev Enferm UERJ* 28: e49596.
- Bera A, Ghosh J, Singh AK, Hazra A, Mukherjee S, et al. (2014) Effect of kangaroo mother care on growth and development of low birthweight babies up to 12 months of age: a controlled clinical trial. *Acta Paediatrica* 103(6): 643-650.
- Silva AS, Cost JP, Figueiredo LSM (2020) A Importância do Método Mãe Canguru na Unidade de Terapia Intensiva Neonatal: uma Revisão de Literatura. *Rev Bras Terap e Saúde* 10(2): 1-6.
- Silveira RCCP, Galvão CM (2005) O cuidado de enfermagem e o cateter de Hickman: a busca de evidências [dissertação]. *Acta Paul Enferm* 18(3): 276-84.
- Silva LLS, Rodrigues Lima AF, André Polli D, Silvério Razia PF, Alvim Pavão LF, et al. (2020) Medidas de distanciamento social para o enfrentamento da COVID-19 no Brasil: caracterização e análise epidemiológica por estado. *Cad. Saúde Pública* 36(9): e00185020.
- Agência Nacional de Vigilância Sanitária (ANVISA) (2020) Nota técnica GVIMS/GGTES/ ANVISA nº 07/2020. Orientações para a prevenção da transmissão de COVID19 dentro dos serviços de saúde.
- Silva MR, Silva PC, Rabelo, HD, Vinha BCV (2020) A terapia ocupacional pediátrica brasileira diante da pandemia da COVID-19: reformulando a prática profissional. *Revista Interinstitucional Brasileira de Terapia Ocupacional* 4(3): 422-437.
- Ribeiro CG (2016) Metodologia Canguru: Benefícios para o Recém-Nascido Pré-Termo. *Caderno De Graduação - Ciências Biológicas E Da Saúde - UNIT - SERGIPE* 3(3): 57.
- (2013) Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Atenção humanizada ao recém-nascido de baixo peso: método Canguru: manual técnico. Brasília: Ministério da Saúde.
- Oliveira AC (2020) Desafios da enfermagem frente ao enfrentamento da pandemia da Covid19. *REME - Rev Min Enferm* 24(1): 1-3.
- Ferreira DC, Silva MPC, Galon T, Ferreira Goulart B, do Amaral JB, et al. (2019) Kangaroo method: perceptions on knowledge, potentialities and barriers among nurses. *RESEARCH. Esc. Anna Nery* 23(4).