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ORIGINAL ARTICLE

KNOWLEDGE AND ADHERENCE OF THE NURSING TEAM TO THE KANGAROO POSITION IN A NEONATAL UNIT

Ana Caroline Sales da Silva*
Sofia Esmeraldo Rodrigues**
Rayssa Matos Teixeira***
Kesia Cartaxo Andrade****

ABSTRACT

Objective: to understand the knowledge and adherence of nursing professionals to the kangaroo position and to investigate the knowledge of professionals about the position and its benefits. **Methods:** qualitative research conducted with 15 neonatology nursing professionals from a tertiary hospital. Data were collected from August to September 2020, using an instrument developed by the authors, and analyzed by the *software Interface de R pour les Analyses Multimensionnelles de Textes et de Questionnaire.* **Results:** all nursing techniques claimed to place the newborn in a kangaroo position. Regarding the nurses, one claims not to perform the position. The analyzed content was categorized into three classes: Class 1) Experiences of the nursing team in performing or not the kangaroo position; Class 2) Importance of applying the kangaroo position; and Class 3) Barriers experienced in performing the kangaroo position. **Final thoughts:** there was a good adherence of professionals to the kangaroo position, however, they report difficulties to perform the technique, such as inadequate routine, lack of institutional incentive and training.

Keywords: Neonatal nursing. Infant Premature. Humanization of Assistance.

INTRODUCTION

Estimates show that about 15 million children are born prematurely each year. Brazil is one of the 10 countries with the highest number of births. Prematurity combined with low birth weight is responsible for almost 80% of neonatal deaths[1,2]. Premature is considered all Newborn (NB) with gestational age below 37 weeks, subdividing into: late premature, aged 34 to 37 weeks, moderate premature, aged 28 to 33 weeks and 6 days, and extreme premature, aged below 28 weeks. Low birth weight is considered to be less than or equal to 2,500 grams, and can be subdivided into very low weight, weighing less than 1500 grams, and extreme low weight, less than 1000 grams[3,4].

The success of the treatment of an NB hospitalized in a neonatal unit is determined not only by their survival and hospital discharge, but also by the construction of bonds that will ensure the continuity of Breastfeeding (BF) and care after discharge[5]. Nevertheless, in order to reduce neonatal mortality rates, the use of complex and specialized technologies in the care of the preterm newborn has been increased, causing a decrease in the formation of the mother-infant bond and causing stress to the NB[2].

As a way to stimulate greater mother-baby contact, and to favor the participation of the family in the care of the newborn, in 1999, the Ministry of Health implemented the Humanized Care Policy for Low-Weight Newborns, called the Kangaroo Method (KM)[6]. The KM is defined as a model of perinatal care focused on qualified and humanized care that brings together biopsychosocial intervention strategies, favoring the care of the newborn and their family[7].

The KM is developed in three stages: the first stage begins in prenatal care, those who are at risk of premature birth, and follows during the hospitalization of the NB in the Intermediate

*Nurse. Specialist in Neonatal Intensive Care Unit. Care Nurse at the Children's Hospital of Fortaleza. Fortaleza, CE, Brazil. anacarolinesalesdasilva@gmail.com ORCID iD: 0000-0002-0685-4280. Lattes: http://lattes.cnpq.br/0069515633024932
**Nurse. MSc in Health Promotion. Nurse of Quality and patient safety center. Fortaleza, CE, Brazil. esmeraldo.sofia@gmail.com ORCID iD: 0000-0002-0302-752X. Lattes: http://lattes.cnpq.br/7335334946780002
***Nurse. MSc in Health Promotion. Care Nurse at the Women's Hospital of Fortaleza. Fortaleza, CE, Brazil. ray.mt1991@gmail.com ORCID iD: https://orcid.org/0000-0003-0969-1648. Lattes: http://lattes.cnpq.br/0420500233201071
****Nurse. MSc in Child and adolescent Health. Care Nurse at the General Hospital of Fortaleza. Fortaleza, CE, Brazil. kesia.cartaxo@gmail.com ORCID iD: 0000-0003-4878-3887. Lattes: http://lattes.cnpq.br/0940615091220375

Conventional Neonatal Care Unit (UCINCo) and/or Neonatal Intensive Care Unit (NICU). The second stage begins at the Kangaroo Intermediate Care Unit (UCINCa), where the baby will remain most of the time in the Kangaroo Position (KP), and the focus will be on the promotion of breastfeeding (BF) and weight gain of the NB. The third stage begins at hospital discharge, where the NB and their family will be followed up outpatiently and by a team from the hospital and the basic health unit until the NB reaches 2,500 grams[7,8].

KP is a tool that makes up the KM. It should be performed from the moment the newborn has clinical and hemodynamic stability and may be hospitalized in a NICU, UCINCo or UCINCa[9]. The KP consists of keeping the NB, in skin-to-skin contact, only diapers, in an upright position next to the parents' chest, keeping the minimum time necessary to respect the stabilization of the NB and for the maximum time that both understand to be pleasant and sufficient. It should be performed in a targeted, safe and accompanied way by care support by a properly trained health team[10].

In this context, nursing is present and relevant due to the primordial role in encouraging and effecting this practice, as well as in the placement of the NB in KP and overcoming barriers[11]. It is necessary that the nursing team is protagonist in the production of health of the neonate in a situation of greater severity, because it has a positive influence on the clinical improvement of this patient, providing direct and frequent care to the newborn. Moreover, the team interferes with the adequate adaptation of the newborn to extrauterine life and assists parents in the care of NB by giving them emotional support in the face of existing tensions[12,13]. Nonetheless, there is still a low adherence of professionals to the humanization process, although there have been numerous changes and improvements in this process.

Studying the adherence of professionals to certain routine becomes important because, in this way, it is possible to perform specific interventions to improve the care of low weight NB. The interest in researching the subject arose through the practice experienced by the researcher during the period of multiprofessional residence in a neonatal intensive care unit. Due to the aforementioned evidence and the importance of performing the KP in neonatal units, the objective was to understand the knowledge and adherence of nursing professionals to the kangaroo position and to investigate the knowledge of professionals about the KP and its benefits.

METHODOLOGY

This was a qualitative and descriptive research conducted in a tertiary hospital in Fortaleza, Ceará. The institution is a reference center in high complexity procedures and has an obstetrics and neonatology service of high risk and, in addition, offers the Humanized Assistance Program to the Newborn - Low Birth Weight.

The target audience of the study consisted of the nursing team composed of nursing technicians and nurses who worked in the UCINCo and NICU. Nursing professionals who worked during the day were included in the study, since it is the moment when the parents are present to perform the KP. Professionals who were on vacation or on sick leave during the study period were excluded. The sample size in the qualitative research was given when the answers/arguments began to be repeated, thus establishing the data saturation. In all, 15 professionals participated in the study, divided between eight nursing technicians and seven nurses, by convenience selection, that is, those who were willing to participate in the research at the time of data collection.

Data collection occurred in August and September 2020 through a semi-structured instrument produced by the researcher containing open and closed questions. The instrument was divided into professional data such as age, sex, training time, time working in the neonatal area, position/function, and questions about the KP, such as: what clinical criteria to place the NB in a kangaroo position? What is the step-by-step for performing the kangaroo position? What difficulties for performing the kangaroo position in the unit? What reasons for performing and not performing the kangaroo position?

Initially, the professional was approached by

the researcher, a resident nurse in neonatal intensive care, and she presented the project to him and invited him to participate in the research. At this point, the professional was explained that the interview would be recorded for further analysis. The interview was conducted in the neonatology unit itself and had an average duration of 30 minutes. After acceptance, the professional signed the Informed Consent Form (ICF). A pilot test was carried out with three professionals so that, in this way, the collection doubts were removed and later made adjustments for a better interview. The main changes were the way to carry out the questions contained in the interview. Participants in the pilot test were not included in the final study sample.

The statements were recorded and transcribed. The data were processed using the software IRAMUTEQ (*Interface de R pour les Analyses Multimensionnelles de Textes et de Questionnaires*). Classical lexicographic analyses were performed in Iramuteq to understand the statistical data and quantify the evocations and forms. The Descending Hierarchical Classification (DHC) was used to assess the dendrogram data according to the generated classes, considering the words with $X^2 > 3.84$ ($p \leq 0.05$)[14]. The participants were coded with the letter N when nurses and with the letters NT when nursing technicians.

All ethical aspects were respected according to Resolutions N. 466 of 2012 and N. 510 of 2016. The project was approved by the Ethics Committee under opinion n. 4.195.935/2020.

RESULTS AND DISCUSSION

All 15 professionals who participated in the research are women, eight nursing technicians and seven nurses. Of the total number of professionals, three worked exclusively at UCINCO, five worked exclusively at UTIN and seven worked at UCINCO and UTIN.

Regarding nursing technicians, the average age was 20 years, the average time of operation in neonatology was one year and the average time of training was 10.3 years. In relation to nurses, the average age was 40.71 years, the average time of operation in neonatology was 8.25 years and the average time of training was 14.28 years.

Concerning training, five nurses were specialists in neonatology, and three also had another specialization. A nurse was a master's student.

Five professionals attended the KM course, three nurses and two nursing technicians. All nursing technicians claimed to put the newborn in the KP; in relation to nurses, only one said not perform the position. As for the analysis of open questions, the following Descending Hierarchical Classification and Word Cloud were obtained.

Descending Hierarchical Classification (DHC)

The general corpus consisted of 15 texts, separated into 1**78** Text Segments (TS), using **144** STs (80.90%). **3421** occurrences (words, forms or words) emerged, being **601** distinct words and **327** with a single occurrence. The analyzed content was categorized into three classes: Class 1) Experiences of the nursing team in performing or not the kangaroo position, with 51 TS (35.42%); Class 2) Importance of applying the kangaroo position, with 58 TS (40.28%); and Class 3) Barriers experienced in performing the kangaroo position, with 35 TS (24.31%).

In order to better illustrate the words of the textual corpus in their related classes, a class diagram was organized with examples of words of each class evaluated using the chi-square test (X^2). In it, the evocations that present similar vocabulary and vocabulary different from other classes emerge. Then, it will be presented, operationalized and exemplified each of these classes found through the analysis of Descending Hierarchical Classification.

Class 1) Experiences of the nursing team in performing or not performing the kangaroo position

This class was composed of words such as "Place" ($x^2 = 48.09$); "When" ($x^2 = 27.96$); "Lap" ($x^2 = 13.42$); "Unit" ($x^2 = 10.05$); "Kangaroo" ($x^2 = 7.57$); "Want" ($x^2 = 7.25$); "Arrive" ($x^2 = 6.28$); "Prescribed" ($x^2 = 5.59$) and "Ask" ($x^2 = 5.59$) and "People" ($x^2 = 4.15$).

This class refers to the perception of the nursing team in relation to the skills and techniques for performing the kangaroo position, effectively and with quality. Thus, the need for internal training was observed in the reports of the professionals, since they do not feel safe in their skills. One notices the interest of the professional in putting the baby on KP. However, the fear of compromising the baby's health and the lack of knowledge of the clinical criteria for performing the technique mean that the practice is not performed.

> I don't know what the criteria for the baby to go to the **kangaroo** are, this part is more of a doctor's part, right?. (N3)

> I don't know how to handle the **kangaroo** cloth. I don't feel able to put the baby on. I do it the way they taught me, but I think we should receive a training. (NT2)

> **When I can't put** in the **kangaroo position** I put at least in the **lap**. [...] I **don't put** baby intubated. **Even** if it **prescribed**, I **don't**, I call the nurse. (NT1)

> **When** the baby is unstable, when he is in no **condition** to go to the kangaroo. Then I ask the doctor or the nurse to know whether to **put** or **not**. (NT8)

> I think we lack a **training**. We lack **courses** about the kangaroo. For the professional to feel **secure** in putting the baby in the kangaroo position. Then we end up being very **insecure**. I don't think I'm really **trained**. (N7)

The Ministry of Health (MH) trains tutors of the kangaroo method to later teach courses in their places of operation. The course has a duration of 24 hours and takes into account both technical improvement and awareness in the traditional posture of the professional, favoring the humanization of attention to the newborn. This often implies profound changes in behavior, attitudes, values and professional philosophy[10].

However, as reported by professionals, there is little availability of this training to professionals in the sector; there is no flow of training and qualification of the team beyond the shortage of permanent education. Many nurses and nursing technicians work in precarious conditions, with little pay, which makes them have to increase their workload, reducing or discouraging interest in professional qualification[11]. In this context, the nurse becomes a key player in the development of continuing education in the service, because, as a team leader, is able to develop strategies for improving care[15].

For being a case of severe and/or potentially serious patients, one can perceive the fear of putting the baby in a kangaroo position, because for professionals, this practice can bring instability to the patient.

It is also necessary that the managers of the institutions become aware of the implementation of good practices aimed at both the health of the NB and for parents and health professionals, aiming at a quality, qualified and humanized care[16].

Class 2) Importance of applying the kangaroo position

This class was composed of words such as "Important" ($x^2 = 29.63$); "Sit" ($x^2 = 17.82$); "Mother" ($x^2 = 15.02$); "Link" ($x^2 = 12.03$); "Contact" ($x^2 = 11.68$); "Satisfaction" ($x^2 = 10.91$); "Skin" ($x^2 = 7.85$); "Caring" ($x^2 = 7.68$), "Son" ($x^2 = 6.1$) and "Feeling" ($x^2 = 4.25$).

This class brings questions to the motives for practicing the kangaroo position. They are related to the numerous benefits in performing the technique. Due to this context, the team reports the importance of the technique for the mother, the baby and the professionals. Among the reports, the construction of the bond between the babies and their parents, the insertion of the mother and the family in the process of care, promotion of the link between the family and the team, besides favoring a humanized assistance.

> In this **moment**, the **baby** is with the **mother**, **because** he was in her bely and I **think it is important** this **skin-to-skin contact** with his **mother** [...]. (NT1)

> For the **mother**, it is **important** to perform the kangaroo position because of the **bond** too, she **feels** her **baby** close to her [...]. (NT8)

> The kangaroo position is **important** for the **mother** for being **closer** to the **baby**, more **bond**. For the professional, it is good to put the **baby** in kangaroo because we see the **mother's** happiness, it is a professional satisfaction. (N2)

> Mother-**baby** contact. The **baby** feels safer with her, the baby stays there in the incubator alone

> and in the kangaroo, he feels better. For the professional, it is **important** duet to the professional satisfaction. (N7)

Newborns admitted to a neonatal unit are very distant from their parents for numerous reasons, whether it is the severity of the newborn or issues of parental access to the unit. In this way, parents experience a mixture of feelings, which can be positive as faith and hope, but also negative, such as sadness, fear, anguish and anxiety[17]. Hospitalization in a neonatal unit impairs the formation of the affective bond and the interaction between the family and the child, fundamental to mitigate or accentuate the difficulties inherent in this condition of vulnerability of the neonate[18].

Thus, it is necessary to strengthen the bond between the baby and the parents so that they strengthen the feeling of protection and care for their child. The physical presence, the emotional involvement of parents and family support are essential for the recovery of the baby at this stage, who feels the parents' love and care, becoming indispensable factors for the clinical improvement of the baby[19]. During the kangaroo position, parents use tactile, olfactory, visual and auditory sensitivities, which promote safety and affection to newborns, in addition to increasing the bond between binomials[20].

In short, there are numerous benefits of the kangaroo position for the mother and the baby, such as: autonomy of the mother in the care of the newborn, improvement in clinical conditions, weight gain and hemodynamic stability, in addition to increasing the bond between the newborn-born and the family, encouraging breastfeeding, contributing to better baby development[21].

The nursing team plays a fundamental role in favoring the formation of the bond between mother and newborn. The professionals interviewed brought professional satisfaction as their own benefit. Caring for the newborn is the role of nursing, however, when observing joy and happiness of parents with the improvement of the newborn, the professional performs their work satisfactorily.

Class 3) Barriers experienced to perform the kangaroo position

This class was composed of words such as "Clothes" ($x^2 = 16.13$); "Duty" ($x^2 = 16.13$); "Fall" ($x^2 = 12.81$); "Flow" ($x^2 = 12.81$); "Cloth" ($x^2 = 9.54$); "Training" ($x^2 = 9.54$); "Course" ($x^2 = 9.54$); "Material" ($x^2 = 8.73$), "Suitable" ($x^2 = 5.75$) and "Weight" ($x^2 = 4.31$).

This class addresses aspects related to the difficulties faced to perform the technique. The professionals reported, mainly, lack of materials to perform the technique safely in addition to work overload, training for a team that works directly with patients. In fact, it negatively affects the context of the unit that aims at the safe, effective and correct realization.

> [...], but the **biggest** problem is the **clothing issue**, **there should be** a **better flow** for requesting the **material**. (N1)

> **Lack** of **material, lack** of **adequate cloth** to **perform** the kangaroo position. (NT3)

> I think we lack **training**. There should be more kangaroo **courses**. For the professional to feel **secure** in placing the baby in the kangaroo position. So we end up being very **insecure**. I don't think I'm really trained. (N7)

> **Clothing**. We never have **clothes**, **cloth**, anything. Sometimes mothers even want to do the kangaroo position, but they don't have **clothes** [...] (NT4)

In a neonatal unit, the routine of nursing professionals becomes quite complex because, in addition to providing assistance to the neonate and having managerial demands, the professional must also provide support to the parents and relatives of the patient[22]. In this way, the professionals report a work overload that hinders placing the baby in the kangaroo position, since it is necessary to maintain a constant vigilance of that binomial during the period when they are in the kangaroo position.

In many services, there is a lack of appropriate quantity of professionals, which leads to an increase in activities for each professional. Studies show that the high workload of the team is related to the results obtained regarding care[12].

Another major challenge for performing the kangaroo position is the availability of materials necessary to maintain the safety of the newborn. An important item is the use of the kangaroo blanket, as it keeps the baby firm to the mother's

body. In many occasions, there is a lack of material, thus professionals need to adapt to the practice with what the sector provides. However, some professionals choose not to perform the kangaroo position and keep the baby safe in the incubator.

Given the barriers experienced, it is essential that the kangaroo position is based only on scientific knowledge and humanization, thus it is necessary to qualify the health team through Permanent Health Education (PHE)[23]. That has great importance in the strategies of educational actions from the problematization of practices. Thus, it aims at the interaction of the team, avoiding disciplinary fragmentation and allowing professionals a reflective look and idealizers of knowledge and alternatives of action, in place of information receiver[24].

FINAL THOUGHTS

The study highlighted the professional practices in the kangaroo method as efficient in promoting the mother's autonomy, improvement in the baby's clinical condition, in addition to enhancing the affective bond between the mother-child binomial and promoting professional satisfaction in this context.

It was possible to detect a good adherence of nursing professionals to the kangaroo positioning of the baby, however, there were reports of difficulties in the performance of the technique, such as lack of material resources and the acceptance of the practice by a few professionals. When the professional has empowerment and realizes the benefits of the kangaroo position, they perform this practice more easily, placing as a priority the good care to the newborn and putting the difficulties in the background. Thus, it was possible to understand the reasons that lead or not to the adherence of professionals to this practice.

As a way to minimize the difficulty related to the low knowledge and technique of the professionals, the hospital provides the Kangaroo Method Course, however, activities are suspended due to the pandemic of the new Coronavirus. After completing the study, the neonatal unit inaugurated the new Kangaroo Intermediate Care Unit, being another tool to stimulate humanized care.

CONHECIMENTO E ADESÃO DA EQUIPE DE ENFERMAGEM À POSIÇÃO CANGURU EM UMA UNIDADE NEONATAL

RESUMO

Objetivo: compreender o conhecimento e adesão dos profissionais de enfermagem à posição canguru e investigar o conhecimento dos profissionais sobre a posição e seus benefícios. **Métodos:** pesquisa qualitativa realizada com 15 profissionais de enfermagem da neonatologia de um hospital terciário. Os dados foram coletados no período de agosto a setembro de 2020, utilizando instrumento desenvolvido pelos autores, e analisados pelo *software Interface de R pour les Analyses Multimensionnelles de Textes et de Questionnaire.* **Resultados:** todas as técnicas de enfermagem afirmaram colocar o recém-nascido em posição canguru. Já em relação às enfermeiras, uma afirma não realizar a posição. O conteúdo analisado foi categorizado em três classes: Classe 1) Vivências da equipe de enfermagem em realizar ou não a posição canguru; Classe 2) Importância da aplicação da posição canguru; e Classe 3) Barreiras vivenciadas em realizar a posição canguru. **Considerações finais**: evidenciou-se uma boa adesão dos profissionais à posição canguru, entretanto, relatam dificuldades para executar a técnica, como a inadequação da rotina, falta de incentivo institucional e treinamentos.

Palavras-chave: Enfermagem neonatal. Recém-nascido prematuro. Humanização da assistência.

CONOCIMIENTO Y ADHESIÓN DEL EQUIPO DE ENFERMERÍA A LA POSICIÓN CANGURO EN UNA UNIDAD NEONATAL

RESUMEN

Objetivo: comprender el conocimiento y la adhesión de los profesionales de enfermería a la posición canguro e investigar el conocimiento de los profesionales sobre la posición y sus beneficios. **Métodos**: investigación cualitativa realizada con 15 profesionales de enfermería de la neonatología de un hospital terciario. Los datos fueron recolectados en el período de agosto a septiembre de 2020, utilizando instrumento desarrollado por los autores, y analizados por el *software Interfaz de R pour les Analyses Multimensionnelles de Textes et de Questionnaire*. **Resultados**: todas las técnicas de enfermería afirmaron colocar al recién nacido en posición

canguro. En cuanto a las enfermeras, una afirma no realizar la posición. El contenido analizado fue categorizado en tres clases: Clase 1) Vivencias del equipo de enfermería al realizar o no la posición canguro; Clase 2) Importancia de la aplicación de la posición canguro; y Clase 3) Dificultades experimentadas al realizar la posición canguro. **Consideraciones finales**: se evidenció una buena adhesión de los profesionales a la posición canguro, sin embargo, relatan dificultades para ejecutar la técnica, como la inadecuación de la rutina, falta de incentivo institucional y entrenamientos.

Palabras clave: Enfermería neonatal. Recién nacido prematuro. Humanización de la atención.

REFERENCES

1. Survive and thrive: transforming care for every small and sick newborn. Key findings. Geneva: World Health Organization; 2018 (WHO/FWC/MCA/18.11). Licence: CC BY-NC-SA 3.0 IGO. [acesso em 30 maio 2020]. Disponível em: https://apps.who.int/iris/bitstream/handle/10665/276655/WHO-FWC-MCA-18.11-eng.pdf?ua=1

2. Farias SR, Dias FSB, Silva JB, Cellere ALLR, Beraldo L, Carmona EV. Kangaroo position in low birth weight preterm newborns: descriptive study. Revista Eletrônica de Enfermagem. 2017; 19:1-12. DOI: 10.5216/ree.v19.38433.

3. Hackbarth BB, Ferreira JA, Cartens HP, Amaral AR, Silva MR, Silva JC, França PHC. Suscetibilidade à prematuridade: investigação de fatores comportamentais, genéticos, médicos e sociodemográficos. Rev Bras Ginecol Obstet. 2015;37(8):354-358. DOI: 10.1590/SO100-720320150005338.

4. Mendes CQS, Cacella BCA, Mandetta MA, Balieiro MMFG. Low birth weight in a municipality in the southeast region of Brazil. Revista Brasileira de Enfermagem. 2015;68(6):1169-1175. DOI: 10.1590/0034-7167.2015680624i.

5. Ministério da Saúde (Brasil). Secretaria de Atenção à Saúde. Departamento de Ações Programáticas e Estratégicas. Atenção à saúde do recém-nascido: guia para os profissionais de saúde. Brasília (DF): Ministério da saúde; 2014. [acesso em 18 maio 2020]. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/atencao_saude_recem_nascido_v1.pdf

6. Araújo JP, Silva RMM, Collet N, Neves ET, Toso BRGO, Vieira CS. História da saúde da criança: conquistas, políticas e perspectivas. Revista Brasileira de Enfermagem. 2014;67(6):1000-1007. DOI: 10.1590/0034-7167.2014670620.

7. Brasil. Ministério da Saúde. Atenção humanizada ao recém-nascido: Método Canguru: manual técnico / Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Ações Programáticas Estratégicas. – 3 ed. – Brasília: Editora do Ministério da Saúde, 2017. [acesso em 22 maio 2020]. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/atencao_humanizada_metodo_canguru_manual_3ed.pdf.

8. Zirpoli DB, Mendes RB, Barreiro MSC, Reis TS, Menezes AF. Benefits of the Kangaroo Method: An Integrative Literature Review. Revista de Pesquisa: Cuidado é Fundamental Online. 2019; 11(2):547-554. DOI: 10.9789/2175-531.2019.v11i2.547-554.

9. Nunes CRN, Campos LG, Lucena AM, Pereira JM, Costa PR, Lima FAF, Azevedo VMGO. Relationship between the use of kangaroo position on preterm babies and mother-child interaction upon discharge. Revista Paulista de Pediatria. 2017;2(35):136-143. DOI: 10.1590/1984-0462/;2017;35;2;00006.

10. Ministério da Saúde (Brasil). Secretaria de Atenção à Saúde. Departamento de Ações Programáticas e Estratégicas. Método canguru: diretrizes do cuidado. Brasília (DF): Ministério da saúde; 2018. [acesso em 19 maio 2020]. Disponível em: https://portaldeboaspraticas.iff.fiocruz.br/wp-content/uploads/2018/09/metodo_canguru_diretrizes_cuidado2018.pdf

11. Souza JR, Ribeiro LM, Vieira GB, Guarda LEDA, Leon CGRMP, Schardosim JM. Método canguru na perspectiva dos profissionais de saúde de uma unidade de neonatologia. Enferm Foco. 2019. [acesso em 30 maio 2020]; 10(2):30-35. Disponível em: http://revista.cofen.gov.br/index.php/enfermagem/article/view/1604/515.

12. Sales IMM, Santos JDM, Rocha SS, Filho ACAA, Carvalho NAR. Sentimentos de mães na unidade canguru e as estratégias de suporte dos profissionais de enfermagem. Rev Cuid. 2018; 9(3): 2413-22. DOI: 10.15649/cuidarte.v9i3.545.

13. Camponogara S, Pinno C, Laiola CN, Oliveira CS, Dias GL. Percepções familiares sobre a visibilidade do enfermeiro atuante em unidade intensiva neonatal e pediátrica. Revista Contexto & Saúde. 2018 [acesso em 10 de Junho de 2020]; 18(35):104-110. DOI: 10.21527/2176-7114.2018.35.104-110.

14 Souza MAR, Wall ML, Thuler ACMC, Lowen IMV, Peres AM. The use of IRAMUTEQ software for data analysis in qualitative research. Rev Esc Enferm USP. 2018;52:e03353. DOI: 10.1590/S1980-220X2017015003353.

15. Rosa JQ, Cecagno D, Cecagno S, Tavares JMW, Soares MC. Pecepção do enfermeiros acerca do processo de titulação Hospital Amigo da Criança. Cienc Cuid Saude. 2021;e61774. DOI: 10.4025/ccs.v20i0.61774

16. Ferreira DO, Silva MPC, Galon T, Goulart BF, Amaral JB, Contim D. Kangaroo method: perceptions on knowledge, potentialities and barriers among nurses. Esc Anna Nery. 2019;4(23):e20190100. DOI: 10.1590/2177-9465-ean-2019-0100

17. Arruda CP, Gomes GC, Juliano LF, Nomberg PKO, Oliveira SM, Nicoletti MC. Reações e sentimentos da família frente à internação do recém-nascido na unidade neonatal. Revista Eletrônica Acervo Saúde. 2019 [acesso em 20 de Dezembro de 2020]; 11(15):1-9. DOI: 10.25248/reas.e1444.2019.

18. Costa DG, Castro HO, Passos RC, Lopes PA, Firmino VHN. Percepção da equipe de enfermagem sobre o método canguru. Revista Ibero-Americana de Humanidades, Ciências e Educação. 2021; 7(9):2675-3375. DOI: 10.51891/rease.v7i9.2228.

19. Lima LG, Smeha LN. The experience of maternity to the baby hospitalization in the icu: a roller coaster of emotions. Psicologia em Estudo. 2019;24;1-14. DOI: 10.4025/psicolestud.v24i0.38179.

20. Lopes TRG, Santos VE, Carvalho JB. A presença do pai no método canguru. Escola Anna Nery Revista de Enfermagem. 2019;23(3):1-5. DOI: 10.1590/2177-9465-ean- 2018-0370.

21. Carvalho ETS, Mais FS, Costa RSL. Método canguru: o papel do enfermeiro frente aos cuidados de enfermagem. De ciência em foco. 2018 [acesso em 5 Jan. 2021]; 2(2):99-113. Disponível em: http://revistas.uninorteac.com.br/index.php/DeCienciaemFoco0/article/view/214/62.

22. Valadares CB, Silva VR. Intervenções de Enfermagem no Cuidado Intensivo Neonatal: Um relato de experiência. Society And Development. 2020; 9(7):1-7. DOI: 10.33448/rsd-v9i7.5185.

23. Nietsche EA, Papa MM, Terra LG, Reisdorfer AP, Ramos TK, Antunes AP. Método Canguru: estratégias de Educação Permanente para sua implementação e execução. Revista Cuidarte. 2019 [acesso em 30 Jul. 2022]; 11(1)e897, 2020. Disponível em: https://www.redalyc.org/journal/3595/359565269004/html/

24. Amaro MOF, Mendlonça ET, Carvalho CA, Nakada KN, Siman AG, Ferreira NCS. Concepções e práticas dos enfermeiros sobre educação permanente no ambiente hospitalar. Arq. de Ciências da Saúde da UNIPAR. 2018 [acesso em 30 Jul. 2022]; 22(2): 87-94. DOI: 10.25110/arqsaude.v22i2.2018.6337

Corresponding author: Ana Caroline Sales da Silva. Av. Contorno Oeste, bloco 41, Aptº 22B, Nova Metrópole – Caucaia, Ceará. +55 (85) 98922-5033, +55 (85) 99998-6012. anacarolinesalesdasilv

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