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RESEARCH

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EVALUATION OF THE THIRD STAGE OF THE KANGAROO METHOD IN PRIMARY HEALTH CARE

*Avaliação da terceira etapa do método canguru na atenção primária a saúde**Evaluación de la tercera etapa del método canguro en atención primaria de salud***Marcos Vilhena Bittencourt da Silva¹** **Zeni Carvalho Lamy^{2,*}** **Álvaro Francisco Lopes de Sousa¹** **Zulmira Hartz³** **Cintia Maria de Melo Mendes¹** **Carmen Viana Ramos¹** 

ABSTRACT

Objective: to evaluate the assistance provided to children by Primary Health Care in the third stage of the kangaroo method. **Methods:** cross-sectional study with 156 preterm children from January to June 2020. A questionnaire was used containing socio-demographic, clinical and care-related variables. **Results:** Among the children: 54.5% were over six months old; 51.9% were from the countryside or other locations; 94.9% were low-income; 39.1% weighed less than 1500g; 62.2% and 12.2% were born with gestational age between 28 and 33 weeks and less than 28 weeks, respectively. As for the assistance provided: 74.4% of the children did not undergo consultations in primary care and among those attended, 78.2% classified it as poor/fair; 59.6% did not receive a home visit. **Conclusion:** the evaluation of the third stage of the kangaroo method in primary care, from the perspective of mothers, pointed out weaknesses in qualification, comprehensiveness of care, network redesign/discussion, in reference and counter-reference.

DESCRIPTORS: Premature newborn; Primary health care; Kangaroo method; Health care; cross-sectional study.

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RESUMO

Objetivo: avaliar a assistência prestada às crianças pela Atenção Primária à Saúde na terceira etapa do método canguru. **Métodos:** estudo transversal com 156 crianças pré-termo no período de janeiro a junho de 2020. Utilizou-se questionário contendo variáveis sócio-demográficas, clínicas e relacionadas à assistência prestada. **Resultados:** Dentre as crianças: 54,5% tinham idade acima de seis meses; 51,9% eram do interior ou de outras localidades; 94,9% eram de baixa renda; 39,1% tiveram peso menor que 1500g; 62,2% e 12,2% nasceram com idade gestacional entre 28 a 33 semanas e inferior a 28 semanas, respectivamente. Quanto à assistência prestada: 74,4% das crianças não realizaram consultas na atenção primária e dentre as atendidas, 78,2% classificaram como ruim/regular; 59,6% não receberam visita domiciliar. **Conclusão:** a avaliação da terceira etapa do método canguru na atenção primária, sob o olhar de mães, apontou fragilidades na qualificação, integralidade da assistência, redesenho/discussão da rede, na referência e contra-referência.

DESCRITORES: Recém-nascido prematuro; Atenção primária à saúde; Método canguru; Assistência à saúde. Estudos transversais.

RESUMÉN

Objetivo: evaluar la asistencia brindada a los niños por la Atención Primaria de Salud en la tercera etapa del método canguru. **Métodos:** estudio transversal con 156 niños prematuros de enero a junio de 2020. Se utilizó un cuestionario con variables sociodemográficas, clínicas y asistenciales. **Resultados:** Entre los niños: 54,5% tenían más de seis meses; El 51,9% eran del campo u otras localidades; 94,9% eran de bajos ingresos; El 39,1% pesaba menos de 1500 g; El 62,2% y el 12,2% nacieron con edades gestacionales entre 28 y 33 semanas y menos de 28 semanas, respectivamente. En cuanto a la asistencia brindada: el 74,4% de los niños no acudió a consultas en atención primaria y entre los atendidos, el 78,2% la clasificó como mala / regular; El 59,6% no recibió visita domiciliar. **Conclusión:** la evaluación de la tercera etapa del método canguru en atención primaria, desde la perspectiva de las madres, señaló debilidades en la calificación, integralidad de la atención, rediseño / discusión de la red, en referencia y contrarreferencia.

DESCRIPTORES: Recién nacido prematuro; Primeros auxilios; Método canguru; Cuidado de la salud; estudio transversal.

INTRODUCTION

Preterm birth is birth occurring before 37 weeks gestation or between 140 and 257 days after the first day of the last menstrual period.¹ Prematurity is the leading cause of perinatal mortality in many countries, with a highly variable incidence. The birth of preterm infants represents a major challenge for public health services around the world as it is a determinant of morbidity and mortality.²

According to data from the United Nations Children's Fund (UNICEF) in 2019, the prevalence of preterm newborns (PNEB) in Brazil may reach 9.2%. Data from the Live Births Information System (SINASC), in 2019, for the State of Piauí, show that the prevalence of preterm was 10.4% of live births, and in the only public maternity reference for high risk, 24.3% of newborns were PT.³

The kangaroo method has been implemented in most countries as a strategy for reducing infant mortality and qualifying neonatal care, and in Brazil, it was adopted in 2000, published in an ordinance, as a public health policy. The kangaroo method is carried out in three stages: the first two are performed in the hospital and the third comprises the initiation of discharge and follow-up with primary health care. Between each stage, there are eligibility and discharge criteria to ensure the safety of the NB and effectiveness in progressive care.⁴

The kangaroo method is a model of care that begins in risky pregnancies and continues until the newborn weighs 2500g. In this model, care is comprehensive, starting in the prenatal period

and continuing through the mother's hospitalization, delivery and birth, hospitalization of the newborn, and return home.⁵

In Primary Health Care (PHC), with regard to child follow-up, health promotion is closely related to health surveillance and child development, whose actions are able to reduce situations of vulnerability and risk, favoring early identification and intervention in the face of delayed child development.⁶

The follow-up of preterm infants in PHC after hospital discharge is one of the actions proposed by the National Policy for Comprehensive Care of Child Health (PNAISC), established in 2015 by the Ministry of Health of Brazil, which aims to ensure comprehensive, resolute, and humanized care to newborns at risk for the reduction of infant morbidity and mortality, with the Manual of the Third Stage of the Kangaroo Method in Primary Care as a guiding instrument.⁷

Despite this, there are still few studies on this important follow-up and those that are found in the literature point to difficulties in deployment and implementation that need to be better studied. The role of the FHS teams still needs to be better known, implemented and disseminated.

Studies point out that the perception of risk of children born preterm or with low birth weight contributed to the fact that PHC professionals did not recognize the importance of their care and that there is still fragmentation and discontinuity of care, marked by lack of communication between the two levels of care - PHC and hospital care.^{2,4-5} Another study⁸ discusses the difficulties present in the assistance to the child born preterm, in the third stage of the kangaroo method, resulting from a certain lack of

knowledge by its facilitators and the lack of effective articulation of hospital care with primary health care. This fragility has substantial repercussions on the increase in late neonatal mortality. The identification of gaps in the care of preterm children may result in interventions that improve the quality of care aimed at reducing infant mortality in this group.⁹

These identified issues need to be better known for an effective implementation of continuing education actions and matrix support to PHC teams. From this perspective, this study aimed to evaluate the assistance provided to children by Primary Health Care in the third stage of the kangaroo method.

METHODS

This is a descriptive study, with cross-sectional design, conducted with mothers of children who were born preterm, egresses from a reference Maternity for high-risk pregnancy in the State of Piauí. In this institution, the kangaroo method is implemented and is a reference for the state. Moreover, this maternity has a high-risk outpatient clinic to which children born preterm are referred after discharge. Data collection occurred from January to June 2020.

The evaluation performed followed the theoretical conception of quality evaluation proposed by Donabedian,¹⁰ whose basic components are: Structure, Process, and Result. For this study, in particular, the process component was chosen, as it constitutes the essential component in which the interaction with the user materializes the health action, as observed by Tanaka.¹¹

Mothers of children who were followed up in the third stage of the kangaroo method participated in the study, and during the research period they were being followed up in the high-risk outpatient clinic. On average, 37 children are discharged per month for the third stage of the kangaroo method, making a total of 444 children per year who are referred for follow-up in PHC. Considering the finite population, the calculated sample was 156 children with a sampling error of 5%, confidence level of 95%. For participation in the study, the following inclusion criteria were considered: being the mother of children who were born preterm in the maternity and participated in the Kangaroo Method (MC), under two years of age and being followed-up in the Family Health Strategy (FHS) in the municipality of residence. Exclusion criteria were: being the mother of children who were being followed-up only in the private service and in the maternity hospital.

The instrument used for data collection consisted of a structured questionnaire prepared by the researcher, containing questions related to socio-demographic data (maternal age, municipality of residence, rural or urban area, type of property, family income, education, maternal work, marital status, number of family members, social program); clinical variables of the children (gestational age, birth weight, birth length)

and data on the assistance received during the third stage of Kangaroo Method (guidance received by the family, scheduling of consultations, and evaluation of what was done during the consultation), based on the actions that are recommended in the “Manual of the third stage of the Kangaroo Method in Primary Care”.¹¹⁻¹²

The questionnaire was applied by the researcher himself with the interviewees, recording the answers in the instrument. Initially, a pre-test of the questionnaire was carried out with 20 mothers in person, in order to find possible inconsistencies or difficulties of understanding on the part of the interviewees. This data was kept in the final sample because no inadequacies were found in the instrument developed for this research.

The interviews were initially carried out in person at the maternity hospital, at the moment the children returned for their third stage consultation or for the consultation at the high-risk outpatient clinic. Due to the pandemic of COVID 19, the return to the maternity ward of children who were born preterm was suspended, and the remaining interviews were carried out by phone after they agreed to participate in the research and filled out the TCLE via Google forms link sent by whatsapp. In this opportunity, the researcher, who is a medical professional, took the opportunity to assess the situation of the children who were born preterm and provided guidance and clarified doubts of the mothers, when necessary, performing a teleconsultation.

Data were tabulated in Microsoft Office Excel software and processed using the statistical package Stata® version 13. The variables were presented using descriptive statistics: number, proportions.

The research was approved by the Research Ethics Committee (CEP) of the Instituto de Ensino Superior do Piauí LTDA, opinion N° 4.034.701, CAAE N° 20652619.1.00005210, on May 18, 2020, according to the resolution of the National Health Council N° 466/12, Ministry of Health. All participants signed the Informed Consent Form (ICF). There were no refusals to participate in the study.

RESULTS

The study included 156 mothers of preterm infants who were experiencing the third stage of the Kangaroo Method. The social demographic data of mothers or guardians are described in Table 1.

The pregnancy-related characteristics (Age, Birth Weight, and Gestational Age of children in the study) are arranged in Table 2.

Regarding prenatal and child follow-up visits, the main findings are shown in Table 3.

The assistance provided by primary health care to the children participating in the third stage of the MC were arranged in Table 04.

Table 1 – Sociodemographic characteristics (mothers) of a reference maternity hospital. Teresina, PI, Brazil, 2020.

Variables	N°	%
City of residence		
Teresina	62	39,7
Other counties Piauí	81	51,9
Maranhão	13	8,3
Mother's age (years)		
<20	27	17,3
20 to 30	72	46,1
30 to 40	55	35,3
>40	2	1,3
Marital status		
With partner	123	78,8
No partner	33	21,2
Numbers of family members residing in the household		
2 to 3	34	21,8
4 to 5	122	78,2
Type of property		
Own	74	47,4
Rented	17	10,9
Lent/Loaned	65	41,7
Monthly family income (SM)		
<1	52	33,4
1 to 2	96	61,5
≥ 3	8	5,1
Receives Social Benefit		
Yes	68	43,6
No	88	56,4
Mother's work		
Yes	29	18,6
No	127	81,4
Education		
Up to 8 years old (EF)	32	20,5
More than 8 years (EM and above)	124	79,5
Total	156	100,0

Table 2 – Characteristics regarding age, birth weight and gestational age of children in the study. Teresina, PI, Brazil, 2020.

Variables	n°	%
Age (months)		
0 to 3	47	30,1
4 to 6	24	15,4
7 to 12	40	25,6
≥ 12	45	28,9
Birth weight (grams)		
500 to 999	15	9,6
1000 to 1499	46	29,5
1500 to 1999	79	50,6
2000 to 2499	13	8,3
>2500	3	1,9
Gestational age (weeks)		
Late preterm - 34 to 36	40	25,6
Moderate preterm - 28 to 33	97	62,2
Extreme preterm - <28	19	12,2
Total	156	100,0

Table 3 – Variables related to follow-up consultations, of the study children in the third stage of the Kangaroo Method. Teresina, PI, Brazil, 2020.

Variables	n°	%
Maternity Discharge Report		
No	2	1,3
Yes	153	98,1
Don't know	1	0,6
Understands the importance of the discharge report		
No	74	47,4
Yes	82	52,6
Takes the discharge report to the appointments		
No	15	9,6
Yes	127	81,4
Sometimes	14	9,0
Received home visits		
No	93	59,6
Yes	63	40,4
Period of the home visit (n=63)		
1st week post-discharge	20	31,8
From the 2nd week post-discharge	43	68,2
After the hospital discharge, he had a consultation at his neighborhood BHU		
No	116	74,4
Yes	40	25,6
Return to BHU 1st week		
No	137	87,8
Yes	19	12,2
Return to BHU 2nd week		
No	131	84,0
Yes	25	16,0
Return to BHU 3rd week		
No	138	88,5
Yes	18	11,5
Total	156	100,0

Table 4 – Variables related to the assistance provided by primary health care in the third stage of MC. Teresina, PI, Brazil, 2020.

Variables	n°	%
Professional who provided the consultation (n=80)		
Doctor	37	46,2
Nurse	43	53,8
They ask about the new routine after the baby arrives at home		
No	24	30,0
Yes	55	68,8
Don't know	1	1,6
Do you observe the baby and evaluate how he is doing?		
No	23	28,8
Yes	56	70,0
Don't know	1	1,2
If you are breastfeeding or using artificial milk?		
No	11	13,8
Yes	67	83,8
Don't know	2	2,5
Does the staff check your baby's temperature?		
No	46	57,5
Yes	33	41,3
Don't know	11	1,2

Table 4 – Cont.

Variables	n°	%
Does the staff weigh the baby?		
No	55	68,8
Yes	24	30,0
Don't know	1	1,2
Does it measure the baby's head?		
No	49	61,3
Yes	30	37,5
Don't know	1	1,2
Does it measure the size of the baby?		
No	48	60,0
Yes	31	38,8
Don't know	1	1,2
About the sounds the baby is hearing?		
No	51	64,6
Yes	26	32,9
Don't know	2	2,5
If the baby stays in the kangaroo position?		
No	52	65,0
Yes	27	33,8
Don't know	1	1,2
About the amount, frequency, and appearance of poop and pee?		
No	20	25,0
Yes	56	70,0
Don't know	4	5,0
About bathing the baby?		
No	35	43,8
Yes	43	53,8
Don't know	2	2,5
About your baby's sleep?		
No	34	42,5
Yes	42	52,5
Don't know	4	5,0
Look at the vaccination card?		
No	18	22,5
Yes	61	76,2
Don't know	1	1,2
Do you note the weight and other measurements on the vaccination card?		
No	47	58,8
Yes	32	40,0
Don't know	1	1,2
Does it advise about the signs of risk that the baby may present?		
No	47	58,8
Yes	32	40,0
Don't know	1	1,2
Do you know the signs of risk that your baby may present?		
No	44	55,0
Yes	33	41,2
Don't know	3	3,8
Total	80	100,0

Finally, we present the assessment of the mothers participating in the study about the care provided after discharge in Table 05. Regarding the completion of neonatal screening tests, the results showed that 100% of mothers performed the Guthrie Test, 95.5% the Little Ears Test, and 89.7% the Little Eyes Test. As

for receiving doses of the immunobiological Palivizumab, due to the indication of having a gestational age under 28 weeks, only 4 children, among the 19 who had the indication, received the dose still in the maternity ward.

Table 5 – Mothers' assessment on the care provided after maternity hospital discharge. Teresina, PI, Brazil, 2020.

Variables	n°	%
Bad	71	45,5
Regular	51	32,7
Good	23	14,7
Great	11	7,1
Total	156	100,0

DISCUSSION

As for the sociodemographic characteristics of the study participants, the results show that this is a population whose majority lives in the inland municipalities, has low income, does not work, does not receive help from social benefits, and lives with more than 4 (four) members in the same household, configuring a situation of social vulnerability.

One study showed that low socioeconomic status is related to a higher occurrence of preterm births and low birth weight,¹³ and in another study¹⁴ carried out in Paraná, Brazil, with preterm births, socioeconomic conditions of the families were similar to those found in this sample.

Other studies carried out in underdeveloped countries, and in the northeast of Brazil, with the objective of evaluating the relationship between social and economic status and the prevalence of preterm births, observed that besides the outcome for preterm births, they indicated that these factors favored delays in child growth and development.^{5,15}

Most mothers or guardians had a higher level of education, which may facilitate the understanding of the orientations received in the health service, being an opportunity to improve the health condition and quality of life of these children. A study¹⁶ carried out in Recife, which characterized the effect of schooling of puerperal women on breastfeeding, highlighted that more educated people can obtain and absorb more health information.

Regarding the biological characteristics of the children, it was observed in the present study that about 1/3 were born with very low weight, moderate preterm, some with extreme low weight and extreme for gestational age, fitting in at least one of the criteria considered by the Brazilian Ministry of Health as children at risk and with high vulnerability, requiring, therefore, continuity of care after hospital discharge.¹⁷

Low weight and gestational age, being the main characteristics related to risk, are pointed out in a study as the most important variables closely related to long periods of hospitalization of the newborn.¹⁸ The results found in this research can also be compared to those found in another study carried out in a reference hospital in the northern region of Brazil, where similar numbers

were obtained, 80.5% of newborns were born weighing less than 2,500g and 79.25% were moderate preterm.¹⁹

An important aspect related to hospital care of PIs concerns the preparation and availability of the discharge report, which is a strategic document for the continuity of care of preterm newborns, since it summarizes the information related to the care provided during hospitalization.²⁰

This study, in particular, showed that almost all mothers received the discharge report and shared it with the professionals who attended them; however, more than half of them did not understand the importance of this document, which may suggest a weakness in the communication between hospital professionals and families or even a lack of appreciation by Primary Care professionals.

In this research, a considerable number of mothers who did not receive a home visit (HV) was noted. This fact may be related to a probable lack of emphasis by maternity professionals in the orientation on the importance of seeking primary care after discharge. The Ministry of Health has reinforced that an important role of hospital care professionals, especially in the second stage of the Kangaroo Method, is the preparation for discharge. In the third stage, shared care should be articulated, linking mothers to their PHC teams in the territory²². One issue that seems to contribute to the non-valuation of care in PHC was that although the hospital care professionals recognized the importance of PHC in the continuity of care, there was always an emphasis on the unpreparedness of these teams in monitoring the child born with premature birth and/or BP, pointing out the need to receive adequate training to deal with the peculiarities of these children²³.

Home visits, for the mothers who received them, most often occurred from the second week after discharge, which is in line with the recommendation of the Brazilian Ministry of Health, which recommends that they are carried out in the first 72 hours after discharge in order to assess risk situations and encourage breastfeeding.^{7,12}

Studies that have shown evidence of the benefits of home visits for this public highlight: development of the bond between the health team and the family, improvement in the practice of

breastfeeding, and better results in the cognitive development of preterm and low birth weight newborns.^{4,21}

Other studies also add that the assistance to families at home, in addition to allowing greater proximity of the professional with the child's family, facilitates the understanding of the disease health process and its determinants, providing the first line of care that optimizes the child's growth and development.²²⁻²³ Therefore, it is important to remember that the HV is of fundamental importance in the monitoring of children in the third stage of MC.²⁴

When it comes to consultations in the third stage, in the basic health unit, the vast majority of mothers did not have this care. According to the Manual of the Third Stage of the Kangaroo Method in Primary Care, three consultations are suggested in the first week, two in the second, and one weekly consultation from the third week on, until reaching the weight of 2,500g, when the child is discharged from the third stage.²⁴ These consultations should be shared, some in the AH (hospital where the child was born) and some in the PHC (Basic Health Unit). In this study, they preferred to return to the hospital, probably reinforcing the fragility of the link with PHC, the lack of information about the role of PHC in the third stage during hospitalization and the lack of articulation between the AH and PHC.

In the present study, only 9 children had this agenda recommendation fulfilled. The discontinuity of care occurs in a complex way and for various reasons such as the lack of perception, by the mothers, of the need for a follow-up visit; lack of organization of services with active search, fragile socioeconomic status of the family that makes it difficult, for example, the transportation; lack of social support for mothers, either family or professional. These issues result in the risk of worse prognoses in the long term.^{2,25}

In this particular evaluation, we found high rates of non-compliance in the care process for the PIs in the third stage of MC in primary health care, especially in the variables that analyze the potential risk indicators (anthropometric data, kangaroo position, hypothermia, sleep assessment and sound stimuli).

The professional who most attended the child during the home visit and/or consultation at the basic health unit was the nurse. According to the answers obtained by the mothers, it was possible to analyze, indirectly, the level of knowledge of professionals about the guidelines recommended by the Brazilian Ministry of Health that must be performed during the assistance provided to children.

It is noteworthy that, in general, in aspects related to the new routine of the baby at home, its observation, breastfeeding, physiological eliminations, and looking at the child's health booklet, the professionals had more concern, probably because they are already part of their routine in childcare.

The variables studied that had a median response were those related to the guidance on the care given by the mother to the baby (bath, sleep, and guidance on where the baby should be taken if he/she presents any risk). However, the variables that are related to the assessment of risk indicators of PIs by professionals during the consultation (temperature, weight, head circumfe-

rence, height, and specific guidance on kangaroo position and signs of risk that the baby may present) were less performed by professionals, according to the mothers' responses.

This is an important result that shows how much the process of implementing the Third Stage of the Kangaroo Method is still under construction and points out, corroborated by other studies^{8,23}, the need for planning strategies that help overcome existing difficulties for continuity of care after discharge. Among these strategies, one can highlight guidelines for parents since the prenatal period, with emphasis during hospitalization of the newborn in the Neonatal Unit, highlighting the importance of monitoring the child in a shared manner and, on the other hand, the training of PHC teams for this follow-up.

The principle of integrality is one of the pillars of SUS, which advocates actions of promotion, prevention of diseases, and health recovery and guides a comprehensive view of the individual, taking into account the whole context where he/she is inserted and its achievement is only possible through the intra and interservice articulation of different sectors and levels of complexity.²⁶⁻²⁷

This aspect of primary care is insipient on the part of professionals, showing that there is a deficit of knowledge and lack of preparation of professionals for its implementation in practice, bringing damage to the quality of care provided to the child, leaving this group of babies in a situation of vulnerability because there is no consistency in the care provided, as can be seen in a survey conducted with health workers in a capital of northeastern Brazil, about their perceptions of the articulation between the services of the Neonatal Unit and PHC in monitoring children in the third stage of the Kangaroo Method.²⁷

Finally, regarding the completion of neonatal screening tests, it was observed that they reached high rates of completion, following the recommendations of the MH,¹² but when the variable on the use of palivizumab in preterm infants under 28 weeks is observed, it is suggested that mothers are unaware of the real purpose of this strategy, since a considerable number of them could not inform about the use in their children.

When the mothers were questioned about the assessment of the care received by the FHS after discharge from the maternity ward, most considered it to be bad, and only 1/10 of the interviewees considered it to be good. A similar finding was found in a research²⁸ in Salvador (BA), which showed that the primary care professionals themselves demonstrate little credibility and that their performance does not reach the integrality that is recommended by the SUS.

This study had limitations, since more than 50% of the children were over 6 months old at the time of the interview, memory bias may have compromised the answers given by them, especially those related to post-discharge care by PHC. Another aspect to be mentioned as a limitation was the fact that the participation of community health agents in the care provided in the third stage was not questioned, although the home visit was part of the research instrument.

CONCLUSION

The evaluation of the process of the third stage of the MC revealed that the care provided by primary health care to children, from the mothers' point of view, presents weaknesses, and points to the need for qualification for primary health care professionals. Another point to be highlighted is the need to strengthen the articulation between hospital care and primary health care, in order to ensure improvement in the flow of care in the follow-up of the preterm-born child. These actions are important to reduce infant morbidity and mortality, valuing both the outpatient follow-up in the hospital and in primary care.

REFERENCES

- Berger AZ, Zorzim VI, Pôrto EF, Alfieri FM. Parto prematuro: características das gestantes de uma população da zona sul de São Paulo. *Rev. Bras. Saúde Mater. Infant.* (Online). [internet]. 2016 [acesso em 18 de maio 2021];16(4). Disponível em: <https://doi.org/10.1590/1806-93042016000400005>.
- Berres R, Baggio MA. (Des)continuidade do cuidado ao recém-nascido pré-termo em região de fronteira. *Rev. bras. enferm.* [internet] 2020 [acesso em 18 de maio 2021];73(3). Disponível em: <https://doi.org/10.1590/0034-7167-2018-0827>.
- Ministério da Saúde (BR). Sistema de Nascidos Vivos (SINASC). Data SUS. [Internet] 2019. Brasília: Ministério da Saúde [acesso em 21 de março 2019]. Disponível em: <http://sinasc.saude.gov.br/>.
- Silva RMM, Zilly A, Nonose ERS, Fonseca LMM, Mello DF. Care opportunities for premature infants: home visit and telephone support. *Rev. latinoam. enferm.* (Online). [internet]. 2020 [acesso em 18 de maio 2021];28. Disponível em: <http://dx.doi.org/10.1590/1518-8345.3520.3308>.
- Ferreira DO, Silva MPC, Galon T, Goulart BF, Amaral JB, Contim D. Método canguru: percepções sobre o conhecimento, potencialidades e barreiras entre enfermeiras. *Esc. Anna Nery Rev. Enferm.* [internet]. 2019 [acesso em 18 de maio 2021];23(4). Disponível em: <http://dx.doi.org/10.1590/2177-9465-ean-2019-0100>.
- Pereira LB, Abrão ACFV, Ohara CVS, Ribeiro CA. Vivências maternas frente às peculiaridades da prematuridade que dificultam a amamentação. *Texto & contexto enferm.* [internet]. 2015 [acesso em 18 de maio 2021];24(1). Disponível em: <http://dx.doi.org/10.1590/0104-07072015000540014>.
- BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Método Canguru: manual da terceira etapa do Método Canguru na tenção Básica 1 ed. Brasília: Ministério da Saúde, 2018.
- Aires LC, Santos EK, Costa R, Borck M, Custódio ZA. Baby follow-up in primary care: interface with the third stage of the kangaroo method. *Rev Gaucha Enferm.* 2015 [cited 2021 may 18];36. Available from: <http://dx.doi.org/10.1590/1983-1447.2015.esp.56805>.
- Silva EP, Lima RT, Osório MM. Impact of educational strategies in low-risk prenatal care: systematic review of randomized clinical trials. *Cien Saude Colet.* 2016 [cited 2021 may 18];21(9):2935-48. Available from: <http://dx.doi.org/10.1590/1413-81232015219.01602015>.
- Donabedian, A. The definition of quality: A conceptual exploration. In *explorations in quality assessment and monitoring.* [internet]. 1980 [cited 2021 may 18];J:77-125. Available from: <https://psnet.ahrq.gov/issue/definition-quality-and-approaches-its-assessment-vol-1-explorations-quality-assessment-and>.
- Tanaka, O. Y. et al. Avaliação da atenção básica em saúde: uma nova proposta. *Saúde soc.* [internet]. 2011 [acesso em 18 de maio 2021];20(4). Disponível em: <https://doi.org/10.1590/S0104-12902011000400010>.
- BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Guia de orientações para o Método Canguru na Atenção Básica: cuidado compartilhado. 1 ed. Brasília: Ministério da Saúde, 2016.
- Dias JPV, Costa MC, Sette DS, Nobre LN. Perfil clínico de neonatos internados em uma unidade de tratamento intensivo neonatal. *Brazilian Journal of Development.* [internet]. 2019 [acesso em 18 de maio 2021];5(10). Disponível em: <https://brazilianjournals.com/index.php/BRJD/article/view/4192>.
- Costa LD, Andersen VF, Perondi AR, França VF, Cavalheiri JC, Broloti S. Fatores preditores para a admissão do recém-nascido na unidade de terapia intensiva neonatal. *Rev. baiana enferm.* [internet]. 2017 [acesso em 18 de maio 2021];31(4). Disponível em: <http://dx.doi.org/10.18471/rbe.v31i4.20458>.
- Ofman G, Pradarelli B, Caballero MT, Bianchi A, Grimaldi LA, Sancilio A, et al. Respiratory failure and death in vulnerable premature children with lower respiratory tract illness. *J infect Dis.* [internet]. 2020 [cited 2021 may 18];222(7). Available from: <https://doi.org/10.1093/infdis/jiaa046>.
- Rocha FPS, Patrício FB, Passos MNS, Lima SWO, Nunes MGS. Caracterização do conhecimento das puérperas acerca do aleitamento materno. *Rev. enferm. UFPE on line.* [internet]. 2018 [acesso em 18 de maio 2021];12(9). Disponível em: <https://doi.org/10.5205/1981-8963-v12i9a235911p2386-2392-2018>.
- Formiga CKMR, Silva LP, Linhares MBM. Identificação de fatores de risco em bebês participantes de um programa

- de Follow-up. Rev. CEFAC. [internet]. 2018 [acesso em 18 de maio 2021];20(3). Disponível em: <https://doi.org/10.1590/1982-021620182038817>.
18. Gonzaga ICA, Santos SLD, Silva ARV, Campelo V. Atenção pré-natal e fatores de risco associados à prematuridade e baixo peso ao nascer em capital do nordeste brasileiro. Ciênc. Saúde Colet. [internet]. 1974 [acesso em 18 de maio 2021];21(6). Disponível em: <https://doi.org/10.1590/1413-81232015216.06162015>.
 19. Lima SS, Silva SM, Avila PES, Nicolau MV, Neves PFM. Aspectos clínicos de recém-nascidos admitidos em Unidade de Terapia Intensiva de hospital de referência da Região Norte do Brasil. ABCS health sci. [internet]. 2015 [acesso em 18 de maio 2021];40(2). Disponível em: <https://pesquisa.bvsalud.org/portal/resource/pt/lil-754816>.
 20. Reis ZS, Aguiar RALP, Ferreira AAT, viegas AC, Anchieta LM. Análise do conteúdo do sumário de alta obstétrica em maternidade de referência. Uma oportunidade para repensar a estratégia da continuidade do cuidado materno e neonatal. Rev. méd. Minas Gerais. [internet]. 2015 [acesso em 18 de maio 2021];25(4). Disponível em: <http://www.dx.doi.org/10.5935/2238-3182.20150111>.
 21. Careti CM, Furtado MCC, Barreto JC, Vincente JB, Lima PR. Ações em saúde na atenção básica para redução da mortalidade infantil. Rev Rene (Online). [internet]. 2016 [acesso em 18 de maio 2021];17(1). Disponível em: <https://doi.org/10.15253/2175-6783.2017000500006>.
 22. BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Manual da terceira etapa do Método Canguru na Atenção Básica. Brasília: Ministério da Saúde, 2018.
 23. Silva MS, Lamy ZC, Simões VMFS, Pereira MUL, Campelo CMC, Gonçalves LLM. Acompanhamento na terceira etapa do método canguru: Desafios na articulação de dois níveis de atenção. Rev. baiana saúde pública. [internet]. 2018 [acesso em 18 de maio 2021];42(4). Disponível em: <https://doi.org/10.22278/2318-2660.2018.v42.n4.a3033>.
 24. Diniz SG, Damasceno SS, Coutinho SED, Toso BRGO, Collet N. Avaliação do atributo integralidade na atenção à saúde da criança. Rev. gaúch. enferm. 2016 [acesso em 18 de maio 2021];37(4). [internet]. Disponível em: <https://doi.org/10.1590/1983-1447.2016.04.57067>.
 25. Oliveira IA, Cutolo LRA. Integralidade: algumas reflexões. Rev. bras. educ. méd. [internet]. 2018 [acesso em 18 de maio 2021];42(3). Disponível em: <https://doi.org/10.1590/1981-52712015v42n3rb20170102r1>.
 26. Silva MS, Lamy ZC, Simões VMFS, Pereira MUL, Campelo CMC, Gonçalves LLM. Acompanhamento na terceira etapa do método canguru: Desafios na articulação de dois níveis de atenção. Rev. baiana saúde pública. [internet]. 2018 [acesso em 18 de maio 2021];42(4). Disponível em: <https://doi.org/10.22278/2318-2660.2018.v42.n4.a3033>.
 27. Valadão PAS, Lins L, Carvalho FM. Melhor no passado: a verdadeira Saúde da família. Saúde Soc. [internet]. 2019 [acesso em 18 de maio 2021];28(1). Disponível em: <https://doi.org/10.1590/s0104-12902019180284>.
 28. Reichert APS, Soares AR, Bezerra ICS, Guedes ATA, Pedrosa RKB, Vieira DS. The third stage of kangaroo method: experience of mothers and primary healthcare professionals. Esc Anna Nery [internet]. 2021 [acesso em 18 de maio 2021];25(1):e20200077. Disponível em: <https://doi.org/10.1590/2177-9465-EAN-2020-0077>