Original Article

TEXTO & CONTEXTO ENFERMAGEM
TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

FROM IMPLEMENTATION TO DISSEMINATION OF KANGAROO CARE IN SANTA CATARINA: A FOUCAULT'S ANALYSIS

Luana Cláudia dos Passos Aires[1]
Laís Antunes Wilhelm[2]
Margarete Maria de Lima[2]
Isadora Ferrante Boscoli de Oliveira Alves[2]
Bruna Schiphorst Delgado[2]
Roberta Costa[2]

[1]Instituto Federal de Santa Catarina. Joinville, Santa Catarina, Brasil.
[2]Universidade Federal de Santa Catarina, Programa de Pós-Graduação em Enfermagem. Florianópolis, Santa Catarina, Brasil.

ABSTRACT

Objective: to know the process of kangaroo care implementation and dissemination in the state of Santa Catarina.
Method: this is socio-historical research with a qualitative approach, with data collection carried out from January to November 2019, through interviews with 12 oral sources. Analysis was carried out in the light of genealogical analysis proposed by Foucault, with the help of Atlas.ti Cloud®.
Results: the process of kangaroo care implementation and dissemination in Santa Catarina happened from the breaking of resistance to the light of scientific knowledge, training and awareness that gradually captivated health professionals for the incorporation of new knowledge in neonatal care practice.
Conclusion: kangaroo care implementation as a public health policy configured a paradigm shift in neonatal care in Santa Catarina. Although scientifically supported, it took years to materialize in the state and still faces resistance.

DESCRIPTORS: Kangaroo-mother care method. Infant premature. Neonatal nursing. Intensive care units. Neonatal. Health policies. History of nursing. Nursing. Neonatal nursing.

HOW CITED: Aires LCP, Wilhelm LA, Lima MM, Alves IFBO, Delgado BS, Costa R. From implementation to dissemination of kangaroo care in Santa Catarina: a Foucault's analysis. Texto Contexto Enferm [Internet]. 2023 [cited YEAR MONTH DAY]; 32: e20220327. Available from: https://doi.org/10.1590/1980-265X-TCE-2022-0327en

DA IMPLANTAÇÃO À DISSEMINAÇÃO DO MÉTODO CANGURU EM SANTA CATARINA: UMA ANÁLISE FOUCAULTIANA

RESUMO

Objetivo: conhecer o processo de implantação e disseminação do Método Canguru no estado de Santa Catarina.
Método: pesquisa sócio histórica com abordagem qualitativa, com coleta de dados realizada de janeiro a novembro de 2019, por meio de entrevistas com 12 fontes orais. A análise foi realizada à luz da análise genealógica proposta por Foucault, com o auxílio do *software Atlas.ti Cloud*®.
Resultados: o processo de implantação e disseminação do Método Canguru, em Santa Catarina, aconteceu a partir da quebra de resistências à luz do saber científico, capacitações e sensibilizações que contagiaram aos poucos os profissionais de saúde para a incorporação dos novos saberes na prática do Cuidado Neonatal.
Considerações finais: a implantação do Método Canguru, enquanto política pública de saúde configurou uma mudança de paradigma no Cuidado Neonatal em Santa Catarina. Embora cientificamente respaldado, levou anos para se concretizar no estado e ainda enfrenta resistências.

DESCRITORES: Método canguru. Recém-nascido prematuro. Enfermagem neonatal. Unidades de terapia intensiva neonatal. Políticas públicas de saúde. História da enfermagem. Enfermagem. Enfermeiras neonatologistas.

DE LA IMPLANTACIÓN A LA DIFUSIÓN DEL MÉTODO CANGURO EN SANTA CATARINA: UN ANÁLISIS FOUCAULTIANO

RESUMEN

Objetivo: conozca el proceso de implementación y difusión del método canguro en el estado de Santa Catarina.
Método: se trata de una investigación sociohistórica con enfoque cualitativo, con recolección de datos realizada de enero a noviembre de 2019, a través de entrevistas con 12 fuentes orales. El análisis se realizó a la luz del análisis genealógico propuesto por Foucault, con la ayuda del software Atlas.ti Cloud®.
Resultados: el proceso de implantación y difusión del método canguro, en Santa Catarina, pasó por el rompimiento de resistencias a la luz del conocimiento científico, la formación y la concientización que poco a poco contagió a los profesionales de la salud para la incorporación de nuevos conocimientos en la práctica del cuidado neonatal.
Consideraciones finales: la implementación del método canguro, como política de salud pública, configuró un cambio de paradigma en la atención neonatal en Santa Catarina. Aunque científicamente respaldado, tardó años en materializarse en el estado y aún enfrenta resistencia.

DESCRIPTORES: Método madre-canguro. Recién nacido prematuro. Enfermería neonatal. Unidades de cuidados intensivos neonatal. Política de salud. Historia de la enfermería. Enfermería. Enfermería neonatal.

INTRODUCTION

Prematurity is a public health problem. About 15 million preterm babies are born each year in the world, with Brazil occupying the 10th position among the countries with the highest rates of premature birth[1]. The challenges in caring for these high-risk babies are related to birth weight, gestational age and hospitalization time, which can pose a risk for the establishment of family ties and also influence breastfeeding rates, in addition to posing a risk for possible sequel related to prematurity[2–3].

Kangaroo care (KC) is a light, safe technology that should be prioritized in the care of low birth weight preterm newborns compared to conventional neonatal care,[4] allowing smaller babies to survive and improve their quality of life[3].

In Brazil, KC has been organized, as a public health policy, since the launch of the Norm of Humanized Care for Low Weight Newborns – Kangaroo Care (NAHRNBP-MC - *Norma de Atenção Humanizada ao Recém-Nascido de Baixo Peso – Método Canguru*) through Ordinance 693/MO of 2000 (revoked and updated in 2007 by SAS/MoH Ordinance 1683). The method is carried out in three stages with integrated care actions related to humanization, the inclusion of parents during the hospitalization process as well as care for babies' neurobehavioral development[2].

The state of Santa Catarina (SC) presented, in 2020, the registration of 97,916 live births. With regard to prematurity and low birth weight,10,524 babies were born before completing 37 weeks of gestational age and 7,726 were low birth weight (less than 2,500 g). The infant mortality rate in the state is one of the lowest in the country (9.67% for children under one year old)[5–6].

About 75% of infant deaths related to prematurity could be avoided through the use of antenatal corticosteroids, antibiotics, surfactant, early skin-to-skin contact, among other resources[3,7]. Therefore, state management efforts continue with the objective of reducing preventable deaths, converging with the Sustainable Development Goals (SDGs) of eliminating preventable deaths, from 2016 to 2030, reducing neonatal mortality to a maximum of 5 per thousand live births, and the mortality of children under 5 years of age to a maximum of 8 per thousand live births[6,8].

Immediate KC, the one that is performed continuously right after birth, improved neonatal survival by 25% when compared to starting this care only after stabilization[3]. It is important to consider, however, that international studies assess skin-to-skin contact as KC, and not a set of precautions as advocated by the Brazilian proposal for the method.

The state of SC is representative in KC in Brazil, having two reference centers: 1) National Reference Center (CRN), located at a university hospital called *Professor Polydoro Ernani de São Thiago*, *Universidade Federal de Santa Catarina* (UH/UFSC/EBSERH), in Florianópolis; and 2) State Reference Center (CRE), located at *Maternidade Darcy Vargas* (MDV), in Joinville.

Although more than 30 years have passed since KC in Brazil, studies indicate resistance to its implementation[9–10] and a low understanding of professionals about this important public health policy, with care still being carried out in a fragmented way and focused on the biomedical model[9].

Considering the above, the question is: how were KC care practices established in the state of SC, from 1996 to 2019, and what are their contributions to the care of preterm and/or low birth weight newborns?

Although the state of SC has stood out in relation to KC implementation, having an CRN for this care since the beginning of policy implementation and dissemination in the country, there are still no studies that describe how this policy was implemented and disseminated in the state, nor that assess the repercussions of this care proposal for newborns, their families and the health team that works at neonatal units (NU). Thus, this aimed to know the process of KC implementation and dissemination in the state of SC.

The social and historical relevance of this investigation is highlighted, since, based on knowledge about how this process of joining KC occurred, it is possible to propose strategies for the nursing and health team that guarantee the application of this policy at all levels of care, guaranteeing quality in the care of preterm and/or low birth weight babies.

METHOD

This is socio-historical research with a qualitative approach. The context of the study was the state of SC, seeking to map the NU that contributed to KC dissemination. The period of data collection was from January to November 2019.

The sources of this investigation consist of oral sources, and for their selection the following inclusion criteria were: being a consultant/tutor/health manager of a multidisciplinary health team (nurse, social worker, physiotherapist, occupational therapist, doctor, psychologist); having participated in the care scenario transformation based on the KC proposal, considering the cut from 1996 to 2019. This cut is justified by the fact that it was the year 1996, the period in which KC-related actions at UH/UFSC/EBSERH began, and ending this historical marker, the year 2019, when the first State Meeting of SC Tutors took place, after almost 20 years of method implementation, dissemination and strengthening in the state. The exclusion criterion was: professionals who have worked for less than three years in the method were adopted, considering that this would be a short period for analysis.

The snowball technique was used to recruit participants, allowing the determination of "key informants", who are interviewed and indicate new participants based on similar characteristics and, so on, until sample saturation[11], with the zero interview being carried out with the KC coordinator, at the CRN of UH/UFSC/EBSERH, who has been working in the unit since the Ministry of Health's policy proposal. The end of collection occurred after data saturation[12].

The interviews were all carried out by the main researcher who has experience in this technique and also experience working at a NU. The interviews were scheduled via telephone, WhatsApp® or e-mail. Taking care of ambience and privacy, they were carried out in places chosen by participants at work (hospitals, maternity wards and health departments), in the research group room and even at the researcher's residence.

As an instrument for data collection, an interview guide was used, which was critically reviewed by three expert researchers in the field. The interviews were audio-recorded on digital equipment, with an average duration of 60 minutes. All were fully transcribed by the main researcher and three nursing students who had been trained for this function. All transcripts were checked by the main researcher. We highlight the use of a field diary to record each interview's particularities, main researcher's perceptions, insights, among others, that she helped at the time of data analysis.

The process of assessing and validating information in historical research is known as external and internal criticism, which verify the quality and relevance of information acquired through sources, determining the historical evidence in which the researcher's hypotheses will be interpreted and analyzed[9]. After transcription, the interviews were sent to the participants via email so that they could be formally validated and authorized for use in the study (either in full or in part), from signing the Letter of Assignment of Rights on the Oral Testimony. To prepare this study design, the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was used[13].

After transcribing and validating the interviews, the material was organized in the free online version of Atlas.ti Cloud® (https://cloud.atlasti.com/). In this device, the oral sources' speeches were organized into 26 codes, which later composed the data corpus. Then, the groupings of provisional significant speeches were carried out in the light of a theoretical framework, giving rise to analytical units.

Data analysis followed Foucault's genealogical analysis proposal. For the philosopher, genealogical research is the constitution of knowledge contrary to the effects of centralizing power that are linked to the institution and a scientific discourse of a society[14].

The study observed the standardization of research activities and interventions with human beings, obeying Resolution 466/12 of the Brazilian National Health Council, and submitted to *Plataforma Brasil*, obtaining project approval by the Research Ethics Committee. Considering the context of historical research, participants in this study are identified by their first name and profession, which was formally authorized by signing the Informed Consent Form (ICF).

RESULTS

Twelve professionals from the multidisciplinary health team who contributed to the process of KC implementation and dissemination, in the state of SC, participated in this study, such as five nurses, four doctors, a psychologist, an occupational therapist and a social worker. Working time at KC ranged from nine to 20 years. These professionals represent six health institutions in the state of SC from four municipalities.

From data analysis and interpretation in light of Foucault's framework, three analytical units emerged that will be presented and discussed below: *Kangaroo care implementation and dissemination in Santa Catarina*; *Resistances, struggles and strategies*; and *Professionals were captivated*.

Kangaroo care implementation and dissemination in Santa Catarina

KC implementation in the state of SC started with UH/UFSC/EBSERH - 2000 (which featured prominently among the services in the southern region), later becoming a CRN, followed by CRE of MDV, 2013. These services already had in their history humanization and compliance with good practice policies for childbirth, birth and breastfeeding.

[…] *the Ministry of Health started to introduce the method in the country [...] they trained people, mainly from university hospitals throughout Brazil to be Regional Reference Centers. And here in the South region, it was determined that it would be the UFSC University Hospital* (Halei/Doctor).

[…] *the Ministry of Health's technical area was locating those who already had a philosophical attitude of humanization to join a larger group of thinkers, to do training [...] our maternity (UH/UFSC/EBSERH) opened in October 1995 and, since then, has the philosophy of humanization.* [...] *child health technicians from the Ministry of Health spoke to management at the time to find out if we had the potential to be the future Reference Center* (Zaira/Psychologist).

[…] *we observed that, much of what they were talking about, we were already doing. We weren't just putting the baby in the kangaroo position, but we were already putting the baby on their mother's lap early to breastfeed.* [...] *we thought, "It's good that we're on the right path, we were already doing it before the Ministry thought about making it a program"* (Glória/Occupational Therapist).

Study participants told how the first training courses for the method were carried out with a view to implementation, highlighting as a landmark the First Brazilian National Conference of "Mother-Kangaroo" (as the method was previously called), in 1999, in Rio de Janeiro, organized by the Brazilian National Economic and Social Development Bank (BNDES - *Banco Nacional de Desenvolvimento Econômico e Social*). Right at the beginning, there were frequent trainings by the Ministry of Health (MoH), with the aim of implementing and disseminating the method in the country. The UH/UFSC/EBSERH and MDV services, which previously carried out internal training/awareness training in their activities, from the moment they become Reference Centers, they commit to train the entire state, with a stricter schedule of courses and training. Tutoring courses emerged with the aim of disseminating the method. The articulation with management was important to ensure knowledge transmission to the rest of the team.

[…] *I know that, in August 2000, back in Fortaleza (*in the first Training Course on Humanized Care for Low Weight Newborns), *we left with an agenda. Fulfill! You will have to take two training courses this year yet, all the services that went there, and there they made the macro-regional division. So, UH/UFSC/EBSERH was responsible for training Santa Catarina, Rio Grande do Sul, Paraná and Mato Grosso do Sul* (Zaira/Psychologist).

[…] *when we got back (from the course in Florianópolis), we had a meeting with the manager, talking about the importance of training people* [...] *in February 2001, we replicated the training to all neonatal unit employees. We did 7 class modules* [...] *and replicated them in all shifts, morning and night, morning and night, morning and night, so the whole team was trained* (Maria Beatriz/Doctor).

[...] *you can't imagine what it was like to train everyone day and night. We did training in the morning, afternoon and evening. And it was very tiring, it was very exhausting.* [...] *but these trainings that we did at the time, they were punctual* [...] *later, when maternity was certified with kangaroo care, the trainings have a date, they are mandatory, they have to be done* (Glória/Occupational Therapist).

Another issue that promoted changes in services was the need for adjustments in the units' physical area, to enable implementing the three stages, as recommended by the government policy.

[…] *our challenge was to first structure the service, at least, in three stages.* [...] *we bought them at Koerich, I never forget, some very domestic, white beds, a white bedside table, with a water green lamp, as if it were a little house, you know? Two beds, with a cot on the side, heated, to change. In a room, next to the ICU, we set up the second stage. And the third stage had a workbench nearby, at the end of the room.* [...] (Zaira/Psychologist).

[…] *sometimes we don't get big changes. We're not going to get that wonderful armchair, but there's a chair. A simple chair next to the incubator* (Zaira/Social Assistant).

[…] *we have some structural problems here in space, but we can always solve them with a little trick. He's not perfect, he has a lot to improve, but whenever we make a request, one way or another, we always end up being attended to by management. So, we get adapted furniture, adapted painting, equipment that is missing, but still has a lot to improve. I think money is something that would make a lot of difference* (Fernanda/Nurse).

[…] *we spent two years with the hospital completely improvised. Still in the reform, we tried to do kangaroo care as much as possible. He improvised a pediatric ward to try to keep as little* (Osmar Doctor).

Gradually, many hospitals and maternity hospitals in the state were trained and had tutors for KC working in their services, but applying the method in its three stages homogeneously has always been a weakness.

[...] *practically none of the maternity hospitals managed to effectively implement the three stages because of managers* [...] *the number of maternity hospitals that have the three stages is very small* (Glória/Occupational Therapist).

Resistances, struggles and strategies

Participants said that the KC implementation process in the state of SC was permeated by struggles and resistance. Many limitations were attributed to the management process at the time.

[…] *it was a lot of resistance. So, it was a "fight", you know. It was difficult, very difficult* [...] *the local management of neonatology in that period had a very authoritarian posture, not very dialogic, especially in nursing* [...] *it created a lot of obstacles.* [...] *it was not open for dialogue, so it imposed many conditions, many difficulties. I would take five steps, go back two, and so on* […] (Zaira/Psychologist).

[…] *I remember that at the time there was a very resistant leadership. So, it was a process that wasn't easy to win over employees. I was one of those* [...] (Márcia/Nurse).

[…] *so, when management doesn't buy the idea, doesn't support it, nothing happens* [...] *it's what we see in other units* [...] *we form other units, maternity hospitals, but they can't implement the methodology because management does not buy the idea, does not help* (Glória/Occupational Therapist).

[…] *in some moments, I don't know how I can rate it, it wouldn't be the lack of support from the management, but the lack of prioritization. There are other priorities that, for management, are more urgent, more important. So, the kangaroo often ends up getting in the way of a very basic difficulty* (Zaira/Social Assistant).

[...] *we found it quite difficult. Just as charming, but at the same time, even a little utopian.* [...] *our passion, our enchantment, did not enchant everyone, because, when I change, I have to leave common sense.* [...], *but it was a little scary, because it was a new one.* [...] *so, all this scared the team a lot and generated a series of conflicts and resistance. Which were gradually being torn down* [...] (Zaira/Social Assistant).

[…] *afterwards, there was a time when I was basically encouraging us to put another patient* (in kangaroo). *There were periods when we faced problems and needed to interrupt. We could not take the patient through the method to the end due to several issues, sometimes due to pressure from the team, negative pressure from the team* (Osmar/Doctor).

As a strategy to face resistance, participants reported carrying out various awareness-raising actions, conversations and listening, to show colleagues the benefits of the method. Even so, some professionals showed resistance to participate in awareness courses.

[…] *the team had a lot of resistance. But that's how it was, we persisted, we showed them how important it was to make it happen and it worked* (Camila/Nurse).

[...] *in some moments, we need to call some employees. So, to this day, there are one or two employees who have never taken the course, and we can't, because they justify that they have another job and that they don't have release from the other job* [...] *there came a time when we even called the other institution, we did the maternity service for the other institution to release and everything, but you saw that there are some people who are resistant to this happening* (Fernanda/Nurse).

One of the reasons, often highlighted to justify nursing resistance, was the fear of work overload. Being the main profession, that of being closer to patients 24 hours a day, they feared not being able to cope with their routine activities combined with KC's actions. Another aspect that created a series of initial discomforts was the entry of parents into the NU, not only as visits, but actively participating in the entire hospitalization process.

[…] *and here we suffered a lot to be able to implement it, because the nursing team always thought, "Oh, it's one more thing for us". At the time, indeed, the number of births was greater than today, and the team was smaller; So, what they thought, "More things for nursing, more things for us". So, it was difficult to deploy* [...] *of course there were nursing technicians, there were employees who also didn't like taking the baby out* (of the incubator), *especially from the ICU. One, she was busy with the baby, "Ah, I'm going to have to leave my baby here to go there and get the baby to put him in the kangaroo position...", there was that too, I won't say no* (Glória/Occupational Therapist).

[…] *I put a father and a mother 24 hours a day inside the neonatal unit, I have to leave my usual place. I started to be observed, and I think that this was one of the biggest fears, I can describe it as a fear, of the team, it was to put this father, this mother, inside the unit*. [...] (Zaira/Social Assistant).

It is worth noting that, at the beginning, resistance to the method was observed, even among the mothers themselves, who considered the machine (incubator) more important than themselves for the treatment of their child.

[...] *sometimes, they imposed a frequency. Because the babies were already taken out of the incubator to be breastfed, so they thought it was too much to take babies out and then do kangaroo care. They could do it again, at another time, while they were there in the room, doing nothing, it*

wasn't close to feeding time, at night... but they didn't do it because they thought that babies already left the incubator too much. So, she started more from the mothers than from the team (Glória/ Occupational Therapist).

Professionals were captivated

Little by little, the teams became captivated with what KC advocates. This awareness was only possible with team training, availability of scientific material and guidance, showing the benefits of the method.

[...] *so they started to incorporate that all this is kangaroo care. It's not just skin-to-skin contact in the kangaroo position. And then it was contaminating itself, contaminating itself* [...] (Zaira/Psychologist).

[…] *and on that day, I saw for the first time the physiotherapist putting a baby in a kangaroo position,* [...] *and then I said, "Well, I think maybe this thing will work, I think it must be really important for the mother". I anchored in this mother, this baby. Then, the other week, when I saw her doing the kangaroo, I paid attention to her face: she smelled the baby, she caressed the baby, and I remember the little hand on her chest, and then I started... when I saw that it was a moment of both, I think that's what started to captivate me, to believe that the method was important* [...] (Fernanda/Nurse).

[...] *while we were talking, while we were showing, there was acceptance because it was something that really showed that it was good for the baby, that it was something that would improve the baby's and the team's quality of life in terms of stress. That we would not only work with babies, the work was also environmental, for the work environment's condition, to improve the mother-baby relationship, to work on the family-team relationship.* [...] *so, as we were talking and developing, it was beautiful like this* (Glória/Occupational Therapist).

An important factor for the effectiveness of the method's actions was its formalization as a public health policy. Scientific productions also ensured support for the compliance with new evidence-based practices.

[…] *there was already evidence from the beginning, it was not at all like the idea, evidence was shown in the spaces. Maybe now what we have are national things too, more specific to some points. But this whole issue of caring for the environment was based on evidence, the evidence-based part of babies' neurological development* (Anelise/Doctor).

[...] *I followed, I ran, I implemented the minimum handling protocol here at the hospital. On top of that, I did my TCC work from my graduate course. My article was published, I was very happy* (Camila/Nurse).

Resistance was gradually overcome and practices were transformed, motivating professionals to do more research in their services on how they could be working on good practices for neonatal care. KC's actions are understood by many participants as a battle flag.

[…] *such small, basic things that you can promote and that can change a whole story and family dynamic.* [...] *so, for me to guarantee this right, you know, this reunion, for me it was everything! It was what made me overcome all the adversities I found inside.* [...] *has become a battle flag. And it's a rallying cry for me. It is a cause, and I think that prematurity, working to prevent and reduce the damage that prematurity imposes is a cause for me.* [...] *and today it is unforgivable for you to go in there and not see that, a well-positioned, well-contained baby, not see a baby that is not skin-to-skin with the mother, not see the unit with less luminosity, that cannot happen (laughs).* [...] *there's no way back, you can't think of the neonatal unit at the UH without kangaroo care* (Zaira/Psychologist).

DISCUSSION

The story of KC implementation and dissemination in the state of SC was told by professionals from the multidisciplinary team who work at different services in the state. In the light of Foucault, it is understood that subjects' discourses are not neutral, as they are inserted in a certain social context that limits who will be the "speaker" based on power-knowledge relations, what can or cannot be said and in what situation[15]. All participants with experience in the method, caring for newborns and their families and accompanying changes in neonatal care practices.

The strategy for KC implementation in Brazil (year 2000) began with the choice of Reference Centers, of which UH/UFSC/EBSERH stood out for southern Brazil due to the quality care provided based on humanization of care. In a second moment, from 2008, with the project to strengthen and expand the KC and with a view to decentralization and dissemination of the method, the MoH requested that each State Health Department indicate a service to be CRE for the method. Also, due to its history of humanization in care, the state of SC indicated MDV, which, in 2013, was officially certified as CRE[2,16].

The professionals of these Reference Centers then take on the role of multipliers of the method, responsible for training new professionals and disseminating knowledge through tutoring courses, seeking to spread this government policy. The first training course for tutors, held in the state of SC, took place from September 14 to 18, 2009, at the UH/UFSC/EBSERH, with the presence of 33 participants from the states of Tocantins, Rio Grande do Sul, Paraná, Mato Grosso do Sul and SC (with five professionals from UH/UFSC/Florianópolis; five from MDV/Joinville; one from *Maternidade Carmela Dutra*/Florianópolis and one from *Hospital Teresa Ramos*/Lages)[16].

Based on the dissemination of this specific knowledge, the trained tutor has the knowledge to implement good care practices for newborns and their families. However, studies highlight that, many times, these professionals who are trained are not the decision makers within the institutions, it is also of fundamental importance to train managers for the successful KC implementation, and that medical hegemony can, not infrequently, restrict the method's actions, a scenario in which the importance of a multidisciplinary team's performance is shown, with emphasis on kangaroo nurses[10]. Nurses are increasingly active in the design of public policies, being considered agents of social and political transformation[17].

The KC implementation process demanded an important articulation with the services' local management, in which it was identified that, in the places where the management was present, the insertion occurred with greater success. Other studies also highlighted the importance of managers' actions for KC implementation[18–19]. Complying with the premises of KC is to act in a new paradigm of neonatal care. Care that has been transformed and needs strategies for its implementation, facing struggles and resistance[10].

About this power-knowledge relationship, in which KC consultants and tutors circulate, it is understood that knowledge is not neutral, but a political act[20]. As for power, Foucault argues that it is a set of social practices and historically constructed discourses, which act in order to discipline individuals and groups[14]. Power cannot be owned or held by any individual, it permeates society[21]; thus, where there is power there is also struggle and resistance[14]. Power presents a analysis space displacement in relation to the level at which it occurs, from the macro (state) to the micro (from the inside to the ends), called by Foucault as microphysics of power[14]. Power is vertical, therefore, it dissipates horizontally in micropowers[14,18]. The participation of local management in this sense empowers other professionals with these micropowers.

From the launch of NAHRNBP-MC, a set of actions was formally instituted aimed at family insertion in the BU, attention to the neuropsychomotor development of newborns and the units'

environment. The discourse of participants in this study showed that much of what was formally advocated in the Brazilian version of the method was already being carried out, "we only had to put the babies in the kangaroo position". This passage reinforces that KC in Brazil involves a lot of care and is not limited to skin-to-skin contact, although it has this strong connotation internationally[22–23].

Paying attention to the environment, one of the complaints of participants regarding KC compliance was related to the NU's physical structure. Adapted contexts, with scarce resources, were the reality of all services. It is also noteworthy that the management of resources for improving physical structure takes place at the local management level, which sometimes has other institutional priorities than those of KC. The guarantee of fiscal support by the federal government to carry out the method's actions could be an incentive strategy for the services that comply with. It is noteworthy that, despite all the financial fragility to achieve improvements, it is observed that the services that were able to put KC recommendations into practice had a group of proactive, motivated and engaged professionals who were able to deal with these institutional limitations. A study carried out in 2018 points to team motivation strategies as essential to face management adversities for good KC practices[18].

A study that sought to define the desirable environmental attributes for the planning of new KC units highlighted the importance of a humanized, private, comfortable, functional environment that enables control of environmental conditions and access[24]. The difficulties related to the physical structure is a reality observed in a large part of the national territory[19,25].

Also, reflecting on the control of NU's environmental conditions, this concept refers to Foucault's panopticon, which, in his thesis on power, control and domination, points out that there would always be someone watching (in this case, the nurse and the multidisciplinary team), acting from surveillance mechanisms that control society (parents and other NU employees), ensuring that norms and discipline are established[14]. A panopticon would be a building with a guard post that covers the entire place, alluding to prisons, where those who watch can observe everything that those inside do, without being observed, exercising power over those who observe. For the philosopher, society's surveillance and control mechanisms act in a similar way, being a model of controlling individuals. In this sense, the structural changes guarantee the surveillance of babies and the environment, but with a purpose not only to exercise power, but to guarantee a reduction in stimuli. Health professionals and parents can be vigilant and help in this care process with the unit's environment.

There are few health services in SC that have the three stages of KC fully functioning (were identified during the study: UH/UFSC/EBSERH in Florianópolis, MDV in Joinville and *Hospital e Maternidade Jaraguá*, in Jaraguá do Sul). It should be noted that these data do not always reflect the institutions' reality, since the process of accrediting the beds is time-consuming and bureaucratic, and that often hospitals do not formally inform the state which steps of the method they are performing. A closer role of the state management would help in this mapping. Despite the high investment by MoH, dissemination is still slow across the country, and many professionals still have limited understanding of this important public health policy[9].

Every change can generate resistance, discomfort and insecurity at first. It was not different with the institution of new knowledge in neonatal care practice, which were initially even considered utopian. With regard to these resistances, the inclusion of parents in care can be highlighted, considered a moment of great transformation in neonatal care, bringing a series of discomforts to the team. This historical construction of power within hospital institutions is also observed in nursing, in which subjects who care for others are inserted, historically and socially, in a complex network of power relations, and the greater the degree of dependence on patients, the less their autonomy and the more this professional power acts on them[20].

It is important to highlight that resistance to KC was identified even in the mothers themselves, who were afraid to remove their children from the incubator to remain skin-to-skin in the kangaroo position. In this context, they considered hard technologies more important than maternal care. To face these fears, families need to be heard and welcomed by the health team, which is part of KC, thus allowing knowledge to circulate and modify practices.

As strategies for coping with struggles and resistance, the literature recommends a more participatory management, monitoring actions, reflections on possible strategies to be adopted by the service and frequent awareness raising[18]. Foucault's genealogy helps to analyze and understand the microphysics that involves these relationships, their biopower: disciplines and biopolitics[26].

This study pointed out that the teams were also transforming with KC, motivated by the benefits of the method and by believing that this care brings better results when compared to traditional care. By incorporating new knowledge into their practice, they played new roles, which made gradual changes in the care provided possible.

In the light of Foucault's framework, power should not be seen as something negative. Power builds, generates knowledge[14]. Currently, despite the national and international evidence on the benefits of KC highlighting, mainly, the greater weight gain of newborns during and after hospitalization, better prevalence and rates of breastfeeding, better control of vital signs, reduction in time and cost of hospitalization and improvement in infant mortality rates[4,9], there is still resistance from institutions and their professionals to fully comply with KC's actions[10].

In Latin American countries, KC implementation and compliance can vary greatly between nations, although its practice is increasingly widespread and supported by evidence. Premature birth is a public health problem, and in these countries 135,000 births of premature children are registered and Costa Rica has the highest percentage[27]. An important strategy aimed at improving care practices and reducing neonatal morbidity and mortality is the Neocosur Neonatal Network, which, since 1997, collects indicators on practices and outcomes of perinatal care in 35 NU belonging to five countries in South America (Argentina, Chile, Paraguay, Peru and Uruguay) and reinforces the importance of including the family in the NU and the beginning of contact early skin-to-skin to improve neonatal outcomes[28-29].

In this sense, qualifying the maternal and child line with KC will help reduce neonatal and infant mortality, as recommended by the SDG. It is emphasized that this will only be possible through the renewal of the hegemonic model, especially through the promotion of non-invasive care technologies. Therefore, it is imperative that health professionals are engaged and committed to the necessary changes, thus contributing to the achievement of goals[8]. The incorporation of new neonatal care practices based on the kangaroo methodology in health services in the state of SC occurred and has been occurring in a procedural way. The spread of a practice can take years to happen. Ensuring the effectiveness of the method throughout the national territory must be an absolute priority for health management teams.

As limitations of this study, we highlight the selection of key informants based on the snowball technique, in which engaged professionals, influential in the process of state implementation and dissemination, were mainly indicated. Understanding Foucault's perspective on the production of discourses and truth/power tension, and consequently power/knowledge[30], future socio-historical investigations that expand the approach to more top professionals are needed in order to answer why so many weaknesses are still found in the state for the effectiveness of KC.

FINAL CONSIDERATIONS

Knowing the process of KC implementation and dissemination in the state of SC, through socio-historical research, showed that the process happened from the breaking of resistance to the light of scientific knowledge, with training and awareness that reflected in the incorporation of new

knowledge in neonatal care practice. The Reference Centers played an important role as centers in the transmission of knowledge, in which method consultants and tutors, characters endowed with specific knowledge, were inserted in the power-knowledge relationship with local managers to carry out KC's actions.

Foucault's framework contributes to understanding how these power-knowledge relationships occur in this process of KC implementation and dissemination, in the state of SC. KC implementation, as a public health policy, configured a paradigm shift in neonatal care in SC that took years to materialize, still facing resistance, discomfort and insecurities, mainly related to the inclusion of parents in NU.

It is believed that a more participatory and active state management will contribute to monitoring health services' actions regarding the method and, considering it to be scientifically proven through benefits to babies, the family and the state, including reducing costs with the hospitalization process, the guarantee of the effectiveness of the three stages of KC must be an absolute priority in the health management spheres. Still in this perspective, KC can help achieve the SDGs with regard to neonatal and infant mortality. It is hoped that this study can motivate and support management actions at the state and national level, rethinking method monitoring strategies so that it occurs effectively throughout the country.

REFERENCES

1. World Health Organization. Preterm birth [Internet]. 2020 [cited 2020 Jun 6]. Available from: http://www.who.int/news-room/fact-sheets/detail/preterm-birth
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Atenção humanizada ao recém-nascido: Método Canguru. Manual técnico. 3rd ed. Brasília: Ministério da Saúde [Internet]. 2017 [cited 2023 Apr 2]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/atencao_humanizada_metodo_canguru_manual_3ed.pdf
3. World Health Organization. Immediate Kangaroo Mother Care (KMC) study group. Immediate "Kangaroo Mother Care" and survival of infants with low birth weight. N Engl J Med [Internet]. 2021 [cited 2020 Aug 12];384:2028–38. Available from: http://doi.org/10.1056/NEJMoa2026486
4. Conde-Agudelo A, Díaz-Rossello JL. Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. Cochrane Database Syst Rev [Internet]. 2016 [cited 2020 Jun 15];4:002772. Available from: https://doi.org/10.1002/14651858.CD002771.pub4
5. Diretoria de Vigilância Epidemiológica de Santa Catarina (BR). Tabnet. Governo do Estado de Santa Catarina [Internet]. 2020 [cited 2020 Oct 25]. Available from: http://tabnet.dive.sc.gov.br/
6. Secretaria de Estado de Santa Catarina (BR). Linha de cuidado materno infantil [Internet]. Florianópolis: Governo de Santa Catarina; 2019 [cited 2020 Oct 13]. Available from: https://www.saude.sc.gov.br/index.php/informacoes-gerais-documentos/atencao-basica/linha-de-cuidado-ab-aps/linha-de-cuidado-materno-infantil/16121-linha-de-cuidado-materno-infantil-1/file
7. Liu L, Oza S, Hogag D, Chu Y, Perin J, Zhu J, et al. Global, regional, and national causes of under-5 mortality in 2000–15: an updated systematic analysis with implications for the Sustainable Development Goals. Lancet [Internet]. 2016 [cited 2020 Jun 16];388(10063):3027-35. Available from: http://doi.org/10.1016/S0140-6736(16)31593-8
8. Brasil. Ministério do Planejamento, Desenvolvimento e Gestão. Metas Nacionais dos Objetivos de Desenvolvimento Sustentável. Brasília: Instituto de Pesquisa e Economia Aplicada [Internet]. 2018 [cited 2022 May 26]. Available from: https://repositorio.ipea.gov.br/bitstream/11058/8855/1/Agenda_2030_ods_metas_nac_dos_obj_de_desenv_susten_propos_de_adequa.pdf
9. Aires LCP, Kock C, Santos EKA, Costa R, Mendes JS, Medeiros GMS. Método canguru: estudo documental de teses e dissertações da enfermagem brasileira (2000-2017). Rev Bras Enferm [Internet]. 2020 [cited 2021 Jul 9];73(2):e20180598. Available from: https://doi.org/10.1590/0034-7167-2018-0598

10. Aires LCP, Padilha MI, Santos EKA, Lamy ZC, Bellaguarda MLR, Alves IFBO, et al. Relações de poder e saber da equipe neonatal na implantação e disseminação do Método Canguru. Rev Esc Enferm USP [Internet]. 2022 [cited 2022 Oct 16];56:e20220200. Available from: http://doi.org/10.1590/1980-220x-reeusp-2022-0200pt

11. Leighton K, Kardong-Edgren S, Schneidereith T, Foisy-Doll C. Using social media and snowball sampling as an alternative recruitment strategy for research. Clinical Simulation. Nursing [Internet]. 2021 [cited 2022 Oct 15];55:37-42. Available from: http://doi.org/10.1016/j.ecns.2021.03.006

12. Minayo MCS. Amostragem e saturação em pesquisa qualitativa: consensos e controvérsias. Rev Pesq Qualit [Internet]. 2017 [cited 2020 Jun 16];5(7):1-12. Available from: https://editora.sepq.org.br/rpq/article/view/82

13. Souza VR, Marziele MHP, Silva GTR, Nascimento PL. Tradução e validação para a língua portuguesa e avaliação do guia COREQ. Acta Paul Enferm [Internet]. 2021 [cited 2022 Oct 22];34:eAPE02631. Available from: https://doi.org/10.37689/acta-ape/2021AO02631

14. Foucault M. Microfísica do poder. 9th ed. Rio de Janeiro/São Paulo: Paz e Terra; 2019.

15. Aquino MGD. Noções de sujeito e poder em leituras foucaultianas e sua influência nos estudos de organizações e gestão de pessoas. Cad EBAPEBR [Internet]. 2019 [cited 2023 Mar 22];17(3):448-59. Available from: https://doi.org/10.1590/1679-395173587

16. Lamy ZC, Córdova F, Machado LG, Morsch DS, Almeida PVB. Fortalecimento e Disseminação do Método Canguru no Brasil. In: Sanches MTC, Costa R, Azevedo VMGO, Morsch DS, Lamy ZC. Método Canguru no Brasil: 15 anos de política pública. São Paulo, SP(BR): Instituto de Saúde; 2015. p. 127-44.

17. Magagnin AB, Aires LCP, Freitas MA, Heidemann ITSB, Maia ARCR. O enfermeiro enquanto ser político-social: perspectivas de um profissional em transformação. Ciênc Cuid Saúde [Internet]. 2018 [cited 2022 Jun 16];17(1). Available from: https://doi.org/10.4025/cienccuidsaude.v17i1.39575

18. Silva LJ, Leite JL, Silva TP, Silva IR, Mourão PP, Gomes TM. Management challenges for best practices of the Kangaroo Method in the Neonatal ICU. Rev Bras Enferm [Internet]. 2018 [cited 2020 Jun 6];71(Suppl 6):2783-91. Available from: https://doi.org/10.1590/0034-7167-2018-0428

19. Ferreira DO, Silva MPC, Galon T, Goulart BF, Amaral JB, Contim D. Kangaroo method: perceptions on knowledge, potencialities and barriers among nurses. Esc Anna Nery [Internet]. 2019 [cited 2020 Jun 12];23(4):e20190100. Available from: https://doi.org/10.1590/2177-9465-ean-2019-0100

20. Matos Filho SA, Souza NVDO, Gonçalves FGA, Pires AS, Varella TCMML. Micropoderes no cotidiano do trabalho de enfermagem hospitalar: uma aproximação do pensamento de Foucault. Rev Enferm UERJ [Internet]. 2018 [cited 2020 Aug 5];26:e30716. Available from: https://doi.org/10.12957/reuerj.2018.30716

21. Berquist R, St-Pierre I, Holmes D. Uncaring nurses: mobilizing power, knowledge, difference, and resistance to explain workplace violence in academia. Res Theory Nurs Pract [Internet]. 2018 [cited 2020 Jun 13];32(2):199-215. Available from: https://doi.org/10.1891/1541-6577.32.2.199

22. Chan GJ, Valsangkar B, Kajeepeta S, Boundy EO, Wall S. What is kangaroo mother care? Systematic review of the literature. J Glob Health [Internet]. 2016 [cited 2020 Jun 17];6(1):010701. Available from: https://doi.org/10.7189/jogh.06.010701

23. Alves FN, Azevedo VMGO, Moura MRS, Ferreira DMLM, Araújo CGA, Mendes-Rodrigues C, et al. Impacto do Método canguru sobre o aleitamento materno de recém-nascidos pré-termo no Brasil - uma revisão integrativa. Ciênc Saúde Coletiva [Internet]. 2019 [cited 2020 Jun 5];27(11):4509-20. Available from: https://doi.org/10.1590/1413-812320202511.29942018

24. Ely VHMB, Cavalcanti PB, Silveira JTT, Klein MF, Soares Junior A. Atributos ambientais desejáveis a uma unidade de alojamento conjunto Método Canguru a partir de uma experiência de projeto participativo. Ambient Constr [Internet]. 2017 [cited 2020 Jun 15];17(2):119-34. Available from: https://doi.org/10.1590/s1678-86212017000200149

25. Santos PF, Silva JB, Oliveira AS. Percepção da enfermagem sobre o Método Mãe-Canguru: revisão integrativa. Rev Eletr Atual Saúde [Internet]. 2017 [cited 2020 Jun 15];6(6):69-79. Available from: https://atualizarevista.com.br/article/percepcao-da-enfermagem-sobre-o-metodo-mae-canguru-revisao-integrativa-v-6-n-6/

26. Choque-Aliaga OD. Foucault: biopolítica y discontinuidad. Prax Filos [Internet]. 2019 [cited 2023 Apr 1];49:191-218. Available from: http://doi.org/10.25100/pfilosofica.v0i49.8030

27. Rocha AM, Chow-Castillo LA. Os benefícios do Método Mãe Canguru na UTI neonatal. Rev Cient Educ Civitas [Internet]. 2020 [cited 2020 Oct 15];3(1):1-16. Available from: https://educandiecivitas.facmed.edu.br/index.php/educandiecivitas/article/view/34/17

28. Matos-Alviso LJ, Reyes-Hernández KL, López-Navarrete GE, Reyes-Hernández MU, Aguilar-Figueroa ES, Pérez-Pacheco O, et al. La prematuridad: epidemiología, causas y consecuencias, primer lugar de mortalidad y discapacidad. Sal Jal [Internet]. 2020 [cited 2023 Mar 20],7(3):179-86. Available from: https://www.medigraphic.com/pdfs/saljalisco/sj-2020/sj203h.pdf

29. Ferreira CV, Silvera F. Estrategias de mejora de calidad en lactancia en recién nacidos muy bajo peso. Revisión del tema. Arch Pediatr Urug [Internet]. 2023 [cited 2023 Mar 22];94(1):e401. Available from: http://www.scielo.edu.uy/scielo.php?pid=S1688-12492023000101401&script=sci_arttext

30. Castro DD de, Tittoni J. Entre clausuras, verdades e resistências: a produção do conhecimento acadêmico no contemporâneo. Fractal, Rev Psicol [Internet]. 2019 [cited 2023 Mar 20];31(3):298–304. Available from: https://doi.org/10.22409/1984-0292/v31i3/5627

NOTES

ORIGIN OF THE ARTICLE

Article extracted from the thesis "*Método Canguru no Estado de Santa Catarina: um estudo histórico e Foucaultiano*", presented to the Graduate Program in Nursing, *Universidade Federal de Santa Catarina*, in 2020.

CONTRIBUTION OF AUTHORITY

Study design: Aires LCP, Costa R.
Data collection: Aires LCP.
Data analysis and interpretation: Aires LCP, Costa R.
Discussion of results: Aires LCP, Costa R.
Writing and/or critical review of content: Aires LCP, Wilhelm LA, Lima MM, Alves IFBO, Delgado BS, Costa R.
Review and final approval of the final version: Aires LCP, Wilhelm LA, Lima MM, Alves IFBO, Delgado BS, Costa R.

FUNDING INFORMATION

This work was supported by the Coordination for the Improvement of Higher Education Personnel (CAPES - *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*) - Financing Code 001.

ETHICS COMMITTEE IN RESEARCH

Approved by the Ethics Committee in Research of the *Universidade Federal de Santa Catarina*, Opinion 3,091,461 and CAAE (*Certificado de Apresentação para Apreciação* Ética - Certificate of Presentation for Ethical Consideration) 03518418.5.0000.0121.

CONFLICT OF INTEREST

There is no conflict of interest.

EDITORS

Associated Editors: Jaime Alonso Caravaca-Morera, Ana Izabel Jatobá de Souza.
Editor-in-chief: Elisiane Lorenzini.

HISTORICAL

Received: December 19, 2022.
Approved: April 05, 2023.

CORRESPONDING AUTHOR

Luana Cláudia dos Passos Aires
luana.aires@ifsc.edu.br