NURSING TECHNICIANS’ KNOWLEDGE ABOUT
THE KANGAROO-MOTHER CARE METHOD IN THE
NEONATAL UNIT

Conhecimento de técnicos de enfermagem sobre o método canguru na unidade neonatal

Conocimiento de los técnicos de enfermería sobre el método Canguro en la unidad neonatal

ABSTRACT

Objective: identifying nursing technicians’ knowledge about the Kangaroo-Mother Care Method (KMC) implementation and analyzing its importance for assistance in the Neonatal Intensive Care Unit. Methods: a descriptive research with a qualitative approach held with 20 nursing technicians in a neonatal unit. Data was collected in the period from March to April 2012 by carrying out semi-structured interviews and analyzed through the central-idea method. Results: it was evidenced that nursing technicians have knowledge about the kangaroo method; however, they report difficulties in identifying its steps in their everyday neonatal practice; they believe it is important in health care, as it helps in the newborn’s recovery, growth and development; in addition to promoting the parents’ participation, providing a humanized care. Conclusion: the nursing technicians investigated know the KMC and its importance in neonatal assistance, although they point out difficulties regarding the identification of its steps and applicability in their daily practice.

Descriptors: Kangaroo-Mother Care Method; Infant; Newborn; Neonatal nursing.

RESUMO

Objetivo: Identificar o conhecimento dos técnicos de enfermagem sobre a aplicação do Método Canguru (MC) e analisar sua importância na assistência na Unidade de Tratamento Intensivo Neonatal. Métodos: Pesquisa descritiva, com abordagem qualitativa, realizada com 20 técnicos de enfermagem em uma unidade neonatal. Os dados foram coletados no período de março a abril de 2012 através da aplicação de entrevistas semiestruturadas e analisados através do método ideo-central. Resultados: Evidenciou-se que os técnicos de enfermagem possuem conhecimento sobre o método canguru, entretanto, relatam dificuldades em identificar suas etapas no cotidiano da prática neonatal; acreditam ser importante na assistência, pois ajuda na recuperação, no crescimento e no desenvolvimento do recém-nascido; além de promover a participação dos pais, proporcionando uma assistência humanizada. Conclusão: Os técnicos de enfermagem investigados conhecem o MC e sua importância na assistência neonatal, embora apontem dificuldades quanto à identificação das suas etapas e a sua aplicabilidade em seus cotidianos.

Descritores: Método Canguru; Recém-nascido; Enfermagem Neonatal.

RESUMEN

Objetivo: identificar el conocimiento de técnicos de enfermería sobre la aplicación del Método Canguru (MC) y analizar su importancia de la asistencia en la Unidad de Tratamiento Intensivo Neonatal. Métodos: investigación descriptiva con enfoque cualitativo realizada con 20 técnicos de enfermería en una unidad neonatal. Los datos fueron recogidos entre marzo y abril de 2012 con la aplicación de entrevistas semi-estructuradas y analizados con el método ideo-central. Resultados: se evidenció que los técnicos de enfermería tienen conocimiento sobre el método canguro, sin embargo, relatan dificultad para identificar
INTRODUCTION

The premature birth, due to its increasing each year, in many underdeveloped countries, has been characterized as a public health problem. Humanistic and technological advances have been made to increasing the survival rate of newborns, standing out in this scenario the Kangaroo Method (KMC) as a strategy for perinatal care(1). Based on previous studies and experience reports from different services, scholars have concluded that the KMC has the potential to improving the health and survival of newborns with low birth weight, particularly where resources are limited due to its high cost(2).

In Brazil, from the end of the 90s, this concern was reflected in the “Humane Care to the Newborn with Low Birth Weight - Kangaroo Mother Care” (AHRNBP-MC). Developed and implemented by the Ministry of Health on July 12, 2007; by Ordinance 1683 and through standards, protocols and a broad training in the different regions of the country, characterized mainly by the change in the form of neonatal care(3), being the first country to standardize its Kangaroo program, its implementation in services proved of these professionals in hospitals and standardization of protocols and a broad training in the different regions of the country(4).

The technical professional of nursing in this scenario operates entirely in the first phase of the method, implementing the RN stimulation and strengthening the bond with the family, through individualized care that promotes the reduction of environmental stressors, besides providing basic guidelines for mother this early juncture, as the production of breast milk, emotional balance, confidence and control of reactions RN, removing fear and insecurity in the ability to take care of the new being(10,11).

According to Law No. 7498 of June 25th, 1986, the nursing technician performs medium activity level, involving guidance and monitoring of nursing degree and participation in assisting the planning of nursing care, and shall especially participate in the program of nursing care and perform nursing actions, as suggested by AHRNBP-MC(4).

Despite the efforts of the Ministry of Health in training of these professionals in hospitals and standardization of Kangaroo program, its implementation in services proved being complex. The initial deployment experience analyzed by the Ministry of Health pointed out that after the period of training, of great excitement by the team, the effective operation of the program had problems. One: it was limited by the overall hospital practices and thus disagrees
with those advocated by the method. Two: revealed little understanding from managers and support teams\(^{[10,12]}\). The nurse faces some hurdles in the implementation of the method. One is the resistance from the part of professionals in fully accepting the proposal as a project of interdisciplinary nature, that has real impact on the overall quality of neonatal assistance\(^{[11]}\). Another point is the insensitivity of these to put into practice the MC. In this perspective since it includes issues related to sensitization to perform the host mothers / families of premature infants and / or low-weight entering the unit and opt for developing the kangaroo, to the exposure of difficulties in engaging parents on the day of the drive\(^{[13]}\).

Based on the above, the question was raised: “What is the knowledge that the technical professional nursing has on Kangaroo” This research is justified by the fact that the legal principles stated by the MC policy enable the professional to become enabled in the humanization of neonatal care in host families and in stimulating bonding. However, will these professionals are actually aware of the development of these assignments? Faced with these questions, this study aims to identify the knowledge of nursing staff on the implementation of the Kangaroo and analyze its importance in assisting in the Neonatal Intensive Care Unit - NICU.

METHODS

This is a descriptive study with a qualitative approach\(^{[14]}\) performed in the Neonatal Intensive Care Unit (NICU) of the Public Foundation State Hospital of Clinics Gaspar Viana, in Belem do Para, Brazil, in reference to newborn care requiring assistance specialized and highly complex. Currently, this unit consists of 30 nursing technicians; of these, 20 agreed to participate after being presented the objectives. There were part of the study participants who had at least three years’ experience in that NICU and participated in the training to work in KMC. Obeying the ethical precepts, coded for respondents, guaranteeing anonymity to the research subjects names were used. The names were arranged according to the ascending order of participation and represented by the letter “T”, namely: T1, T2, T3 and so on.

Data collection occurred between March-April 2012, through semi-structured interviews, guided by a script containing: a) questions about the social variables such as gender, age, time of work in the unit and level of education; b) questions about their knowledge of the method, the applicability and its importance for assistance. The collection was stopped when no new data was being added to the study, ie, when data started to be repeated, thus obeying the principle of saturation\(^{[15]}\).

Data were grouped and then analyzed by ideo-central modality, thematic analysis which aims to highlighting key ideas or ideas of key nuclear speeches; ideas that emerge from the responses to each question. After the analysis, one can gather the key ideas, redefining them, rearranging them and / or reorganizing them in other units of meaning forming frames\(^{[16]}\), which are presented and discussed below, within categories that emerged from the data: “Unveiling the knowledge of the nursing technician about kangaroo care” and “the nurse facing the implementation of kangaroo care.”

It should be noted that the present study complied with the ethical aspects present in resolution No. 196/96, of the National Health Council, with signature of informed consent and obtained approval of the Research Ethics Committee of the Public State Foundation Clinical Hospital Gaspar Viana, under Protocol n° 002/2012.

RESULTS AND DISCUSSION

In its entirety, the subjects were female, with a minimum age of 25 years old and maximum of 44, with work experience in the unit from four to fifteen years, with varied degree of schooling, being: with four college degrees, seven with incomplete and nine top level with medium level.

The central ideas of the participants showed a hitherto unknown universe. Studies addressing the knowledge of KMC from the perspective of nurses\(^{[3-6,13]}\), however, has not been explored from the perspective of technical nursing professionals on the theme; this view will be presented and discussed below.

Unveiling the nursing technical knowledge about the Kangaroo method

The interviewees, when asked about what it meant the KMC in their care, 12 (60%) revealed that the MC is related to the promotion of emotional bond, as noted below:

“[…] helps the premature baby to stay closer to the mother, not only from the mother, but the father, a grandparent or a relative who has a closer connection with the baby […]”. (T9)

“[…] It can be applied by any member of the family, both father and mother, and placed close to the mother or the father, skin-to-skin, it gets cozy […]”. (T13)

The reports show consistent with the information found in other studies\(^{[5,17]}\) nationals who evaluated the application of KMC and its benefits to RNs. The participants in these studies, as well as the respondents in this survey assimilated the method as a strategy that provides the affective bonding between parents and baby, strengthening the mother-child
bond and the promotion of confidence that is gained by parents in the care of your baby\textsuperscript{(13)}.

The discovery of the needs of the mother and father as well as the baby himself, to enjoy the presence of the child during hospitalization, has been one of the gains of KMC, which, in the present study differed from the others scattered studies in the national literature\textsuperscript{(17,18)}.

The respondents of this study reported that the father’s presence brings to all experiences of a positive family structure to recover the baby, which is essential, even in a crisis, and may be maintained by the relational functions of care and affection. If baby hospitalized for these crisis, and may be maintained by the relational functions structure to recover the baby, which is essential, even in a presence brings to all experiences of a positive family

scattered studies in the national literature\textsuperscript{(17,18)}.

KMC, which, in the present study differed from the others child during hospitalization, has been one of the gains of as well as the baby himself, to enjoy the presence of the RN in KMC. Humanization is evident as a trend of humanization and comprehensive modality of care directly related to KMC, with a strategy to watch the RN in KMC. Humanization is evident as a

means, among others, have technical security professional

performance, or efficacy in attention to RN, hospital conditions compatible with the neonatal period and family participation in the process assistance. All this, combined with the need of individual attention\textsuperscript{(10)}. The reports of the interviewees in this study show consistent and attitudes that go against the actions recommended by MOH. However, it is important to note that working in the neonatal environment professionals should be attentive to the needs to learn and understand the “language of premature” because, well, it is possible to evaluate these individual daily needs, improving healthcare conduct the RN and its family.

Breastfeeding is one of the benefits, important for the mother-son pair, both from a physical standpoint as psychological kangaroo method; in this case, breastfeeding is seen as an act of love that requires affection, attention, patience and availability of mother to the newborn. It is a commitment of the mother with her child, which provides healthcare and making the bond stronger mother and son\textsuperscript{(2)}.

The KMC encourages breastfeeding of newborns, because we understand that human milk has nutritional and biochemical characteristics necessary to give the milk an ideal composition. Thus, it contributes to the growth and development of infants, being safe, it offers protection to the newborn against infection and ensures part of the immunization, assisting in the development of auditory, tactile and sensory stimuli without emotional abnormalities\textsuperscript{(2,12)}.

Thus, the theoretical evidences\textsuperscript{(2,13,19)} explored in this category, from the perspective of nursing professionals converge on the understanding that the sooner the infant is placed in the breast, the greater the chance of establishing the link mother-son and the lower the chance of early weaning. This fact emphasizes the importance of applying the KMC for the efficient recovery of the RN and the provision of increasingly individualized care.

As to the steps of the method, eight (40\%) of respondents in the current research showed difficulties in reporting and identify the operationalization of the steps, as exemplified below:

\[\ldots\) the method has three stages; I can’t tell in detail these stages." (T1)\]

\[\ldots\) I know there are three stages, but I can’t say all well explained. " (T6)\]

\[\ldots\) there are three stages that we try to develop the first stage, but I don’t know the stages in detail. " (T16)\]

This fact points to the grievance of the assistance provided, for all investigated previously held the training course - Humane Care of the Newborn underweight - which leads to realize that training was important for the beginning of the deployment process KMC, however, may not have

been sufficient for the implementation of the three phases of the method, as recommended by the MOH.

The implementation of the guidelines recommended by the MOH requires health workers with skills not only to guide the practice of KMC in neonatal units, but also to deal with the aspects that can influence the act of caring within the family\(^{(19)}\). Thus, for proper development of kangaroo care, nursing professionals need to know, assume and implement their role in care, which was not observed in the present study because the practice of the method is converged only the first step.

Other mechanisms that would certainly be necessary to achieve this goal, are tied to the act of sustainability practices, promotion of supervision, funding, provision of educational materials, exchange of experiences and proper selection of professionals for training\(^{(20)}\).

**The nursing technician facing the implementation of Kangaroo method**

In this category it presents the relations made by interviewees as to the applicability of the method in the NICU, and 16 (80%) state that the method applies various strategies within their daily lives, such as reduction of noise, ambient light, positioning of the RN and encouraging the adoption of kangaroo position, as shown in the statements below:

“[…] we provide a calm and quiet because we know that the noise near the RN, mainly the low weight, wreaks havoc on recovery […]” (T1)

“[…]the nap is respected for not handling, we seek to put the doily, us seeks to mess with it together, nurse and technician, we do this because the studies show that when clutter; they lose weight […]” (T11).

“[…] Put “roll” for him feel good snug and warm […]” (T13).

The environment of the NICU provides an experience quite different to the newborn from that experienced in the intrauterine period, because this environment had distinct characteristics of the womb as pleasant and constant temperature, the warmth and extra-uterine sounds that were once filtered considerably\(^{(18)}\).

Reduce noise and ambient light is critical for good recovery RN. As emphasized by the interviewees studies\(^{(10,12,17)}\) showed that smaller patients do best when the noise is minimized, the monitor volume is decreased or exchanged for another type of alarm, and when direct light is reduced, premature babies have a lower risk for the development of retinopathy of prematurity. Moreover, constant light levels can make the normal development of the sleep-wake slower cycle\(^{(19)}\). In this sense, an inadequate extra-uterine environment characterized by constant stress, manipulation, sleep deprivation, noise and glare, resulting in adverse to the proper development of the nervous system and are risk factors for the normal development of children\(^{(27)}\).

The perspective of the participants about maintaining a good environment in the ICU and its contribution to the RN is consistent with those described by MOH, which states that reduce environmental stimuli is an important measure for the best development of the patient\(^{(19)}\). A fact also evidenced in another study that referenced that 73% of participants believe in the influence of minimal or moderate environment on pain and recovery\(^{(21)}\).

Hosting is the act of receiving and answering the different members of the family baby hospitalized in the neonatal unit at facilitating their integration in this environment. The host involves not only physical but also emotional nature action\(^{(12)}\). It is known that, prior to the birth of the term, this initial contact cannot occur soon after birth. Therefore lies with the healthcare team try to provide an initial contact in a warm environment, with the goal of providing an intimate contact of parents with their baby\(^{(19)}\). It is therefore recommended not to remove the baby in a very short time after being placed in the kangaroo position and must remain for at least an hour, being considered the time to organize and then enter deep sleep, which is very important for brain development and recovery\(^{(13)}\).

With this fact, the proportion that parents feel free to stay as long as is possible with their infants in neonatal units assisted them, they are more confident to care, improving the quality of the mother-child-family. At this point, it becomes essential to the presence of nursing professionals in the technical assistance of parents, not only in nursing, but also in the emotional support\(^{(21)}\).

However, as evidenced in the statements of the interviewees, as the excess handlings RN, professionals should also stimulate handling only when necessary. This is an issue to be observed, as it causes physiological stress and discomfort changes; therefore premature at this stage of life babies are very fragile and susceptible to development of various complications\(^{(19)}\) therefore, the reduction of manipulation and one of the essential measures to preventing and managing pain in the neonate.

The organization of the baby, as the use of “padded” to the formation of nests (“rolls”), was addressed by 17 of the participants as an important tool also. The positioning with padded was understood as essential because premature cannot maintain a comfortable position for yourself, just a bad positioning, over time, can affect their motor development.

When the newborn is positioned in the neonatal ICU at various positions, experience a variety of pressures and
forces in muscles and joints, which will positively affect the development of these and mechanoreceptors, preparing thus for more coordinated movements\(^{(18)}\).

In the present study, the difficulties of applicability of the method in the neonatal unit were found, whereas 12 (60\%) of the interviewees emphasized that encounter difficulties in applicability due to insufficient training, and inadequate physical space for its implementation, as noted below:

“[…]. Should have another training and more physical space. I believe we should have more staff training and a better physical space so as to have better adhesion of the method” (T8).

“[…]. I find it difficult to apply the method by lack of material and space, which is declined, I think you should have more courses, more information, because sometimes you lose with the routine and with time” (T10).

“[…]. I think you should see more training, because I know that not everybody does. While I do like other people are different and that strengthens the method. (T17)

Key points highlighted in the speeches were lack of training and the need for improvement of the physical structure, which, according to the interviewees, helps to increase the difficulties of a company committed to the uniqueness of RN practice.

One of the main difficulties in the implementation of KMC is the membership of the health care team who works with premature infants. To this end, a series of measures are being implemented by the MOH has deployed since 1999 in Brazil the “Standard Humane Care of the premature Newborn with low-weight Kangaroo Method”. Since then, MOH is unfolding efforts in trying to spread the KMC and train professionals involved in the care of the newborn. On the other hand, professional adhesion is not yet effective, but can be facilitated if the evidence of the benefits of MC are consolidated\(^{(10)}\).

With the implementation of effective management strategies for KMC, any health facility, from the least equipped, with little technology available, to the most complex, can implement the KMC in their routines with the consent of limited resources, there is no need to wait structural changes, although they should always be sought for improving the healthcare environment\(^{(7,10,20)}\).

This study presented a limiting factor is the fact restrict a reality investigated among a small number of professionals within a particular neonatal unit of the State of Para, thus making it impossible to establish itself larger generalizations to a larger group of individuals, requiring thus, future research for better understanding on the subject.

**FINAL CONSIDERATIONS**

The study showed that the interviewed nursing technicians have knowledge about KMC; however, it points out difficulties regarding the identification of the steps and their applicability in their daily lives, which are represented here due to shortages of the largest professional training in the area, the scarcity of resources and the deficit in everyday practice neonatal physical structure.

Despite the difficulties found, there is the appreciation of the importance of KMC in neonatal care in the ICU with respect to recovery, growth and development of infants, showing an increase of satisfaction of care offered. Thus, it is believed that not enough to meet the practical nurse on the method, larger joints are required to enable the values to pass and knowledge of the method for power customers.

**REFERENCES**


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