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Women's experiences providing kangaroo mother care in an academic hospital in Tshwane, Gauteng

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Abstract

Preterm birth can be stressful for mothers and have negative consequences for the natural establishment of the mother-infant relationship. A high-impact, economical, and potentially life-saving strategy for the care of preterm and low-birthweight babies is kangaroo mother care (KMC). The literature suggests challenges to and enablers of KMC implementation in low-resource environments. The aim was to explore and describe women's experiences of providing KMC to their preterm babies. A qualitative, exploratory and descriptive approach was adopted. An unstructured interview guide was used to collect data during a focus group interview with mothers who provided kangaroo care. Data were analyzed using Braun and Clarke's method. Four main themes emerged from the analyzed data. The results reflected on participants' positive experiences, parenting skills and challenges. The participants suggested measures to enhance their encounters while providing KMC. Nurses need to support mothers who provide KMC; continuous education and guidance can enhance the implementation of this evidence-based practice to improve health outcomes for both preterm babies and their mothers. There is a need for continued training and support for mothers practising KMC, along with the consideration for healthcare providers to offer postpartum services for the mothers. (*Afr J Reprod Health 2023; 27 [12]: 101-105*).

Keywords: Academic hospital, experiences, kangaroo mother care, mothers, premature babies, women

Résumé

Une naissance prématurée peut être stressante pour les mères et avoir des conséquences négatives sur l'établissement naturel de la relation mère-enfant. Les soins maternels kangourous (KMC) constituent une stratégie à fort impact, économique et potentiellement vitale pour les soins aux bébés prématurés et de faible poids de naissance. La littérature suggère des défis et des catalyseurs pour la mise en œuvre de KMC dans des environnements à faibles ressources. L'objectif était d'explorer et de décrire les expériences des femmes en matière de fourniture de KMC à leurs bébés prématurés. Une approche qualitative, exploratoire et descriptive a été adoptée. Un guide d'entretien non structuré a été utilisé pour collecter des données lors d'un groupe de discussion avec des mères qui prodiguaient des soins kangourous. Les données ont été analysées à l'aide de la méthode de Braun et Clarke. Quatre thèmes principaux ont émergé des données analysées. Les résultats reflètent les expériences positives des participants, leurs compétences parentales et leurs défis. Les participants ont suggéré des mesures pour améliorer leurs rencontres tout en fournissant des KMC. Les infirmières doivent soutenir les mères qui dispensent des soins KMC ; une éducation et des conseils continus peuvent améliorer la mise en œuvre de cette pratique fondée sur des données probantes pour améliorer les résultats de santé des bébés prématurés et de leurs mères. Il est nécessaire de poursuivre la formation et le soutien des mères pratiquant la KMC, ainsi que d'envisager que les prestataires de soins de santé offrent des services post-partum aux mères. (*Afr J Reprod Health 2023; 27 [12]: 101-105*).

Mots-clés: Hôpital universitaire, expériences, soins de la mère kangourou, mères, bébés prématurés, femmes

Introduction

Around the world, premature delivery is the primary cause of neonatal fatalities, accounting Africa, which includes South Africa has the highest rate of preterm birth worldwide, estimated to be about 12.0%, compared to a global average of 10.6%. Premature babies not only have a higher chance of dying as newborns, but they also experience more

long-term health issues, physical impairments, and permanent mental impairments than term babies. An intervention called kangaroo mother care (KMC) can assist preterm and low birthweight (LBW) babies survive¹. KMC is described as skin-to-skin contact between a mother and her newborn, frequent or exclusive breastfeeding, and early discharge from the hospital has been effective in reducing the risk of mortality among preterm and low birth weight

infants.² It was developed in Bogotá in the 1970s, where the advantages of early mother-baby contact were recognised as an alternative to conventional neonatal care, which yielded slow development rates among preterm babies and increased premature mortality².

The World Health Organization (WHO) and the United Nations Children's Fund recommend facility-based KMC as a routine method of care for clinically stable newborns weighing 2000g or less at birth^{3,4}. In 2003, the WHO recognized KMC as the most effective strategy to maintain neonates' body temperature, stimulate the senses and provide maternal love⁵. The benefits of KMC include but are not limited to physiological stability, improved heart rate, respiratory system and blood pressure regulation, and it promotes the development of the baby's brain, cognition, and motor functions. KMC also improves immune system functioning, weight gain, better deep sleep, greater bonding with the mother, decreases stress and crying, and is said to reduce the length of hospital stay^{1,6}. KMC has thus gained global popularity, given its feasibility and effectiveness in improving the rate of preterm babies' development.

Above all, KMC makes it possible for the medical staff to concentrate their interactions with the mother and the baby as a single unit. This kind of approach at KMC will ensure that the mothers have positive experiences. Additionally, the approach make sure that babies not only survive but also develop healthily and reach their full potential in terms of well-being and health. While studies have demonstrated the advantages of KMC, they have also demonstrated the obstacles and facilitators that exist for the actual application thereof. The same factors that either help or hinder KMC's success include mothers as key people responsible for care, lack of privacy, one position for prolonged periods, compromised sleep, restricted movement, boredom and limited time for family to name a few⁷.

During clinical placement, the researchers observed that two mothers were readmitted back to the KMC ward barely three days after they insisted on being discharged due to hypothermic infants and breastfeeding challenges. Others experienced

challenges when providing KMC to their preterm babies, complaining of the long hospital stay and reportedly lacking skill in the practice.

Methods

The study followed a qualitative, explorative, and descriptive design, and was conducted in a specific unit of an academic hospital in Tshwane, Gauteng province. The academic hospital is situated in the north of Pretoria, and serves a population of about 600 000. The study population comprised 18 participants recruited from a sample of mothers who gave birth to preterm babies and were practicing KMC, above 18 years of age, willing to participate, and gave informed consent. Non-probability convenience sampling was employed, where mothers who practiced KMC were chosen to participate because they were regarded as knowledgeable and had experience with KMC⁸.

A focus group interview (FGI) was employed to capture participants' views regarding their experiences with KMC. The FGI took place in a private noise free room provided by the unit manager and was audio-recorded with permission from the participants. An unstructured interview guide with open-ended questions was used to collect data, thus allowing participants an opportunity to give their answers in their own words and express their opinions. A central question was asked, and followed up with probing questions. The central question was: "*What are your experiences when providing kangaroo mother care?*" English, Setswana, Isi-Zulu, and Sesotho were languages used to conduct the interview. Field notes were taken during the interview, and a voice recorder was used with permission granted by the participants⁹. Thematic analysis was utilised to analyse data according to Braun and Clarke's approach¹⁰. Thematic analysis entails the identification and organisation of themes across datasets and offers insight into patterns of meaning, thereby allowing an insightful interpretation of findings. A consensus meeting was held with the co-coder, who is an expert in qualitative research to verify and analyse the collected data, thus confirmability took place¹¹.

Results

Positive experiences

Sub-theme: Promotes growth

Almost all the participants indicated they experienced tremendous growth and development in their infants since they practiced KMC.

“My son is growing well; he is no longer that small. I am now able to pick him up” (P5)
“My infant is no longer the same, she has changed a lot. It shows that she is growing” (P12)

Another participant repeatedly commented:
“I was excited when I saw her gained weight” (P2)

Parenting skills

The participants shared that they valued KMC as it allowed them time with their infants.

“He was very small that I was even afraid of holding him. He has grown so fast. KMC promotes bonding as the baby is your chest 24/7 most of the time” (P3)
“It promotes warmth between me and my baby, and you get to know your baby better” (P15)

The participants shared that KMC not only promoted bonding and growth, but also provided an opportunity for them to closely monitor the baby for any changes in their condition or potential complications.

“It is good as you can monitor the infants’ skin colour” (P10)

A similar experience was shared by other participants who stated:

“You can easily note when the baby needs attention e.g., when he needs a nappy change or when he is hungry” (P11)
“I remember the first time when I realised that I could not feel the air that he breathes out. I was very worried and reported to the nurse and I was reassured” (P3)

Challenges experienced by mothers while practising KMC

Participants who were first-time mothers expected additional support from the healthcare providers. Hence, some of their initial claims insinuated they

received inadequate support from the nurses, in particular.

“I didn’t have breast milk and that was a big problem for me and when I told the sister I was told to continue to put my infant on the breast. I became tense” (P14)

“I don’t have breast milk and I am told to express and was left just like that. when I expressed only few drops of milk came out and I was panicking knowing that my infant is suffering” (P19)

Mothers’ health needs

Participants indicated that they were still recovering from the pregnancy and childbirth-related effects and needed to be checked on and attended to in the ward if they reported feeling unwell. They shared their experiences as follows:

“What I have realized is that our health needs are not catered for no matter how many times you report an illness. Instead, you are told to go to the antenatal clinic for a check-up. I went to the clinic only to find that the doctors who were responsible for me during pregnancy and childbirth unavailable” (P13)

“I have developed hypertension during pregnancy and when I got discharged with treatment from the ward to join my baby in KMC. I am continuing to take the medication, but my blood pressure is not checked. I have reported swollen feet, but nothing is done about that. I gave up reporting. I think they are waiting for me to collapse or drop dead before they can act” (P12).

Discussion

KMC is recognized as a cost-effective intervention to promote the survival of preterm and low birthweight newborn infants¹². In this study, participants shared positive experiences and also highlighted some challenges they encountered.

Participants expressed that their newborn infants had grown and gained weight since they started KMC. The practice’s promotion of infants’ growth is not uncommon; 100% (n=113) of respondents in a quantitative study associated growth with the STS warmth provided to the infant through KMC¹³. The study’s findings indicated that the mothers experienced a positive and strong relationship with their infants since bonding was

promoted, and they could witness their baby's behavioral patterns. Literature posits that preterm birth can be stressful and traumatic for mothers and have negative consequences for the natural establishment of the interactions with her baby¹⁴. However, in this case, the participants' involvement in their infants' care enhanced the attachment process, thereby reducing stress and anxiety as they could monitor and see when the baby needed attention. This had a resilient effect and improved maternal satisfaction.

Other studies revealed similar results, confirming that mothers play an important role in infant care, and positive interactions between mothers and preterm infants at an early age are associated with better cognitive outcomes^{15,16}. Thus, maternal involvement appears to have a very positive effect. On the contrary, another study found that prolonged periods of KMC were an exhausting experience for mothers and caused a lack of sleep¹⁷. Still, many studies have confirmed that KMC can stabilize the vital signs of premature infants, promote growth and development, reduce their hospitalization cycle and mortality¹⁸. The participants described their interactions with the health team as being positive as they gained knowledge and skills. The partnership with the health team was regarded as significant in the adjustment period; to the routine in the KMC ward, and in the transition to motherhood, which was new for many of the mothers. The mothers were kept informed about their babies' progress and condition, which enhanced their active participation in the provision of care. It has been affirmed that KMC in an ideal hospital environment will equip mothers with the knowledge and skills associated with parenting responsibilities¹⁹.

Despite their positive experiences with KMC, mothers alluded to insufficient support, restricted movement, inadequate meals, unaddressed maternal health needs and discomfort due to KMC as key challenges. Primi-parous mothers, in particular, experienced inadequate support regarding breastfeeding-related issues, such as perceived insufficient milk supply. This notion was supported by other researchers who alluded that mothers who had problems breastfeeding experienced pressure rather than support; advice from nurses was not helpful but contributed to more stress²⁰. Additionally, previous systematic reviews also

identified a lack of healthcare worker support for mothers as one of the barriers to effective KMC. They suggested that breastfeeding is an area where mothers need more support to enhance their milk let-down reflex²¹. When mothers reported health problems such as swollen feet and headaches, they were not taken seriously by healthcare workers whose focus was on the infants. The effects of pregnancy and the birth of preterm or LBW infants predisposed mothers to health problems associated with the puerperal period. Another study reported similar findings, revealing that the post-partum period is characterized by physiological and psychosocial adaptations as well as changes in the parental role, heightening women's vulnerability to health problems²². Discomfort from KMC as a challenge related to the women's sleeping position with their infant on their chest, pain on a vertical Caesarean section suture line, and rashes on the mother's chest at the site occupied by the infant. These findings are not limited to this study, since other authors reported the same findings and attributed such discomfort to low motivation and medical issues²³.

Conclusion

The study's findings revealed that mothers had a positive attitude towards KMC. The participants were happy with the benefits attributed to KMC, which included improved breastfeeding, monitoring and observing the baby and positive attachment. The supportive environment nurses provided facilitated the mothers' active involvement in caring for their babies. However, they felt neglected as mothers post-delivery with postpartum challenges as they were not catered for in the unit. Nurses thus have an important role as they can influence women's practice of KMC, which ultimately improves the health outcomes for both the mother and their preterm babies.

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