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Challenges Facing Mothers Who Practice Kangaroo Mother Care in Health Facilities; A Case of Dar es Salaam

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Abstract

Kangaroo mother care has been proved scientifically to reduce morbidity and mortality of preterm infants since it maintains bonding between mother and infant as a result of skin to skin contact, protects infants against infection, stimulates milk secretion, reduces hospital long stay for the infant and provides good sleep pattern to infants because of comfortability from the mother. The objective of this study was to assess challenges facing mothers who practice kangaroo mother care method for their preterm or low birth weight babies in Dar es Salaam. The study adopted a descriptive cross-sectional design. Mwananyamala hospital which is located in Kinondoni municipality was purposively selected for the study. The study population included mothers who practice kangaroo mother care method in the kangaroo unit of the hospital. Data was collected using structured interviews, focus group discussion and observation. Fifteen individual interviews and one focus group discussion were conducted. Data was analysed using content analysis methods where themes were developed from the responses. Major factors that affect kangaroo mother care include little knowledge of kangaroo mother care, fatigue of mothers, lack of cooperation from health care workers and unconducive environment of the wards. Recommendations from the study are that mothers should be educated on the importance of kangaroo mother care during the perinatal period, health care workers should encourage mothers to practice kangaroo method and hospital administrators should furnish the kangaroo wards with the necessary equipment.

Keywords

Challenges, Health Facilities, Kangaroo Mother Care

1. Introduction

Kangaroo Mother Care (KMC) also called kangaroo care or skin-to-skin contact, was initially developed in Colombia in the 1970s for low birth weight and preterm infants who no longer needed intensive care. The discovery of KMC contributed to the reduction of mortality and morbidity of preterm infants. Although it was initially developed for use with preterm and low birth weight babies, KMC is beneficial for all babies as constant contact with their mothers and their warmth, breast milk, love, and protection are all basic requirements needed for their well-being and survival.

Tanzania established 27 sites for KMC in different areas with 973 trained healthcare workers and is still orienting further 939 health facility managers. It has also improved the sites by making them well equipped with kangaroo mother care manual beds, room heaters, digital weigh scales, feeding tubes and neonatal resuscitation equipment.

More than 20 years of research and implementation in health care has shown that kangaroo care is more than just an alternative to incubator care. Kangaroo mother care has been

proved practically to reduce morbidity and mortality of preterm infant as it has various advantages including maintaining bond between mother and infant as a result of skin to skin contact, preventing infant against infection, stimulating milk secretion, reducing hospital long stay for the infant and providing good sleep pattern to an infant because of comfortability from the mother [1]. Additionally KMC is a beneficial method for bonding, breast-feeding and temperature control of all new-born infants, regardless of weight, gestational age and clinical condition [2-3]. It has been recommended that staff initiate continuous KMC as soon as possible after the infant is born and after initial resuscitation and stabilization [3-4]. Medical personnel must learn to meet the highly technical needs of today's preterm infants, while at the same time responding to the parents' need of emotional support and desire to be close to their infants [5].

Furthermore, KMC has shown to significantly reduce preterm mortality by 40 percent and to improve other outcomes including severe infection or sepsis, emotional attachment in mothers, and weight gain comparably to conventional neonatal care in preterm infants [6], reducing incidence of nosocomial infections and mortality [7-8]. Besides, there is evidence of increased growth and development, more physiological stability, feeling less pain during medical procedures [4] and better ability to preserve body temperature [7].

Mothers who practice KMC are more sensitive to any changes in their babies (4), show less maternal stress [9] and are likely to have a family that is more cohesive [10]. Thus, confidence is built in meeting their babies' needs [11]. Breastfeeding and adequate follow-up after discharge have also been noted [12]. In spite of these benefits, mothers face barriers to practice KMC. [1] noted the barriers of KMC to include scarcity of resources, negative impressions of staff attitudes, lack of help with KMC practice or other obligations and low awareness of KMC.

Research has been conducted concerning factors affecting KMC but has majorly emphasised on general factors, awareness and perceptions of mothers, staff and family members towards KMC, thus creating a knowledge gap of challenges facing mothers who practice kangaroo care method practice in different hospitals having KMC units especially in resource limited settings like Tanzania. This study was set forth to assess challenges facing mothers who practice KMC method to their preterm or low birth weight babies in Dar es Salaam.

2. Methodology

The study adopted a descriptive cross-sectional design. Mwananyamala hospital was purposively selected as the study area because of its high patient flow compared to other hospitals in the region. Besides, it represents hospitals with adequate KMC units. Mwananyamala hospital (regional hospital for Kinondoni) is located in Dar es Salaam which is one among the 30 regions of Tanzania. Other municipalities of Dar es Salaam include Temeke, Ubungo, Ilala and Kigamboni.

The study population included mothers who practiced KMC method in Mwananyamala hospital during the study period. Non-probabilistic sampling techniques were used to select the respondents. All women who practiced kangaroo care in the hospital KMC unit having preterm infants or low birth weight babies and were willing to participate in the study were interviewed. An open period of recruitment that continued until a saturation point is reached was used. When the researcher observed that the responses were becoming repetitive, she stopped interviewing the participants.

The interview guide was pre-tested at IMTU hospital to check the validity of the questions, clues and guidance, acceptability of questions, and accuracy of translation in Swahili language. Primary data was collected using structured interviews, focus group discussion and observation. The interview guide consisted of a list of predetermined questions to be asked.

The duration of the structured interviews was between fifteen to twenty minutes. Fifteen individual interviews and one focus group discussion were conducted. Participants of focus group discussion were different from those of individual interviews. Responses were noted in summary form as interviews went on. Data was analysed using content analysis methods. Inductive coding was used to find similar responses in the texts. Patterns and codes from analysis resulted into themes.

Ethical clearance was sought from the responsible authority at the International Medical and Technological University (IMTU). Permission to conduct the study was sought from the Municipal Medical Officer of Health (MMOH) of Kinondoni and medical officer in charge at Mwananyamala hospital. Informed consent was also sought by word of mouth from each of the study participants. All subjects participating in the study were assured of confidentiality and that no identifying information was to appear in any publication.

3. Results

Due to limitations in accessing different hospitals and similarity in health facility settings in Dar es Salaam, only Mwananyamala referral hospital was selected. Among the 15 mothers who were interviewed, one mother had an infant of low birth weight while the remaining 14 mothers had preterm babies. The themes that came up after analysing the data are poor knowledge on KMC, fatigue of mothers, lack of cooperation from health workers and environment of the wards.

3.1. Poor Knowledge on Kangaroo Mother Care

Among the fifteen mothers, only five mothers mentioned to be aware of KMC though they did not have enough information about it. Mothers had heard about KMC

information from neighbours (2), friends (1) and relatives (2). They only knew that KMC was used for handling premature babies. During the focus group discussion, one mother responded that;

"*….after coming here we were just told (by health workers) to handle our baby on kangaroo position or method for the growth of our babies, weight gain in order to be discharged home at continue with it at our homes." Respondent D, Mwananyamala hospital, January, 2017*

Further, another respondent had this to say;

"….I cannot believe such simple measures can increase chances of life survival of our babies. I wish all pregnant mothers could be given such education. It could reduce many of the neonatal and infant mortalities in the country…" Respondent M, Mwananyamala hospital, January, 2017

Ten mothers had never heard of KMC before giving birth to premature babies, and being transferred to neonatal ward. When nurses told them to handle their babies in kangaroo position, they did not know what the nurses meant. The mothers had to ask their colleagues who were practicing KMC and they got help from them on how to carry their babies. During one of the individual interviews, one mother mentioned that;

"*After delivering my baby, I was told that my baby had been born with complications……then I was brought to this ward. I heard nurses telling me that I should put my baby in kangaroo method…….When I observed other mothers holding their babies, that is how I was able to learn how to hold my baby that way…." Respondent U, Mwananyamala hospital, January, 2017.*

3.2. Fatigue of Mothers

On interviewing, all mothers claimed to become fatigued with the method. One of the mothers stated that;

"…..we get tired of putting our infants in this position, its better if we are discharged home so that we can get assistance from other family members and we can rest too instead of handling them by ourselves……by the way our infants do not increase in weight here every day. They just remain as yesterday or decrease" Mother Y from Mwananyamala hospital, January 2017.

Similarly, another respondent revealed that:

"…..Just imagine if you were myself then you sit in one place for a long time. You could get tired and stand up or change position. You cannot sleep on one side for the whole night without changing positions. That is why sometimes we put our babies on the bed so that they can rest and resume with kangaroo method again…." Respondent O, Mwananyamala hospital, January, 2017.

Another response that was got from the focus group discussion was that;

"…sincerely speaking, this method is tiresome. At least when at home, relatives and friends can provide assistance. The environment itself in the hospital is not conducive for the practice….." Respondent K, Mwananyamala hospital, January, 2017.

3.3. Lack of Cooperation from Health Care Workers

Another challenge that was mentioned by mothers is that they get little assistance or cooperation from the health care workers even when they first become admitted to the ward. They are not instructed on how to hold their infants in kangaroo position. One respondent who had premature twins said that;

"*…when I came here I did not even know how to put my babies in kangaroo position……when I called one of the health providers and ask her to teach me how to put my babies in kangaroo position, she told me to ask my colleagues…" Respondent F, Mwananyamala hospital, January 2017*

The respondent was crying as she lamented about the answer that was given by the health provider and she further said that she had never told anyone else about that scenario before. Another respondent with a similar story said that;

"…we get many of the instructions on how to hold our babies from our fellow mothers and not health care workers. This is very absurd…." Respondent Q, Mwananyamala hospital, January, 2017.

3.4. Environment of the Wards

On observation, it was noted that the environment of the ward is not friendly for premature babies. The ward, called neonatal ward, admits all babies with problems from day one up to two months of life including those babies who need KMC. This implies that chances of acquiring nosocomial infections are increased. The only neonatal ward was subdivided in to cubicles in which one was designated for mothers who practice kangaroo care method. The ward was noted to be noisy and overcrowded with no incubators for mothers to keep their babies when they want to rest or take a bath. One mother had this to say about the environment of the ward during the interviews;

"…the area is noisy, you cannot even rest if at all you want to….you just have to tell another mother who is nearby to look after your baby in case you want to go to the bathroom or do some personal stuff……If at all the area had been spacious, the help of friends and relatives would have been beneficial." Respondent U, Mwananyamala hospital, January, 2017.

The beds in the ward had no pillows and could not be adjusted according to mothers' wishes making them uncomfortable for rest or sleep. There were no side chairs for mothers to sit when they want to breastfeed their babies, hence they sat on beds. In addition, there were no visible room thermometers. If mothers feel coldness, they cover up their babies with heavy clothes and close then the windows. Likewise, if mothers feel hotness, they cloth their babies with light attire. One mother during the focus group discussion said;

"…the beds are hard. We get tired of sitting on them yet there are no chairs. Sometimes it feels so hot and I get to think I am the baby practicing the kangaroo method…" Respondent J, Mwananyamala hospital, January, 2017.

4. Discussion

Education on importance of kangaroo mother care method should be given to all mothers irrespective of whether they have pre-term or low birth weight babies throughout the perinatal period. Some mothers do not practice the method because they are not aware of the benefits of the practice. Further, health care workers should be encouraged to remind the mothers throughout the perinatal period, that is, ante-natal, intra-natal and post-natal period. Once this is done, mothers can get prepared psychologically for KMC in case they give birth to premature babies or low-birth weight babies. For home deliveries, such knowledge can enhance KMC practice before mothers reach nearby health facilities. Knowledge that KMC stabilizes newborn's temperatures, improves breathing and promotes mother–child bonding encourages the practice [13]. Healthcare workers knowledge and implementation of KMC can be increased through organizing trainings and seminars [14]. This knowledge can further be passed on to the mothers during their perinatal period.

Fatigue especially after delivery can affect practice of kangaroo mother care [15]. Kangaroo method of care needs assistants because mothers alone cannot hold a baby in kangaroo position for 24 hours. It is better for kangaroo units or wards to be independent so that space can be large to accommodate at least one relative of the mother to provide assistance.

Although mothers need emotional support from healthcare workers [5], this is not done in many hospitals. This might be due to high numbers of clients in relation to staff that are available in different units of hospitals. Mothers practice KMC to help their babies grow well. Since the practice starts from health facilities, they need assistance, encouragement and cooperation from health care providers. Despite the fact that health care workers are critical for implementing KMC in health facilities with the role of educating mothers about kangaroo mother care [16], this study has revealed that the assistance that health care workers provide to mothers who practice KMC does not meet the expectations of the mothers. One of the reasons that can be provided for the *un-cooperation* of health care workers is a lack of belief in kangaroo mother care and limited knowledge of such care among health-care workers [17-21]. Furthermore, without protocols for implementing KMC in health facilities, health care workers feel uncomfortable to promote kangaroo mother care [18, 22].

Kangaroo mother care practice can be enhanced through increasing visiting hours at health facilities [23] because mothers get encouragement from relatives and friends. However [24] and [25] reported mothers not being supported by their families and relatives to carry out kangaroo mother care practice.

It cannot be overemphasized that kangaroo units need special rooms other than the normal wards. [26-27] noted that lack of space in health facilities hindered the practice of kangaroo mother care. Thus, wards or units where mothers practice KMC need to be spacious with adequate warmth and separated from other general wards. Otherwise, the babies might end up acquiring nosocomial infections. [25] noted that parents believed KMC to be less costly than incubator care. In so doing, continuous practice of the method can be encouraged.

Appropriate equipment and accessories support KMC in health facilities. Kangaroo wards need to be furnished with basic equipment so that they serve their purposes. Kangaroo mother care wards should have wrappers to hold babies, furniture and beds where mothers can conduct KMC and rooms where mothers can spend the nights with their babies [26-28].

5. Conclusion and Recommendations

Results from the study show low awareness and knowledge among mothers who practice KMC. Many women were not aware of this method making it hard for them to practice KMC effectively. Further research is needed concerning the topic using more health facilities in Dar es Salaam so as to obtain quantifiable results. The major challenges that were observed in this study to impede KMC include fatigue of mothers, lack of cooperation from health care workers and environment of the wards.

Mothers should be educated on the importance of kangaroo mother care right from antenatal period since both mothers and their babies benefit from the practice. Once mothers get to know the benefits of KMC and outweigh them with fatigue, they will endure. This can be reinforced with having the necessary supportive infrastructure like adjustable beds, pillows for cushioning and support from relatives.

Health care workers should be reminded to encourage mothers to practice KMC. Hospital administrations should improve KMC wards so as to make them suitable for practising the method for mothers with pre-term and low birth-weight babies including purchasing necessary equipment for the KMC wards.

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