



A Study to Assess the Knowledge Regarding Kangaroo Mother Care among Antenatal Mothers in Selected Hospital, Thrissur with a View to Develop an Information Booklet

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ABSTRACT

Kangaroo mother care is a special way of caring of low birth weight babies. It fosters their health and well being by promoting effective thermal control, breastfeeding, infection prevention and bonding. Nurse, as the primary care giver must encourage and make the mothers aware about KMC. Hence, the study was undertaken to assess the knowledge regarding KMC among antenatal mothers in selected hospital, Thrissur. The objectives of the study were to assess the knowledge of antenatal mothers regarding KMC to associate the knowledge of antenatal mothers regarding KMC with their selected demographic variables and to prepare an informational booklet on KMC. The design of the study was descriptive and was conducted over 30 antenatal mothers. The samples were selected by using non probability convenient sampling. The result showed that about 40% of antenatal mothers were having inadequate knowledge, 60% of antenatal mothers were having moderate knowledge and none of them had adequate knowledge on KMC. The study also showed some association between knowledge score of antenatal mothers regarding kangaroo mother care with some of the selected demographic variables such as age, number of deliveries, number of child, religion, family and income. Thus, the study concluded that, the antenatal mothers were having lack of adequate knowledge regarding kangaroo mother care and if they get enough knowledge regarding the same, the complications of low birth weight babies can be prevented to an extent.

KEYWORDS

Antenatal mothers; Knowledge; Kangaroo mother care; Information booklet



INTRODUCTION



Background of the problem

“Bottle feeding is an unsuitable, a strict time table is nonsense, babies do not like being alone and crying is stressful. Just carry it next to your skin. Breast feed it whenever it’s hungry”.

Joan Norton, 2007

Children are one of the most precious gifts of God. Biologically a child is generally a human between the stages of birth and puberty. The legal definition of “child” generally refers to a minor, otherwise known as a person younger than the age of majority. Child care is the care, control, supervision and maintenance of a child provided by an individual or parent¹.

Globally 25 million infants (17%) are borne with low birth weight and most of these occur in low income countries. These low birth weight infants suffer from high rates of morbidity and mortality and often remain under weight or stunted or wasted from the neonatal period through childhood. Therefore low income countries have recognized kangaroo mother care as a necessity to promote positive neonatal health under adverse conditions. The benefits of kangaroo mother care include improving the mother to care for her low birth weight infants, decreasing infant mortality, encouraging breast feeding and reducing the frequency of low birth weight

babies visiting clinics after discharge from the hospital².

Carrying for low birth weight infants imposes a heavy burden on poor countries. In 1978, due to increasing morbidity and mortality rates in the Institute of Maternal and Child Health, Bogota, Columbia, Dr Edgar Rey Sanabria, Professor of Neonatology, Department of Pediatrics conducted a survey in order to find out the causes and remedies for increased neonatal mortality and morbidity rates of the Neonatal Intensive Care Unit of his institute. He found that pre term as well as low birth weight was the main reason for neonatal mortality and morbidity. He suggested that mothers has to provide continuous skin to skin contact with their low birth weight babies to keep them warm and must give exclusive breast feeding. His study findings concluded that kangaroo mother care is one of the best methods for treating low birth weight as well as pre term babies².

Kangaroo mother care which also called as skin to skin contact was initially developed in Columbia in 1970, where the low birth weight babies and preterm infants who no longer needed intensive care were cared by skin to skin contact with their parents. More than 20 years of research and implication in health care has shown that kangaroo mother care is that much



effective as incubator care. Kangaroo mother care is a beneficial method for bonding, breast feeding and temperature control on newborn infants, regardless of weight, gestational age and clinical condition¹.

An experimental study was conducted by final year MBBS students in SMTNHL Municipal Medical College, Ahmadabad among 120 antenatal women to assess the change in knowledge regarding kangaroo mother care after explaining the process and benefits. The results revealed that, 89% of antenatal women had inadequate knowledge regarding kangaroo mother care. There was a significant increase in the post intervention knowledge regarding the same. Thus the study findings demonstrated that the antenatal women's knowledge regarding kangaroo mother care can be improved by proper educational intervention³.

Need and significance of the study

“There can be no keener revelation of a society's soul than the way in which it treats its children”

Around 20 million low birth weight babies are born in each year, because of either preterm birth or impaired prenatal growth, mostly in developed countries. Low birth weight and preterm birth are associated with high neonatal and infant morbidity

and mortality. In India 32.8% of newborn babies are low birth weight babies. Larger number of deliveries is conducting by untrained people especially in rural area and urban slums. Therefore care of such infants becomes a burden for health and social system⁷.

Modern technology is either not available or cannot be used properly, often due to the shortage of skilled staffs incubator intense are often insufficient to meet local needs or are not adequately cleaned purchase of infants from mothers under such circumstances good care of preterm and low birth weight babies is a big problems and it leads to poor outcomes¹¹.

Under NRHM program, the Government of India is committed to improve newborn care and bring down, the neonatal and infant mortality to meet, the millennium development goals. It is there for important operationalize primary health for round the clock deliveries and upgrade health facilities at the district hospitals and referral centers³.

Kangaroo mother care is humanization of high tech ~~Nelson Mandela~~ alternative for minimal neonatal care unit in countries, where majority of delivers are at home and vary limited resources for neonatal care are available, Kangaroo mother care is alternative for all low birth weight and side new born babies. Nowadays, we require



sufficient knowledge regarding natural and universally approved early applicable way of mother care among antenatal mothers¹².

Kangaroo mother care has often been used as treatment for premature or preterm babies. As the 21st century is in the threshold of challenging preventive healthy interventions, the evidence based practice of new born care must be efficiently adopted for applying in the operational milieu of rural care facilities and the awareness on kangaroo mother care should be taught, among the expected mothers in all country provide perinatal and neonatal care units¹².

According to the WHO nearly one in ten babies worldwide is born as preterm [before 37 completed weeks of gestation], with resulting birth complication. Preterm birth rates are rising globally every year and it becomes one of the leading causes of death. More premature babies are born in low income countries [9%], where they face a greater risk of complications than high income countries [12%]. In Malawi, for example, 18 in every low birth are preterm. Many survivors face a life time disabilities and visual and hearing problems and require extra care to avoid illness and death from secondary, preventable complications including hypothermia¹³.

Kangaroo mother care seeks to provide restored closeness newborn with mother and father by placing the infant in direct skin to skin contact with one of them. This ensures physiological and psychological warmth and bonding. The kangaroo position provides ready access to nourishment. The mothers body responds to the needs of the infant directly, helping regulate temperature move smoothly than an incubator, her milk adjusts to the nutritional and immunological needs of her fragile infant, and the baby sleeps more soundly¹².

As per the findings of Dr. Petter Singer, Chief Executive Officer of Grand Challenges Canada, “In developing countries where incubators are often scarce and unreliable, kangaroo mother care could save lives”. This opinion demonstrates the importance of our present research study. He also highlighted some studies which shows the importance of KMC on the survival of premature and LBW babies¹⁴.

“A premature infant is born in the world in every two seconds”. Some studies shows that number of LBW and preterm babies die in neonatal period due to complications of LBW and preterm. Most of the mothers of LBW and preterm babies are ignorant on KMC. Hence assessing the knowledge of mother of those babies can decrease the mortality rate o LBW and preterm babies¹⁴.



Statement of the problem

A study to assess the knowledge regarding kangaroo mother care among antenatal mothers in selected hospital, Thrissur with a view to develop an information booklet.

Objectives

- ❖ To assess the knowledge of antenatal mothers regarding kangaroo mother care.
- ❖ To associate the knowledge of antenatal mothers regarding the kangaroo mother care with their selected demographic variables.
- ❖ To prepare an information booklet

Assumptions

Antenatal mothers may have adequate knowledge regarding kangaroo mother care

- ❖ The knowledge regarding kangaroo mother care among antenatal mothers may be influenced by their selected demographic variables.

Hypothesis

H1: There is a significant association between the selected demographic variables and knowledge score of antenatal mothers on kangaroo mother care.

Delimitations

- ❖ The study is delimited to obstetrics OPDs.
- ❖ The study is delimited to antenatal mothers.
- ❖ The study is delimited to 30 samples.

Research design

The research design is the master plan specifying the methods and procedures for collecting, analyzing the needed information in a research study and the researchers overall plan for obtaining answer to the research questions and it spells out strategies that the researcher adopt to develop information that is adequate, accurate, objective and interpretable³⁴. The research design of the present study was non experimental descriptive survey design.

Setting of the study

Setting is the physical location and condition in which data collection takes place in a study. The present study was conducted at antenatal OPD's in Aswini Hospital, Thrissur.

Population of the study

A population is the aggregation of cases in which the researcher is interested. In this study the population comprised of all the antenatal mothers³⁴.

The target population is the aggregate of cases about which the researcher would like to generalize. For the present study, all the antenatal mothers belong to Thrissur District is considered as the target population.

The accessible population is the aggregate of cases that confirm to designated criteria and that are accessible as subjects for the



study. In this study, the accessible population comprised of all the antenatal mothers who are attending the obstetrics OPD's of Aswini Hospital, Thrissur.

Sample

Sample is a subset of population selected to participate the research study³⁴. In this study the sample was 30 antenatal mothers. Sampling techniques is the process of selecting a part of the assigned population to represent the entire population being studied. In the present study, samples were selected by non probability convenient sampling method.

Criteria for sample collection

The criteria that specify the characteristics that the subjects in the population must possess are referred as eligibility criteria or inclusion criteria³⁴. For this study, the inclusion criteria's were:-

Antenatal mothers who were

- Attending obstetrics OPD at Aswini Hospital
- Willing to participate in the study
- Available at the time of data collection
- Able to read and write Malayalam

Exclusion criteria:-

The criteria's or characteristics that can cause a person or element to be excluded from the target population are referred as exclusion criteria. For this study the exclusion criteria's were:-

Antenatal mothers who were

➤ not able to read and write Malayalam

➤ not willing to participate

Tool instruments

Development of tool: The tool for the present study was prepared based on extensive literature review and guidance of experts from the field of Child Health Nursing. It consist of two sections.

Description of tool

Section A: Socio demographic data of samples

The socio demographic data of antenatal mothers consists of 10 variables such as age, number of children, number of labor, religion, area of residence, educational status, occupational status, type of family, monthly income and previous source of information.

Section B: Structured knowledge questionnaire on kangaroo mother care

A structured knowledge questionnaire on kangaroo mother care with 26 items, was constructed to assess the knowledge of antenatal mothers regarding kangaroo mother care. Each item had 4 alternative responses. Each item had only one correct response. The maximum score was 26. To interpret the level of knowledge, the score were distributed as follows

<u>Level of knowledge</u>	<u>Scoring range</u>	<u>% interpretation</u>
Inadequate knowledge	0-9	< 33%
Moderate knowledge	10-18	34 - 66%
Adequate knowledge	19-26	> 66%



Procedure for data collection

Content validity of tool:-

To ensure the validity, the tool, information booklet and methodology were submitted to the experts from the field of Child Health Nursing. The experts validated the tool and information booklet. They gave their acceptance that the content and the tool are valid and appropriate for use in concerned study with slight modifications. Necessary modifications were made in the tool based on their valuable suggestions and opinions.

Data collection process

Firstly, the permission to conduct the study was obtained from the Principal, Aswini College of Nursing. Followed by, the investigators got formal permission from the Nursing Superintendent as well as 5 obstetricians of Aswini Hospital Ltd, Thrissur for the data collection in the Hospital. The data collection period was from 19.5.2017 to 24.5.2017. The investigators selected samples from 5 obstetrics OPDs respectively by non probability convenient sampling. The investigators selected a total of 30 samples within 6 days. After the self introduction to the samples, the investigators explained the purpose of the study to them. Written consent was obtained from the antenatal mothers and maximum confidentiality was assured. Right to withdraw from the course

of the study was assured and human rights were protected. After the data collection, the investigators distributed an information booklet to the all antenatal mothers of each OPD's.

SECTION A

Table 1 Frequency and percentage distribution of knowledge score of antenatal mothers regarding kangaroo mother care

Level of knowledge	Scoring Range	Frequency (n)	N=30
			Percentage (%)
Inadequate knowledge	0-9	12	40
Moderate knowledge	10-18	18	60
Adequate knowledge	19-27	0	0

The above table (1) summarizes the knowledge score of antenatal mothers regarding KMC. As it is observed from the above table, out of 30 samples nobody is having adequate knowledge, 60% of antenatal mothers had moderate knowledge and 40% of antenatal mothers had inadequate knowledge on kangaroo mother care.

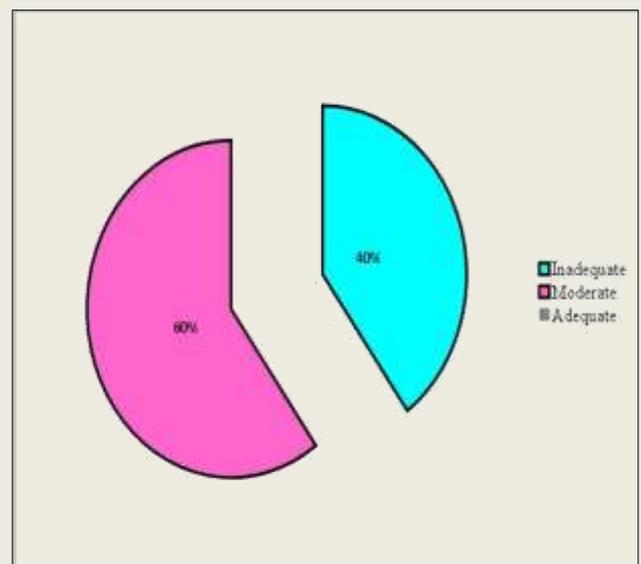


Fig 1 Percentage distribution of level of knowledge of antenatal mothers on kangaroo mother care



CONCLUSION

Children are the gift of this world and it is our responsibility to nurture and care them. Sometimes a small negligence towards their health may lead to complications. Parents have a greater role in it. Low birth weight and preterm delivery are the common cause for increased neonatal mortality and morbidity. These neonatal mortality and morbidity rates are also high in our country. Here comes the importance of kangaroo mother care, which is the cheapest method of caring of low birth weight as well as preterm babies. So in order to spread out the importance, benefits and techniques of KMC, the nurses must take the responsibility. The investigators felt deep sense of satisfaction and fulfillment for having undertaken this study.



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