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Perception and Utilization of Kangaroo Mother Care among Nursing Mothers Attending Post-Natal Clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State

Adedamola Ayodeji Tella 1 , Zorto Dwamo Philip 2 , Ayinde Abayomi Oluwasegun 3 , Olayide Olubunmi Olabumuyi 4 , Olufunke Adenike Vaughan 5 , Olaogun Victor Adeshina 6 , Nathaniel Agboola Ajagbe 7

Abstract: Background: Despite improvements in child survival in the past four decades, an estimated 6.3 million children under the age of five die each year, and more than 40% of these deaths occur in the neonatal period. Interventions to reduce neonatal mortality are needed. Kangaroo mother care (KMC) is one such life-saving intervention; however, it has not yet been fully integrated into health systems around the world. Utilizing a conceptual framework for integration of targeted health interventions into health systems, we hypothesize that caregivers play a critical role in the adoption, diffusion, and assimilation of KMC. The objective of this research was to investigate the perception and utilization of kangaroo mother care among nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State.

A cross sectional, descriptive and inferential study design was used to determine the perception and utilization of kangaroo mother care among nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State. Target population were nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State. The convenience sampling technique was used to select 154 respondents attending the antenatal clinic at a secondary healthcare facility. Descriptive such as frequency, table and percentages were used, also inferential statistics such as the chi-square was also use to determine the relationship between some selected independent and dependents variable at p-less than.



¹ Babcock University, Ilishan-Remo, Ogun State

² MBBS, MPH, University of Maiduguri, Benue State University PhD, Texila American University

³ University of Ibadan (Public Health, Epidemiology)

⁴ World Health Organization

⁵ University of Bradford UK

⁶Ladoke Akintola Univeristy of Technology

⁷ Federal University of Agriculture, Abeokuta, Nigeria

The result showed that there was statistically significant relationship between knowledge and perception of nursing mothers toward the utilization of kangaroo mother care. The result from the findings also showed that mothers have good knowledge and perception towards kangaroo mothers care.

The study therefore recommended among others, the need for health care providers to be more responsive in raising awareness of Kangaroo mother care among mothers, which could impact on the perceptions of the mothers positively.

Keywords: Knowledge, Perception, Kangaroo mother care, Roles, Healthcare providers, Secondary health facilities

Background of The Study

More than six million neonates are born with low birth weight in Nigeria and 11.4% of which occurs in Ogun State (Maznah et al, 2013). A birth weight of less than 2500g(2.5kg) accounts for 60-90 percent of new born deaths globally. Every day, approximately 7000 newborn babies die around the world. Sub-Saharan Africa and southern Asia account for roughly 80% of these deaths. (Bayo, Alobo, Feyissa, & Belaid, 2019). In these areas, preterm birth and low birth weight (LBW) are the leading causes of newborn death.

Preterm LBW newborns who survive the early neonatal period are at an increased risk of early growth retardation, infections, developmental delays, and early death in childhood. LBW infants continue to be more prevalent in low-income countries than high-income countries, with 18 million of the 20 million global LBW infants born annually in low-income countries. Sub-Saharan Africa accounts for nine of the eleven countries with preterm birth rates over 15%. Preterm neonates have a different chance of surviving depending on where they are born, with more than 90% dying in low-income countries compared to fewer than 10% in the richest countries.

Kangaroo mother care is the skin to skin contact of the neonate to the mother's chest between her breast and under her clothes, where the mother uses her own temperature to keep her baby warm. It is particularly useful in low birth weight newborns as it provides the basic needs for survival such as; mothers warmth, love and protection, stimulation of breast milk. Kangaroo mother care is an alternate method of caring for LBW premature infants, however it is still uncommon. A variety of barriers have been identified in studies, especially at the level of the healthcare system, but there is a paucity of research on the drivers and enablers at the community level. Complications from preterm birth are the leading cause of death among new born.

In low birth weight newborns (< 2000 g) who are clinically stable, kangaroo mother care reduces mortality and if widely applied could reduce deaths in preterm newborns (Grace, Amy, Stephen, 2016). Preterm low birth weight infant who survives neonatal stage, may later have to deal with growth retardation, developmental delays, infections and early death at childhood.

Although there are a lot of evidences to show the benefits of kangaroo mother care, the practice still remains low. It is considered the next option when incubators are not available in low income countries. Some health workers do not actively promote the implementation of KMC as they still believe it is only feasible for neonates who are clinically stable, while others lack the necessary skills to instruct its practice, especially teaching the mothers how to position the neonate on the chest, how to protect the airway and how to breast feed in that position (Bayo, Alobo, feyissa, 2017).

The norms and practice of some low-income countries affect the effective implementation of kangaroo mother care. For example, in some health facilities during medical rounds the hospital doesn't allow the mothers to be with their neonates, thereby reducing skin to skin contact and hindering mother interactions with healthcare workers, thus preventing adequate information about kangaroo mother care from getting to the mothers.

The practice of kangaroo mother care begins in the hospital and mothers are encouraged to continue at home. However, in a setting with low resource facilities, successful initiations of kangaroo mother care are not effectively practiced and there appears to be no continuity of care in the health system. A study conducted in Ghana showed that 95.5% of mothers showed willingness to continue kangaroo mother care after discharge, only 71.8% were willing to practice it outdoors, and only 61.9% believed that kangaroo mother care was easy to practice. The authors explained that mothers were afraid that kangaroo mother care would not be acceptable to the society because traditionally babies are carried on the mothers back and not chest.

A study in india distinguished few hindrances to the practice of kangaroo mother care, which included heat and humidity throughout the summer, lack of privacy, hesitance to wearing clothes with open fronts because of social reasons as well as fear of harming the umbilical cord of the neonate and causing bleeding due to friction with the mother's abdomen. Other barriers distinguished in that study include fear of sending the mothers disease to the neonates, fear of squeezing the neonate's stomach and causing spewing, worries that the practice will keep the mother from continuing routine work because of extreme bonding, absence of time and family support. A few mothers considered the feeding process a barrier as the act of breast feeding and milk expression interferes with the extreme skin-to-skin contact of kangaroo mother care session (Bayo, Alobo, Feyissa, & Belaid, 2019). A few mothers also think kangaroo mother care presents an awkward sleeping position that results in insufficiency of sleep (Bayo, Alobo, Feyissa, & Belaid, 2019). However, there are supportive relatives who assist the mother with either kangaroo mother care itself or other activities like cooking, cleaning up the home, looking after other siblings, government policies that allow the parents to take time off work were totally seen as working factors by the parents.

KMC is an effective intervention for reducing neonatal morbidity and death by promoting thermoregulation, mother bonding, and exclusive breastfeeding. However, unlike other maternal child health interventions, the success of KMC is dependent on significant efforts from family members. At the community level, however, there is insufficient documentation of the factors of KMC practice.

Statement of Problem

Measuring the success of kangaroo mother care does not only depend on implementation of kangaroo mother care but also the utilization of the service by the beneficiaries and parents with low birth weight neonates. As such, the success of service utilisation largely depends on the utilisation determinants, absence of challenges and barriers, perceived quality of care, cost of care, supportive factors, cultural factors, health system factors and provider factors (Christina, Solange & Themba 2018). Many studies focus on kangaroo mother care delivery and health workers, but not many focuses on perception and utilization of kangaroo mother care by mothers.

More than 20 million low birth weight babies are born each year, because of either pre term birth or impaired prenatal growth, most likely in less developed countries (WHO, 2003). They contribute considerably to the high rate of neonate mortality and morbidity whose frequency corresponds to those of poverty. Low birth weight and preterm birth are associated with high neonatal morbidity and mortality. 4 million neonates die, one fifth of them are associated with low birth weight and preterm birth. The care of those neonates becomes a source of worry to health and social system. Despite evidences, adoption and implementation of kangaroo mother care has been limited and global coverage remains low (Grace, Amy, Stephen, 2016).

Annually, 15 million babies are born prematurely (before 37 weeks of pregnancy) and 1 million people die as a result of preterm birth complications. Preterm birth is the major cause of neonatal fatalities in Sub-Saharan Africa and South Asia, accounting for three-quarters of the 2.7 million neonatal deaths that occur each year. Although progress in preventing preterm delivery has been slow, better care in low-resource settings could result in significant reductions in mortality. Because infant special care is not accessible in such circumstances, 50 percent of neonates delivered at 32 to 34 weeks gestation dies, when almost all should survive. (Melissa, Harriet, peter, 2018)



Sub-Saharan Africa has made poor progress in lowering newborn mortality, especially death owing to preterm birth, when compared to other parts of the world. This is most likely attributable to a higher prevalence of preterm birth and less access to care, as well as a shortage of health personnel. Furthermore, many interventions are brought into low-resource settings without adequate proof of their efficacy in these environments. Due to resource-related issues such as irregular electrical supply or access to replacement parts, incubators, the primary form of thermal support for small and premature infants, are frequently unavailable or fail to work. They also necessitate regular disinfection, which is frequently neglected in resource-constrained environments. When incubators are shared, there is a risk of cross-infection from other newborns, as well as cost. (Melissa, Harriet, peter, 2018)

Significance of The Study

The findings of this study would be of great benefits to the society in general in order to formulate policies, implement, direct, organize and evaluate the effectiveness and efficiency of kangaroo mother care provided to preterm low birth weight infants. This may employ approaches to facilitate the uptake of kangaroo mother care by mothers of low birth weight infants.

The findings of this study would serve as reference for subsequent studies on perception and utilization of kangaroo mother care among nursing mothers. It may serve as a body of knowledge on how to effectively implement kangaroo mother care among nursing mothers if communicated to them. It may equally help to plan strategies on the remedy of non-implementation of kangaroo mother care among nursing mothers with low birth weight.

The findings of this study would increase the level of knowledge of the health care providers, which may relieve the amount of professional and medical care needed to reduce mortality rate of preterm low birth weight neonates. To the nursing mothers, the study may increase their level of knowledge, thereby reducing the mortality of preterm low birth weight neonates.

Objectives of The Study

Broad Objective:

To investigate the perception and utilization of kangaroo mother care among nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State.

Specific Objectives Are:

- 1. To discuss respondents' level of perception on kangaroo mother care among nursing mothers attending post-natal clinic in Olabisi Onanbanjo University Teaching Hospital, Ogun State.
- 2. To determine respondents' level of knowledge on kangaroo mother care among nursing mothers attending post-natal clinic in Olabisi Onanbanjo University Teaching Hospital, Ogun State.
- 3. To explore those factors contributing to the adequate utilization of kangaroo mother care among nursing mothers attending post-natal clinic in Olabisi Onanbanjo University Teaching Hospital, Ogun State.

Research Questions

- 1 What is the level of knowledge of kangaroo mother care among nursing mothers attending postnatal clinic.
- 2 What is the perception of kangaroo mother care among nursing mothers attending post-natal clinic.
- 3 What are the factors contributing to the adequate utilization of kangaroo mother care among nursing mothers attending post-natal clinic.

Hypothesis

H_{1:} There is no significant association between nursing mothers level of knowledge and utilization of kangaroo mother care.



H₂: There is no significant association between nursing mothers perception and utilization of kangaroo mother care

METHODOLOGY

Research Design

A descriptive cross-sectional design was used to assess the determinants affecting the perception and utilization of kangaroo mother care among nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State.

Research Setting

Olabisi Onabanjo University Teaching Hospital

This study was carried out among nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun state. It came into existence in 1 January, 1986 and it was formerly known as Ogun State University Teaching Hospital (OSUTH). It is located at Sagamu Ogun state, South west Nigeria. In partnership with Obafemi Awolowo College Health Sciences it was founded to provide medical training for medical students of Olabisi Onabanjo University. It was formerly located at the former state hospital, Sagamu, Ogun State. The pioneer chief medical director of the hospital was Prof. A.A.O. Laditan.

It has different departments which include: cardiology, nephrology, psychiatry, respiratory, ophthalmology and otorhinolaryngology. It consists of different wards such as: female medical ward, female surgical ward, male medical ward, male surgical specialty, male surgical general, obstetrics and gynecology, intensive care unit, theatre, accident and emergency, children emergency, neonatal ward. It has different clinics as well: general outpatient department, virology, community outpatient department, eye clinic.

Target Population

The study population consists of nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State.

Method of Analysis

Descriptive and inferential statistics were used for analysis of data. The data collected from questionnaire were sorted out and coded and thereafter imputed into the computer for analysis using Statistical package for social sciences (SPSS) software. Descriptive statistics such as frequency tables and percentage were used for presentation. Inferential statistics such as Chi-square was adopted to determine the level of association between selected independents and dependents variables at p-value less than 0.05 considered statistically significant.

Ethical Consideration

Ethical approval would be obtained from the Babcock University Health Research Ethics Committee (BUHREC) Ilishan Remo for approval and to administer. A letter of introduction and permission from the school was taken to the research and ethical committee of Olabisi Onabanjo University Teaching hospital, Ogun state and an approval to conduct the study was obtained. Respondents consent was obtained after provision of adequate information about what the study entails.

A written informed consent was obtained from each participant. Ethical standard principle was adhered to in order to ensure confidentiality. Names of the respondent and any other personal identifiers were not written on the copies of questionnaires. Participants was informed that participation is voluntary and that data collected was mainly for research purposes. Anonymity and confidentiality of responses was ensured.



RESULT

Presentation of result

Socio-Demographic Characteristics of Respondents surveyed (n=154)

Table 4.1 shows the socio demographic characteristics of the respondents under survey.

Age of the respondents	Frequency	Percentage
24-29	53	34.4
30-35	55	35.6
36-41	34	22.1
42-47	12	7.8

Mean 2.0325, Standard Deviation 0.9387

Table 1above show the result of the respondents age in which majority 55 (35.6%) of the respondent fall within the age range of 30-35, while 5(34.4%) of the respondents fall within 24-29 years followed by 34(22.1%) of the respondent fall within the age range of 36-41 while the remaining respondents 12(7.8%) falls within the age range of 42-47. The mean and the standard deviation were found to be 2.0325 year and 0.9387 years respectively.

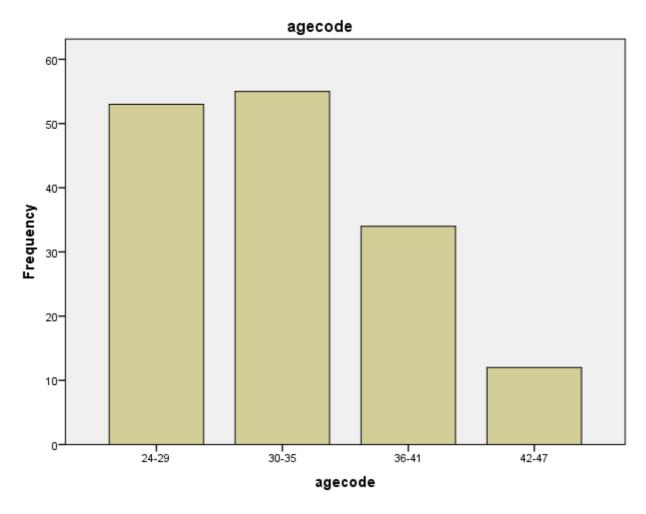


Table 4.2

Religion	Frequency	Percentage
Christian	114	74.0
Islam	40	26.0

Result from the table above show that majority 114 (74.0%) of the respondent were Christian while 40(26.0%) of the respondent were Muslim

Table 4.3

Ethnic Group	Frequency	Percentage
Yoruba	95	61.7
Igbo	49	31.8
Hausa	10	6.5

Majority 95(61.7%) of the respondent were Yoruba followed by 41 (31.8%) of the respondents were Igbo while 10(6.5%) of the respondent were Hausa by ethnic group

Table 4.4

Marital Status	Frequency	Percentage
Married	121	78.6
Single	33	21.4

Out of 154 respondents, 121(78.6%) of the respondents were married and 33(21.4) were single

Table 4.5

Working Status	Frequency	Percentage
House wife	26	16.9
Teacher	21	13.6
Self employed	79	51.3
Students	28	18.2

Result from the table above show that majority 79 (51.3%) of the respondent were self-employed, followed by 28 (18.2%) were students while the other respondents 26(16.9%) and 21 (13.6%) were house wife and teachers respectively.

Table 4.6

Level of Education	Frequency	Percentage
Illiterate	5	3.2
Primary	10	6.5
Secondary	16	10.4
Diploma	35	22.7
Tertiary	88	57.1

Result from the above table show that majority 88 (57.1%) of the respondent attended tertiary institution, followed by 35(22.7%) of the respondent had diploma, 16(10.4%) of the respondents attended secondary school while 10(6.5%) and 5 (3.2%) of the respondents attended primary school and the rest were illiterate respectively.

Table 4.7

Monthly Income	Frequency	Percentage
Less than 50,000	76	49.4
50,000-100,000	78	50.6

Out of the 154 respondents, majority of the respondents 78 (50.6%) monthly income falls within the range of 50,000-100,000, while 76(49.4%) of the respondent's monthly income is less than 50,000.

Level of Knowledge of Kangaroo Mother Care Among Nursing Mothers

Table 8

What is the source of your	frequency	Percentage
information on kangaroo		
mother care?		
Internet	88	57.1
Health Workers	52	33.8
Relatives and Friends	14	9.1

The table above show that majority of the respondents 88(57.1%) gotten the information on kangaroo mother care through internet, followed by 53(33.8%) got theirs through health workers while 14(9.1%) got their information from relatives and friends

Table 9

what best describes	Frequency	Percentage
kangaroo mother care?		
breastfeeding only	22	14.3
skin to skin contact with the	132	85.7
infant accompanied with		
breast feeding		

The table above shows that majority of the respondents 132(85.7%) described kangaroo mother care as skin to skin contact with the infant accompanied with breast feeding while 22(14.3%) of the respondents described it as breastfeeding only

Table 10

Do you know one of the	Frequency	Percentage
benefits of kangaroo mother		
care is increased infant		
mortality?		
No, I don't	120	77.9
I cant recollect	34	22.1

The table above indicate that majority of the respondents 120(77.9%) don't know that the one of the benefit of kangaroo mother care is increased infant mortality while 34(22.1%) of the respondents cant recollect that the benefit of kangaroo mother care is increased infant mortality.

Table 11

Were you able to	Frequency	Percentage
exclusively breastfeed		
during the practice of		
kangaroo mother care?		
Yes, I do	154	100

The above table indicate that all the respondents were able to exclusively breastfeed during the practice of kangaroo mother care

Table 12

Does kangaroo mother care	Frequency	Percentage
have positive effect on the		
general condition of your child?		
Yes, it does	120	77.9
No, I don't	34	22.1

Out of 154 respondents, majority of the respondents 120(77.9%) said yes that kangaroo mother care have positive effect on the general condition of your child while 34(22.1%) said it does not.

Table 13

Does kangaroo mother care	Frequency	Percentages
promote infant development		
stages		
Yes, it does	109	70.8
No, I don't	45	29.2

Majority of the respondents 109(70.8%) said yes that the kangaroo mother care promote infant development stages while 45(29.2%) said no it doesn't.

Table 14

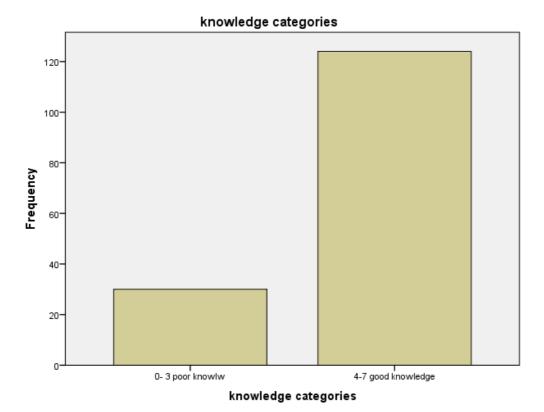
How frequently do you practice kangaroo mother care?	Frequency	Percentages
Always	107	69.5
Frequently	47	30.5

Result from the table above indicate that more than half of the respondents 107(69.5%) always practice kangaroo mother care and 47(30.5%) frequently practice kangaroo mother care.

Table 15

knowledge categories	Frequency	Percentage
0-3 Poor knowledge	30	19.5
4-7 Good knowledge	124	80.5

The above table shows that majority of the respondents 124(80.5%) have good knowledge about kangaroo mother care while 30(19.5%) have poor knowledge about kangaroo mother care.



Perception of Kangaroo Mother Care Among Nursing Mothers

Table 16

Do you perceive that the	Frequency	Percentage
practice of kangaroo		
mother care to increase		
bonding with your child?		
Yes, I do	35	22.7
No, I don't	119	77.3

Out of 154 respondents, majority of the respondents 119(81.2%) did not perceive that the practice of kangaroo mother care to be uncomfortable while 35(22.7%) perceive that the practice of kangaroo mother care to be uncomfortable.

Table 17

Do you perceive that the practice of kangaroo mother care to be beneficial?	Frequency	Percentage
Yes, I do	135	87.7
No, I don't	19	12.3

Majority of the respondents 135 (87.7%) perceive that the practice of kangaroo mother care to increase bonding with your child while 19 (12.3%) did not perceive that the practice of kangaroo mother care to increase bonding with your child.

Table 18

Do you perceive that the	Frequency	Percentage
practice of kangaroo		
mother care to promote the		
growth of your child?		
Yes, I do	136	88.3
No, I don't	18	11.3

Majority of the respondents 136 (88.3%) perceive that the practice of kangaroo mother care to promote the growth of your child while 18(11.3) of the respondents did not perceive that the practice of kangaroo mother care to promote the growth of your child

Table 19

Do you perceive that the	Frequency	Percentage
practice of kangaroo		
mother care to require so		
much time?		
Yes, I do	126	81.8
No, I don't	28	18.2

From the table above, it can be seen that 135 (87) perceive that the practice of kangaroo mother care to require so much time and 28 (18.2%) did not perceive that the practice of kangaroo mother care to require so much time

Table 20

Do you perceive that	Frequency	Percentage
significant others have a lot		
of role to play in the		
practice of kangaroo		
mother care?		
Yes, I do	135	87.7
No, I don't	19	12.3

Majority of the respondent from the table above shows that 135 (87.7%) perceive that significant others have a lot of role to play in the practice of kangaroo mother care while 19(12.3%) did not perceive that significant others have a lot of role to play in the practice of kangaroo mother care

Table 21

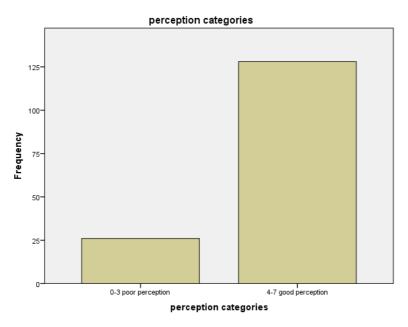
Do you perceive kangaroo mother care to have positive effect on your social morale?	Frequency	Percentage
Yes, I do	130	87.2
No, I don't	24	12.8

From the table above, Majority of the respondents 130 (87.2%) perceive kangaroo mother care to have positive effect on your social morale while 24 (12.8%) did not you perceive kangaroo mother care to have positive effect on your social morale.

Table 22

perception categories	Frequency	Percentage
0-3 Poor Perception	26	16.9
3-7 Good Perception	128	83.1
Mean 1.8052		
Standard Deviation 0.2973		

The table above shows that majority of the respondent s 128 (83.1%) have a good perception about kangaroo mother care while 26 (16.9%) have poor perception about kangaroo mother care.



Factors Contributing to the Adequate Utilization of Kangaroo Mother Care Among Nursing Mothers

Maternal factors

Table 23

Are you scared of suffocating the baby while using kangaroo mother care?	Frequency	Percentage
Yes, I do	130	84.4
No, am not	21	13.6
I don't know	3	1.9

The table above shows that majority of the respondent 130 (84.4%) scared of suffocating the baby while using kangaroo mother care, and 21 (13.6%) were not afraid or scared of suffocating the baby while using kangaroo mother care while 3 (1.9%) don't know if they were scared of suffocating the baby while using kangaroo mother care.

Table 24

Do you create time to use	Frequency	Percentage
kangaroo mother care		
Yes, I do	135	87.7
No, I don't	19	12.3

Majority of the respondents 135 (87.7) create time to use kangaroo mother care while 19 (12.3%) did not create time to use kangaroo mother care.

Health factors

Table 25

Do you have any health	Frequency	Percentage
problem that hinders your		
utilization of kangaroo		
mother care?		
Yes, I do	65	42.2
No, I don't	89	57.8

More than half of the respondents 89 (57.8%) did not have health problem that hinders your utilization of kangaroo mother care while 65 (42.2%) of the respondents have health problem that hinders your utilization of kangaroo mother care.

Table 26

Do you think the type of	Frequency	Percentage
delivery you had disturbs		
your utilization of kangaroo		
mother care?		
Yes, I do	56	36.4
No, I don't	98	63.6

Majority of the respondents 98 (63.6%) did not think the type of delivery they had disturbs your utilization of kangaroo mother care while 56 (36.4%) thinks the type of delivery they had disturbs their utilization of kangaroo mother care

Socio-economic factors

Table 27

Does your job type disturb	Frequency	Percentage
the utilization of kangaroo		
mother care?		
Yes, I do	111	72.1
No, I don't	43	27.9

The table above shows that 111 (72.1%) said their job type disturbed the utilization of kangaroo mother care while 43 (27.9%) said they don't know if their job type disturbed the utilization of kangaroo mother care.

Table 28

Do you think the materials	Frequency	Percentage
used for kangaroo mother		
care is expensive?		
Yes, I do	60	39.0
No, I don't	94	91.0

Out of the 154 respondents 94 (91.0%) do not think the materials used for kangaroo mother care is expensive, while 60 (39.0%) think the materials used for kangaroo mother care is expensive.

Motivational factors

Table 29

Do you get enough support	Frequency	Percentage
from significant others		
during kangaroo mother		
care practice?		
Yes, I do	126	81.8
No, I don't	28	18.2

The table above indicate that 126 (81.8%) of the respondents get enough support from significant others during kangaroo mother care practice while 28 (18.2%) did not get enough support from significant others during kangaroo mother care practice

Table 30

Are you given enough privacy while practicing kangaroo mother care?	Frequency	Percentage
Yes, I do	104	67.5
No, I don't	50	32.5

Majority of the respondents 104 (67.5%) were given enough privacy while practicing kangaroo mother care while 50 (32.5%) were not given enough privacy while practicing kangaroo mother care.

Health care provider factors

Table 31

Were you given enough information from the health care provider about kangaroo mother care?	Frequency	Percentage
Yes, I do	119	77.3
No, I don't	35	22.7

More than the half of the respondent 119(77.3%) were you given enough information from the health care provider about kangaroo mother care while 35 (22.7%) were not given enough information from the health care provider about kangaroo mother care.

Knowledge

Table 32

Are you aware of the	Frequency	Percentage
benefits you and your child		
would get from kangaroo		
mother care?		
Yes, I do	123	79.9
No, I don't	31	20.1

The result above indicates that majority of the respondents 123 (79.9%) were aware of the benefits they and their child would get from kangaroo mother care while 31(20.1%) were not aware of the benefits their and your child would get from kangaroo mother care.

Pre term illness

Table 33

Does your child have any illness disturbing your adequate utilization of kangaroo mother care?	Frequency	Percentage
Yes, I does	40	26.0
No, he doesn't	114	74.0

Out of 154 respondents, 114 (74.0%) of respondents child have no illness disturbing your adequate utilization of kangaroo mother care while 40 (26.0%) child have illness disturbing your adequate utilization of kangaroo mother care.

FIRST HYPOTHESIS: BIVARATE ANALYSIS: THE RELATIONSHIP BETWEEN KNOWLEDGE OF RESPONDENTS AND UTILIZATION OF KANGAROO MOTHER CARE

VARIABLE KNOWLEDGE SCORE

Do you create time to use	0-3	4-7	Chi-square
p-value			
Kangaroo mother care	poor	good	
	Knowledge	knowledge	
	n(%)	n(%)	
Yes, I do	3 (22.2)	105 (77.8)	5.244
0.012			
No, I don't	0 (0.0)	19 (100)	

There is also a statistical significant relationship between the knowledge of the respondent and utilization of kangaroo mother mother care (chi -square =5.244, p-value >0.05) decision: since the calculated value is more than the tabulated value, we therefore reject the null hypothesis and conclude that the nursing mother attending post nata clinic in Olabisi Onabanjo Teaching Hospital has a good knowledge towards utilization of kangaroo mother care

SECOND HYPOTHESIS: FIRST HYPOTHESIS: **BIVARATE ANALYSIS:** THE RELATIONSHIP BETWEEN PERCEPTION OF RESPONDENTS AND UTILIZATION OF KANGAROO MOTHER CARE

VARIABLE	PERCEPTION SCORE			
Do you create time to use	0-3	4-7	Chi- square	
p-value				
Kangaroo mother care	poor	good		
	perception	perception		
	n(%)	n(%)		
Yes, I do 0.036	26 (19	9.3)	109 (80.7)	4.403
No, I don't	0 (0.0)	19	(100)	

There is also a statistical significant relationship between the perception of the respondent and utilization of kangaroo mother mother care (chi -square =4.403, p-value >0.05) decision: since the calculated value is more than the tabulated value, we therefore reject the null hypothesis and conclude that the nursing mother attending post nata clinic in Olabisi Onabanjo Teaching Hospital has a positive perception towards utilization of kangaroo mother care.

Discussion of findings, Conclusion & Recommendation.

Discussion of finding

Socio-Demographic Characteristics of Respondents surveyed

Finding from this study revealed that quite number of respondents 55 (35.6%) of the respondent fall within the age range of 30-35, while 5(34.4%) of the respondents fall within 24-29 years followed by 34(22.1%) of the respondent fall within the age range of 36-41 while the remaining respondents 12(7.8%) falls within the age range of 42-47. The mean and the standard deviation were found to be 2.0325 year and 0.9387 years respectively. Majority 114 (74.0%) of the respondent were Christian while 40(26.0%) of the respondent were Muslim. More than half 95(61.7%) of the respondent were Yoruba followed by 41 (31.8%) of the respondents were Igbo while 10(6.5%) of the respondent were Hausa by ethnic group. More so, majority 121(78.6%) of the respondents were married and 33(21.4) were single. Majority 79 (51.3%) of the respondent were self-employed, followed by 28 (18.2%) were students while the other respondents 26(16.9%) and 21 (13.6%) were house wife and teachers respectively and also majority 79 (51.3%) of the respondent were self-employed, followed by 28 (18.2%) were students while the other respondents 26(16.9%) and 21 (13.6%) were house wife and teachers respectively. More so, majority 88 (57.1%) of the respondent attended tertiary institution, followed by 35(22.7%) of the respondent had diploma, 16(10.4%) of the respondents attended secondary school while 10(6.5%) and 5 (3.2%) of the respondents attended primary school and the rest were illiterate respectively also, majority of the respondents 78 (50.6%) monthly income falls within the range of 50,000-100,000, while 76(49.4%) of the respondent's monthly income is less than 50,000

Level of Knowledge of Kangaroo Mother Care Among Nursing Mothers

Findings from this study revealed that majority of the respondents 88(57.1%) gotten the information on kangaroo mother care through internet, followed by 53(33.8%) got they're through health workers while 14(9.1%) got their information from relatives and friends and also half of the respondents 132(85.7%) were able to described kangaroo mother care as skin to skin contact with the infant accompanied with breast feeding while 22(14.3%) of the respondents described it as breastfeeding. More so, majority of the respondents 120(77.9%) don't know that the one of the benefit of kangaroo mother care is increased infant mortality while 34(22.1%) of the respondents cant recollect that the



benefit of kangaroo mother care is increased infant mortality and all the respondents were able to exclusively breastfeed during the practice of kangaroo mother care. Majority of the respondents 120(77.9%) also have the knowledge that kangaroo mother care have positive effect on the general condition of your child while 34(22.1%) said it does not this is in line with the study by Bayo, Alobo, Feyissa, & Belaid, (2019) where they stated that in Sub Saharan Africa has the highest rates of neonatal mortality and where KMC could make the greatest impact. (Bayo, Alobo, Feyissa, & Belaid, 2019). Also, majority of the respondents 109(70.8%) have the knowledge that the kangaroo mother care also promotes infant development stages while 45(29.2%) said no it doesn't. Also, this finding from this study also revealed that more than half of the respondents 107(69.5%) always practice kangaroo mother care and 47(30.5%) frequently practice kangaroo mother care and also revealed that majority of the respondents 124(80.5%) have good knowledge about kangaroo mother care while 30(19.5%) have poor knowledge about kangaroo mother care, this is in line with the study carried out by Boma A. N Okoh, et al., (2018) where a cross-sectional study of knowledge and attitude of Nigerian Health workers concerning kangaroo mother care used 157 health workers. The number of respondents with good level of knowledge was 142 (90.4%) surpassed those with a good level of attitude 136 (86.6%).

Perception of Kangaroo Mother Care Among Nursing Mothers

Finding from this study revealed that majority of the respondents 119(81.2%) did not perceive that the practice of kangaroo mother care to be uncomfortable while 35(22.7%) perceive that the practice of kangaroo mother care to be uncomfortable, this finding also revealed that more than half of the respondents 135 (87.7%) perceive that the practice of kangaroo mother care to increase bonding with your child while 19 (12.3%) did not perceive that the practice of kangaroo mother care to increase bonding with your child, this is in line with the a Turkish study by ztürk which discovered that women who visited their infant on the first day of NICU had higher mean maternal attachment scores than mothers who saw their baby on subsequent days, implying that there was more maternal connection. More than half of the respondents 136 (88.3%) perceive that the practice of kangaroo mother care to promote the growth of your child, this is in line with A recent study by Feldman et al (2021) showed that infants who had an average of 1 hour of kangaroo mother care for 14 days showed a more organized circadian rhythm at 10 years of age. He evaluated if skin to skin contact increased autonomic and neuro-behavioural maturation in preterm infants. while 18(11.3) of the respondents did not perceive that the practice of kangaroo mother care to promote the growth of your child.

It was also revealed that 135 (87) of the respondents perceive that the practice of kangaroo mother care to require so much time, this is in line with the study carried out by Emily et, al., (2017) on barriers and enablers of health system adoption of kangaroo mother care by Emily et, al., (2017) identified four themes surrounding the interaction between families and the KMC intervention. They include: buy in and bonding (benefits of KMC to mothers and infants and perceptions of bonding between mother and infant), social support (help from other people to perform kangaroo mother care), sufficient time to perform Kangaroo mother care and medical concerns about new born or mother and 28 (18.2%) did not perceive that the practice of kangaroo mother care to require so much time.

Also, majority of the respondents 135 (87.7%) perceive that significant others have a lot of role to play in the practice of kangaroo mother care while 19(12.3%) did not perceive that significant others have a lot of role to play in the practice of kangaroo mother care. More so, majority of the respondents 130 (87.2%) perceive kangaroo mother care to have positive effect on your social morale while 24 (12.8%) did not you perceive kangaroo mother care to have positive effect on your social morale. Furthermore, on the general scale high number of the respondent s 128 (83.1%) show a good perception about kangaroo mother care while 26 (16.9%) have poor perception about kangaroo mother care.

Factors Contributing to the Adequate Utilization of Kangaroo Mother Care Among Nursing Mothers

More than half of the respondents 130 (84.4%) stated that they were scared of suffocating the baby while using kangaroo mother care, and 21 (13.6%) were not afraid or scared of suffocating the baby while using kangaroo mother care while 3 (1.9%) don't know if they were scared of suffocating the baby while using kangaroo mother care. Also majority of the respondents 135 (87.7) create time to use kangaroo mother care while 19 (12.3%) did not create time to use kangaroo mother care and more than half of the respondents 89 (57.8%) stated that they did not have health problem that hinders your utilization of kangaroo mother care while 65 (42.2%) of the respondents have health problem that hinders your utilization of kangaroo mother care. This study also revealed that majority of the respondents 98 (63.6%) stated that they did not think the type of delivery they had disturbs your utilization of kangaroo mother care while 56 (36.4%) thinks the type of delivery they had disturbs their utilization of kangaroo mother care. More so more than half of the respondents 111 (72.1%) stated that their job type disturbed the utilization of kangaroo mother care while 43 (27.9%) said they don't know if their job type disturbed the utilization of kangaroo mother care. This study also revealed that majority of the respondents 94 (91.0%) stated that they do not think the materials used for kangaroo mother care is expensive, while 60 (39.0%) think the materials used for kangaroo mother care is expensive. More than half of the respondents 126 (81.8%) stated that they get enough support from significant others during kangaroo mother care practice while 28 (18.2%) did not get enough support from significant others during kangaroo mother care practice. Majority of the respondents 104 (67.5%) were given enough privacy while practicing kangaroo mother care while 50 (32.5%) stated that they were not given enough privacy while practicing kangaroo mother care and, more than the half of the respondent 119(77.3%) stated that were able to get enough information from the health care provider about kangaroo mother care while 35 (22.7%) were not given enough information from the health care provider about kangaroo mother care. This study also revealed that majority of the respondents 123 (79.9%) were aware of the benefits they and their child would get from kangaroo mother care while 31(20.1%) were not aware of the benefits their and your child would get from kangaroo mother care. And more so, majority 114 (74.0%) of respondent's child have no illness disturbing your adequate utilization of kangaroo mother care while 40 (26.0%) child have illness disturbing your adequate utilization of kangaroo mother care.

There was a statistically significant relationship between the knowledge of the respondent and utilization of kangaroo mother care (chi -square =5.244, p-value >0.05), this however implies that the more knowledgeable the mothers are on the utilization of kangaroo mother care, the more their practice and utilization of kangaroo mother care

There is also a statistical significant relationship between the perception of the respondent and utilization of kangaroo mother care (chi -square =4.403, p-value >0.05) this however implies that the better perception the mothers have on the kangaroo mother care, the more their practice and utilization of kangaroo mother care by them

Summary, Conclusion and recommendation

This chapter provides new knowledge and perception about parents' practice of KMC, where the possibility existed for the infant to be cared for in an incubator by trained staff. The results from this thesis indicate that parents want to be with their infant and be actively involved in the infants' care and care-giving activities. Although KMC can be experienced as tough, parents want to perform KMC. Early initiation of KMC after birth appears to result in longer duration of KMC during the infants' whole hospital stay.

SUMMARY

Kangaroo mother care is a technique for holding an infant, it involves skin to skin contact. The baby is commonly stripped with the exception of a diaper, then placed in an upstanding position against a parent exposed chest. Both mother and father can perform kangaroo mother. It is frequently utilized with preterm infants while they are still in the hospital. This study was carried out to determined the perception and utilization of kangaroo mother care among nursing mothers attending post-natal



clinic in Olabisi Onabanjo University Teaching Hospital, Ogun State. A cross sectional design was used to determine the main objective of the study among nursing mothers attending post-natal clinic in Olabisi Onabanjo University Teaching Hospital, Ogun state. A questionnaire would be used as data collection instrument. The questionnaire will be given to the target population who satisfy the inclusion and exclusion criteria in order to obtain information and data was collected using SPSS version 21.

However, all the respondent has heard about kangaroo mother care and majority of the respondents have good knowledge and perception towards kangaroo mother care. And there is a statistically relationship between utilization of kangaroo mother care and perception and knowledge of the respondents.

CONCLUSION AND RECOMMENDATION

Conclusions and clinical implications of the results from this study are:As early initiation of KMC seemed to have an effect on the total time the infants spent skin-to-skin during their stay, parents should be given the opportunity to start KMC, be involved in their infants' care, and to stay with their infant around the clock as soon as possible after the infants' birth. Also the KMC environment should be improved to become as family centred as possible, and provide both verbal and non-verbal messages that invite parents to stay with their infant around the clock and perform KMC and other care-giving activities as much as they wish and the infants' condition allows. Parents should also be provided with adequate, repeated information about the KMC method and be supported in their performance of KMC.

The study therefore recommends the need for health care providers to be more responsive in creating awareness of kangaroo mother care and its importance among mothers, in order to change the negative perceptions, and encourage them to practicing KMC. Knowledge could also be extended / deepened through adequate information sessions during prenatal visits at the clinics and when admitted to the ward.

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