

## **Lactation Management Techniques Possessed by Women in Owerri Municipal Council of Imo State**

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### **ABSTRACT**

*The study investigated the lactation management techniques possessed by women in Owerri Municipal Council of Imo State. Five research questions and three null-hypotheses guided the study. The descriptive survey research design was used for the study. The population for the study was three hundred and fifty-five (355) child bearing mothers registered for antenatal at St. David's Hospital, Owerri Municipal and Federal Medical Centre Owerri. Two hundred and twenty-one was the sample for the study. A three sectioned researcher designed questionnaire was the instrument for data collection. The instrument was validated by three experts one from the Department of Guidance and Counselling, and two from the Department of Human Kinetics and Health Education, Nnamdi Azikiwe University Awka. Cronbach Alpha method coefficient was utilized to establish the internal consistency of the instrument and had a reliability index of .800, .871, and .833, descriptive statistics of frequency and percentage. Chi-square statistics were used to test the hypotheses was verified at 0.05 level of significant. The results of the study showed that the researcher observed that mothers use skin to skin contact with baby and most times use hand milk expression to stimulate milk flow. the study showed that mothers encourage the baby's lips to open by touching the baby's lips with the nipples, wait for the baby to open his/her mouth before feeding, support the nipple with fingers, ensuring that the baby has slow deep sucks, and that they allow the baby's head to be able to flex while holding his/her neck. the researcher concludes that t mothers use of initiation of lactation management techniques do not depend on their occupation, mothers use of positioning lactation techniques do not dependent on their educational level and that mothers use of post feeding techniques do not dependent on their age. Based on the findings, recommendations among others were made mothers should always breast feed their baby no matter their age so as to enable efficient growth f their baby. Mothers should breast feed their baby no irrespective of their occupation so as to avoid malnutrition of the baby. Mothers should always breast feed their baby irrespective of their educational level so as to hasten the growth of their baby.*

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## **Introduction**

Lactation is an extension of maternal protection that transits the young infant from the shelter of the in utero environment to life in the ex utero world with its variety of potentially harmful exposures (WHO, 2003). Lactation has evolved over millions of years as an interaction to meet the biological needs of a child, enhancing its well-being and survival chances, as well as complementing the nurturing role of the mother. Lactation is a traditional norm in most African countries including Nigeria and is widely practiced. However, this practice is far from being optimum (Whitney & Rolfes, 2008). Lactation is perhaps the oldest practice in mammalian history as it is the healthiest and least expensive means of meeting the nutritional needs of infants (Ballard 2013). The human species is the only one among mammals in which breastfeeding and weaning are not governed only by instinct, as a mother needs to learn the techniques of positioning and attaching a helpless infant to the breast which may cause injury if not done properly (Riskin, 2012). Consequently, women become mothers with little or no ability to breastfeed, which makes them more vulnerable to difficulties during the process (Bartick and Reinhold, 2010).

According to WHO (2003) awareness regarding the importance of lactation has been increasing over decades with the information, communication and education strategies brought about by various organisations that involves social workers and health-care providers. But the awareness about the techniques of lactation such as the time of initiation of breast feeding, latching - on, mothers positioning and post feeding techniques seems limited. Inappropriate techniques of lactation such as delay in initiation of breastfeeding and improper feeding results to lactation complications. Failed lactation deprives the infant from natural passive immunity that the breast milk provides and makes babies susceptible to seizures, and the end result is the impairment of neonatal sensory and cognitive development (Fergusson and Beautrais, 2010). Moreover, improper posture of the mother and positioning of the baby can result in persistent backache. There are other implications that may further worsen the problems in the form of cracked nipple, blocked milk ducts, mastitis, breast engorgement and breast abscess (Mbada, oyinlola and Awotibeda 2013).

In Nigeria, most children are breastfed. However, the number of women following the appropriate techniques is low and declining from 28% in 1999 to 17% in 2013 (NDHS, 2013). Also, the rate of breastfeeding in Nigeria has been decreasing from 81.9% in 2010 to 78% in 2012 (NDHS, 2013). It is because of this decline that the researcher is interested in identifying the lactation management techniques possessed by women in Owerri Municipal, Imo State.

### **Purpose of the Study**

The purpose of this study was to determine the lactation management techniques possessed by women in Owerri Municipal Council of Imo state.

Specifically this study was intended to:

1. Determine the extent to which lactating women possess hand milk expression skill as a lactation management technique.
2. Determine the extent to which lactating women possess skin –to- skin contact skill as a lactation management technique in Owerri Municipal Council of Imo- State.
3. Determine the extent to which lactating women possess cue based feeding skill as a lactation management technique in Owerri Municipal Council of Imo State.
4. Identify the positioning techniques possessed by lactating women in Owerri municipal council of Imo State.
5. Identify the extent to which lactating women possess post feeding techniques for lactation.

### **Research Questions**

1. To what extent do lactating women possess hand milk expression skill as a lactation management technique?
2. To what extent do lactating women possess skin –to skin contact skill as a lactation management technique?
3. To what extent do lactating women possess cue based feeding skill as a lactation management technique?
4. What are the positioning techniques possessed by lactating women in Owerri municipal council of Imo -State?
6. To what extent do lactating women possess post feeding techniques for lactation?

### **Hypotheses**

The following null hypotheses were tested at 0.05 level of significance.

1. Mothers use of initiation of lactation management techniques was not dependent on their occupation.
2. Mothers use of positioning lactation techniques was not dependent on their educational level.
3. Mothers use of post feeding techniques was not dependent on their age.

## METHODS

The survey research design was adopted in this study. This research was conducted in Owerri Municipal Council in Imo state. Owerri Municipal is a local government area located in Imo State with its headquarters in the heart of the city of Owerri. The sample size for the study was 221 child bearing mothers who was selected from the population of 355 child bearing mothers registered for antenatal at FMC and St. David’s Hospital, Owerri Municipal, and Federal Medical Centre Owerri. The instrument for data collection for this study was a structured questionnaire titled lactation Management Techniques Questionnaire (LMTQ). The respondents rating of questionnaire items regarding lactation knowledge, techniques and management was summarized using mean and standard deviation. Chi-square test was used to compare each of lactation management techniques. Also chi-square was used to test association between lactation management techniques and each of cumulative lactation management score levels.

## RESULT AND DISCUSSION

This chapter deals with the presentation of result and conclusion. The result of the analysis of data related to the research questions are presented one after the other and the responses are computed statistically and presented in tables.

**Table 1:** Respondents’ mean rating on initiation lactation management techniques used

(N=221)

	Items	Yes	No
<b>A</b>	Skin to skin contact with baby	200(90%)	21 (10%)
<b>B</b>	Wrapped baby without skin contact	189(86%)	32(14%)
<b>C</b>	Hand milk expression to stimulate milk flow	197 (89%)	24(11%)
<b>D</b>	Cue-based feeding	196(89%)	25(11%)

From the analysis in table I above, it shows that 200(90%) of the respondent agree that they use Skin to skin contact with baby, 189(86%) agree that they wrapped baby without skin contact, 197(89%) agree that they Hand milk expression to stimulate milk flow and 196 (89%) agree that they use Cue-based feeding in initiating lactation management techniques.

**Table 2:** Respondents’ mean rating on positioning and latch on lactation management technique

S/N	Items on positioning and latch on lactation management technique	Mean	Remarks
1	Cradle hold to feed the baby	2.9	Agree
2	Side-lying to feed the baby	2.5	Agree
3	Football hold position to feed the baby	2.3	Disagree
4	The crossover hold position to feed the baby	2.1	Disagree
5	Laid back position to feed the baby	3.0	Agree
6	Encourage the baby’s lips to open by touching the baby’s lips with the nipples	3.3	Agree
7	Wait for the baby to open his/her mouth before feeding	2.6	Agree
8	Support the nipple with fingers	2.9	Agree
9	Ensuring that the baby has slow deep sucks	2.7	Agree
10	Allow the baby’s head to be able to flex while holding his/her neck	2.8	Agree

From the analysis in Table II, it shows that the respondents agree that Cradle hold to feed the baby, Side-lying to feed the baby, Laid back position to feed the baby, Encourage the baby’s lips to open by touching the baby’s lips with the nipples, Wait for the baby to open his/her mouth before feeding, Support the nipple with fingers, Ensuring that the baby has slow deep sucks, and that they allow the baby’s head to be able to flex while holding his/her neck with a mean score of 2.9, 2.5, 3.0, 3.3, 2.6, 2.9, 2.7 and 2.8 respectively. The respondents also disagree that Football hold position to feed the baby and that the crossover holds position to feed the baby with a mean score of 2.3 and 2.1

**Table 3:** Respondents' mean rating on the post feeding lactation management techniques used

S/N		Mean	Remarks
a)	Interrupting suction by pushing the baby away from the breast	3.0	YES
b)	Interrupting suction by inserting finger between baby's gums and breast	2.1	NO
c)	Putting baby in lying down position after feeding	2.9	YES
d)	Burping the baby after feeding both breast	2.8	YES
e)	Burping the baby after feeding each breast	3.2	YES
f)	Holding the infant up the adult shoulder and lightly rubbing the lower back	3.1	YES
g)	Interrupting suction by pushing the baby away from the breast	2.3	NO

From the analysis in Table III above, the respondents agree that interrupting suction by pushing the baby away from the breast, putting baby in lying down position after feeding, burping the baby after feeding both breast, burping the baby after feeding each breast and holding the infant up the adult shoulder and lightly rubbing the lower back are the post feeding lactation management techniques used with a mean score of 3.0, 2.9, 2.8, 3.2 and 3.1 respectively. The respondents also disagree that interrupting suction by inserting finger between baby's gums and breast and interrupting suction by pushing the baby away from the breast are the post feeding lactation management techniques used with a mean score of 2.1 and 2.3 respectively.

## Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

**Table 4:** Mothers use of initiation of lactation management techniques will not be dependent on their occupation.

	N	Mean	SD	Minimum	Maximum	Sig	Remarks
<b>Housewife</b>	221	18.7500	5.56028	13.00	24.00		
<b>Civil servant</b>	221	31.7500	19.05037	10.00	56.00		$H_0$
<b>Student</b>	221	40.5000	17.91647	23.00	65.00	0.056	Accept ed
<b>Trader</b>	221	26.5000	9.71253	21.00	41.00		
<b>Teacher</b>	221	25.2500	4.71699	21.00	32.00		
<b>Farmer</b>	221	28.0000	17.90717	12.00	44.00		

From the analysis above, it shows that the probability value (0.056) is greater than the alpha value (0.05), the researcher therefore accept the null hypothesis and conclude that the Mothers use of initiation of lactation management techniques was not dependent on their occupation.

**Table 5:** Mothers use of positioning lactation techniques was not dependent on their educational level.

	N	Mean	SD	Minimum	Maximum	Sig	Remarks
<b>Primary</b>	221	25.5000	6.02771	19.00	32.00		$H_0$
<b>Secondary</b>	221	37.0000	5.29150	32.00	44.00	0.060	Accepted
<b>Tertiary</b>	221	40.5000	17.91647	23.00	65.00		
<b>Vocational</b>	221	35.2500	5.31507	29.00	41.00		

From the analysis above, it shows that the probability value (0.06) is greater than the alpha value (0.05), the researcher therefore accept the null hypothesis and conclude that the Mothers use of positioning lactation techniques do not dependent on their educational level.

**Table 6:** Mothers use of post feeding techniques was not dependent on their age.

	N	Mean	SD	Minimum	Maximum	Sig	Remarks
<b>Below 18</b>	221	27.0000	11.20268	12.00	43.00		
<b>19-24 years</b>	221	28.4000	10.03992	11.00	36.00		$H_0$
<b>25-29years</b>	221	29.2000	10.42593	15.00	42.00	0.055	
<b>30-34years</b>	221	30.0000	9.46044	19.00	42.00		Accept ed
<b>35-40years</b>	221	30.4000	12.44186	21.00	51.00		
<b>40-44years</b>	221	34.6000	6.84105	27.00	42.00		
<b>Above 45years</b>	221	32.8000	12.33694	13.00	45.00		

From the analysis above, it shows that the probability value (0.056) is greater than the alpha value (0.05), the researcher therefore accept the null hypothesis and conclude that the Mothers use of post feeding techniques do not dependent on their age.

### Discussion of Findings

The discussion of the study was based on the following headings;

- Extent to which lactating women possess hand milk expression skill as a lactation management technique
- Extent to which lactating women possess skin –to skin contact skill as a lactation management technique
- Extent to which lactating women possess cue based feeding skill as a lactation management technique
- Positioning techniques possessed by lactating women in Owerri municipal council of Imo -State
- Extent to which lactating women possess post feeding techniques for lactation

The first analysis focused on the initiation lactation management techniques used by mothers. The findings revealed that the respondent agree that they use Skin to skin contact with baby, wrapped baby without skin contact, hand milk expression to stimulate milk flow and agree that they use Cue-based feeding in initiating lactation management techniques. This was in line with the study carried out by Ram, Goyal, Banginwar, Fatima, and Ahmed (2013) which states

that mothers use hand milk expression to stimulate milk flow and agree that they use Cue-based feeding in initiating lactation management techniques.

The second analysis focused on the positioning and latch on lactation management technique mothers use. The findings revealed that the respondents agree that Cradle hold to feed the baby, Side-lying to feed the baby, Laid back position to feed the baby, Encourage the baby's lips to open by touching the baby's lips with the nipples, Wait for the baby to open his/her mouth before feeding, Support the nipple with fingers, Ensuring that the baby has slow deep sucks, and that they allow the baby's head to be able to flex while holding his/her neck. The respondents also disagree that Football hold position to feed the baby and that the crossover holds position to feed the baby. The findings was in support of the study carried out by Madhu, Sriram &Ramesh ( 2009) which revealed that mothers makes use of Side-lying to feed the baby and laid back position to feed the baby.

The third analysis focused on the post feeding lactation management techniques used by mothers. The findings revealed that the respondents agree that interrupting suction by pushing the baby away from the breast, putting baby in lying down position after feeding, burping the baby after feeding both breast, burping the baby after feeding each breast and holding the infant up the adult shoulder and lightly rubbing the lower back are the post feeding lactation management techniques used. The respondents also disagree that interrupting suction by inserting finger between baby's gums and breast and interrupting suction by pushing the baby away from the breast are the post feeding lactation management techniques used. This was in line with the study carried out by kiranmi, Shyamala, Shripad, Prashantha, and Lavanya , (2015) which states that putting baby in lying down position after feeding and burping the baby after feeding both breast are the post feeding lactation management techniques used by mothers.

In the test of hypotheses, it was revealed that mothers use of initiation of lactation management techniques do not depend on their occupation, mothers use of positioning lactation techniques do not dependent on their educational level and that mothers use of post feeding techniques do not dependent on their age. This was in accordance with the study carried out by Chidozie, Adekemi, Joel, Folasad, Funmilola, Abiola, Tofeek, Adepuja & Oluwakemi (2013) which states that mothers use of positioning lactation techniques do not dependent on their educational level.

## **Conclusion**

From the findings of the study, the researcher observed that mothers use skin to skin contact with baby and most times use hand milk expression to stimulate milk flow. the study showed that mothers encourage the baby's lips to open by touching the baby's lips with the nipples, wait for the baby to open his/her mouth before feeding, support the nipple with fingers, ensuring that the

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baby has slow deep sucks, and that they allow the baby's head to be able to flex while holding his/her neck. the researcher concludes that mothers use of initiation of lactation management techniques do not depend on their occupation, mothers use of positioning lactation techniques do not dependent on their educational level and that mothers use of post feeding techniques do not dependent on their age.

### **REFERENCES**

- Ballard, O. (2013). Human milk composition. *Paediatric clinics of North America*: 60 (1):49 -74.
- Bartick, M. And Reinhold. A. (2010). The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. *Pediatrics*; 125(5):e1048–e1056.
- Chidozie, E., Adekemi , E., Joel ,O., Folasade ,C., Funmilola ,F., Abiola, O. and Oluwakemi, A. (2013). Knowledge, attitude and techniques of breastfeeding among Nigeria, mothers from a semi urban community.
- Fergusson, D. and Beautrais, A. (2010). Breastfeeding and cognitive development in the first seven years of life. *Soc Sci Med*, 16 (19):17 05-8.
- Fernandez, L., Garssen, J., Knol, J., Rodriguez, J. M., & Martin, R. (2013). Human milk: a source of more life than we imagine. *Benef Microbes*; 4(1):17–30.
- Madhu, K., Sriram ,C. and Ramesh ,M.(2009). Breastfeeding practices and new born care in rural areas: A descriptive cross sectional study. *Indian Journal of Community Medicine* .medknow publications.
- Mbada, C. Oyinlola. F, and Awotibeda T, (2013). Is baby friendly breastfeeding mother friendly? *J Womens Health* 37 (1):19 -28.
- Riskin, A. (2012). Changes in immunomodulatory constituents of human milk in response to active infection in the nursing infant. *Pediatr Res*; 71(2):220–225.
- Whitney, E. And Roles, R. (2008). *Nutrition during lactation in understanding nutrition*. 11<sup>th</sup> ed. Thomson higher education, USA pp 533.
- WHO (2003) .The global strategy for infant and young child feeding .Geneva.