

Demographic Determinants, Knowledge and Practice of Exclusive Breastfeeding among Mothers Attending Post-Natal Care in Port Harcourt Metropolis of Rivers State, Nigeria

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Abstract: *The objective of this study was to investigate the demographic determinants, knowledge and practice of exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis of Rivers State. Descriptive research design was used in the study. The population of the study consisted of all mothers attending postnatal care in Port Harcourt metropolis in Rivers state. A semi constructed questionnaire and a sample size of 500 was used. The result showed that 90.9% of postnatal mothers had good knowledge on exclusive breastfeeding though their level of practice was low with the grand mean rating ($M=2.45$, $SD=0.81$). However, age ($p<.002$), marital status ($p<.007$), occupation ($p<.000$) and educational attainment ($p<.000$) had significant difference on postnatal mothers' knowledge towards exclusive breastfeeding. While, marital status ($p<.003$), occupation ($p<.007$) and baby age ($p<.000$) had significant difference on the postnatal mothers' practice towards exclusive breastfeeding. It was concluded that postnatal mothers had high knowledge of the exclusive breastfeeding while their level of practice was low. Based on the findings of this study, it was recommended that continuous encouragement and more education on the importance of exclusive breastfeeding should be maintained and early introduction of infant formula by mothers should be discouraged for adequate practice of exclusive breastfeeding.*

Keywords: knowledge; practice; exclusive; breastfeeding; mothers; post-natal care

1. INTRODUCTION

Exclusive breastfeeding (EBF) simply means feeding an infant or young child with breast milk from the mother or other wet nurses for six months rather than using infant formula, water or any other milk from baby bottle [1]. This act of exclusive breastfeeding has tremendous benefits including improving child's survival rate, helps in the psychological and physiological development of the infant and even helps breastfeeding women to lose birth weight [2]. Interestingly in some countries, we have breast milk bank gotten from other women. In breastfeeding the baby is attached to the breast or the milk extracted to feed the baby from human breast. It supposed to last for six months from the time of birth and it is usually initiated within 30 minutes. But a lot of times, mothers are confused with the issue of water. No other liquids or solids are given with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals, or medicines as the breast milk has enough water to meet the needs of the child [3,4]. According to the World Health Organization [5] human breast milk is the healthiest and the best form of milk for babies. Moreover, available evidence shows early skin-to-skin contact or bonding between mother and baby improves the nutritional, social, psychological, economic, immunologic, developmental, and environmental outcomes of the child and thus increases cardio-respiratory stability [6,7].

Additionally, it has long-term health benefits for women including reduced risk of breast cancer, endometrial cancer and ovarian cancer [8]. Breast milk contains all the nutrients that a child needs to grow and survive, in addition to water, breast milk contains nutrients such as protein, vitamins, iron, minerals and fats. Aside from the already mentioned benefits, exclusive breastfeeding creates an inevitable bond or relationship between a mother and her child [9]. Research shows that about 1.3 million children are saved worldwide each year as a result of exclusive breastfeeding [10].

Educating the mothers on the importance of EBF helps to increase their knowledge of EBF and education would help in promoting the campaign for 100 percent attainment of a positive attitude of mothers regarding EBF in Nigeria [11]. Mothers Knowledge has a great impact on the nutritional status of the child, as children born by mothers who were either unable to attain any form of education or only had access to lower education are mostly faced with issues of malnutrition. A survey conducted by the United Nations International Children Emergency Funds [12] shows the higher the number of educated mothers in the country, the higher the chances of an increased percentage of children exclusively breastfed as a result of access to adequate information and a better knowledge.

Despite the recommendation of Exclusive breastfeeding by WHO, the rate at which Port Harcourt is making progress in exclusive breastfeeding is very slow. Exclusive breastfeeding is the key to fighting child malnutrition, though some mothers do not practice EBF while others practice it for less than the stipulated 6 months due to the fear of having a saggy breast or the excuse of their occupation. Hence, the researcher deemed it necessary to carry out this study to investigate the demographic determinants, knowledge and practice of mothers attending post-natal care towards exclusive breastfeeding in Port Harcourt metropolis of Rivers State.

1.2 Aim and Objectives of the Study

The aim of this study is to determine the demographic determinants, knowledge and practice of mothers attending post-natal care towards exclusive breastfeeding in Port Harcourt metropolis of Rivers State. The specific objectives of the study include to:

1. Determine the demographic determinants of mothers' level of knowledge on exclusive breastfeeding in Port Harcourt metropolis of Rivers State.
2. Determine the demographic determinants of the level of practice of exclusive breastfeeding in the study area.

1.4 Research Questions

The research questions in this study include the following:

1. What are the demographic determinants of knowledge on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis?
2. What are the demographic determinants of the level of practice of exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis?

1.5 Hypotheses

The following hypotheses were formulated to guide the study and were tested at 0.05 alpha levels

1. There is no significant difference between mothers demographic determinants and level of knowledge of exclusive breastfeeding
2. There is no significant difference between demographic determinants and practice of exclusive breastfeeding among respondents.

3. METHODOLOGY

A descriptive survey design method was used to observe, describe and document the aspects of the knowledge and practice of exclusive breastfeeding among mothers attending post-natal in Port Harcourt metropolis. Six research questions was used and three hypotheses were formulated to achieve the aim of the study, the study population consisted of all nursing mothers attending postnatal care in health centers within PHALGA, OBIO/ AKPOR LGA's in Port Harcourt metropolis. Ten (10) selected health facilities were used. Each of the health institutions were visited on different days. Respondents who participated in this study was 500, simple random sampling technique was used to select the 50 respondents from each of the health institutions. The research instrument for data collection was semi-constructed questionnaire, the questions was constructed to reflect the specific objectives of the study as to ensure content validity. To ascertain the reliability of the instrument, 10 percent (50 copies) of the validated instrument were pretested in another health facility homogenous to the study area in other to ensure the internal consistency of the items in the questionnaire; the pretested questionnaires were subjected to a reliability test using the cronbach's alpha. The reliability coefficient of 0.657 was for knowledge and 0.742 for practice.

The researcher and two trained research assistance personally visited the selected health institution, simple random sampling techniques was used to select the respondents present in the various health institutions. Personal interviews were done using a semi-constructed questionnaire on participants who seems to be very busy. The Statistical Package for Social Sciences were used for data analysis, descriptive statistic such as frequency, percentages, mean, and ANOVA at 0.05 alpha level were used for the analysis.

4. RESULT

Table 1: Frequency Distribution of socio-demographic variables (age, marital status, education, occupation, number of children, and age of the baby).

		Frequency (F)	Percent (%)
Age	18-25years	123	25.3
	26-33years	209	42.9
	34-41years	148	30.4
	42-49years	7	1.4
Total		487	100.0

Table 1 shows the demographics characteristics of the respondents. It indicates that age category of 18-25years was 123(25.3%), 26-33years was 209(42.9%), while 34-41years was 148(30.4%) and 42-49years was 7(1.4%).

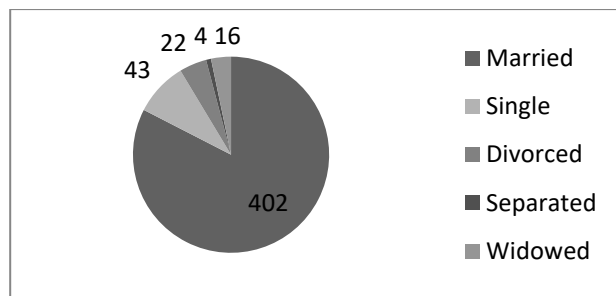


Figure 2: Pie chart showing marital status of the respondents

Pie chart showed the marital status of the respondents, which revealed that 402(82.5%) was married, whereas 43(8.8%) was single, 22(4.5%) was divorced, 4(0.8%) was separated, and 16(3.3%) was widowed.

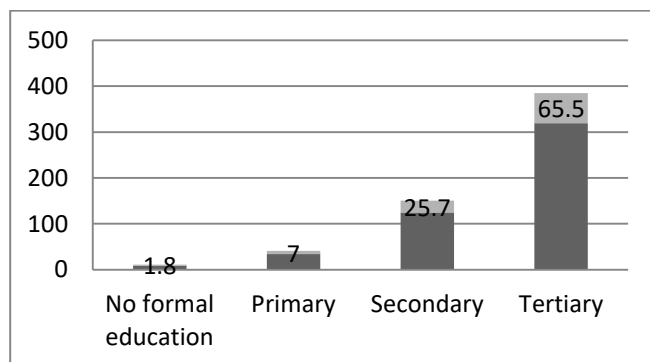


Figure 3: Bar chart showing the educational attainment of the respondents.

Bar chart showed the educational attainment of the respondents indicates that 9(1.8%) has no formal education, 34(7.0%) has primary education, 125(25.7%) attended secondary education, whereas 319(65.5%) has tertiary education.

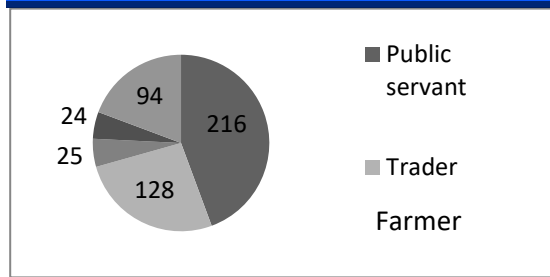


Figure 4: Pie chart showing occupation of the respondents

Pie chart showed the occupation of the respondent shows that 216(44.4%) were public servants, trader 128(26.3%), artisan was 25(5.1%), farmer was 24(4.9%) while others (students and unemployed) indicates 94(19.3%).

Table 2: Frequency table showing number of children and age of the baby

		Frequency (F)	Percent (%)
No of Children	1-3 children	334	68.6
	4-6 children	141	29.0
	7-9 children	12	2.5
Baby age	1-3 months old	204	41.9
	4-6 months old	228	46.8
	7-9 months old	55	11.3
Total		487	100.0

Table2 showed that the number of children owned by the respondent shows the category of 1-3 children was 334(68.6%), while4-6 children was 141(29.0%) and from 7-9 children was 12(2.5%). Finally, the age category of the baby from1-3months old was 204(41.9%), whereas 4-6months old was 228(46.8%) and 7-9months old was 55(11.3%)

Research question 1: What are the demographic determinants of knowledge on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis?

Table 3: Percentage responses on the demographic determinants of knowledge on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis

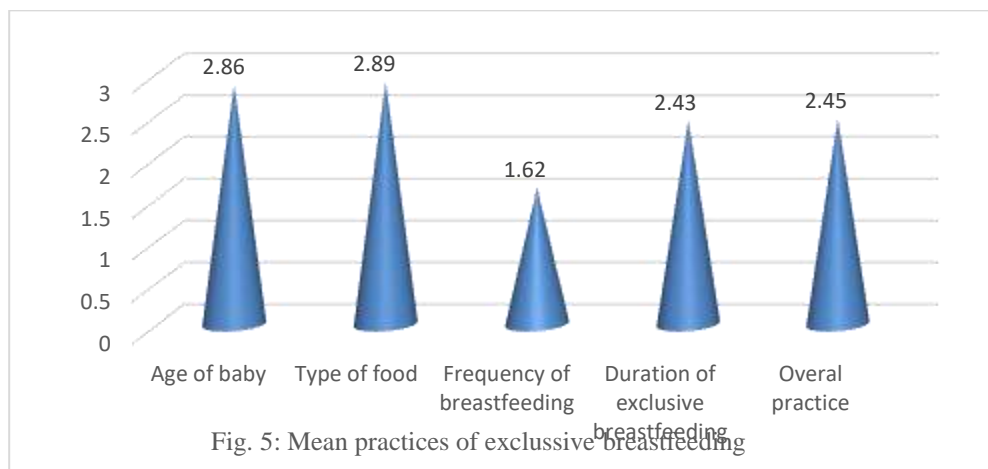
SN			N	%
1	Have you ever received information on exclusive breastfeeding before delivery of your baby	No	26	5.3
		Yes	461	94.7
	Total		487	100
2	What do you understand by exclusive breastfeeding?			
	Giving breast milk only		41	8.4
	Giving breast milk for two weeks		13	2.7
	Giving only breast milk for six months		410	84.2
	Others (no idea)		23	4.7
	Total		487	100
3	What are the benefits of exclusive breastfeeding to your baby?			

	Breast milk is hygienic and safe for the baby.	470	96.5
	Only breast milk does not satisfy the baby	17	3.5
	Total	487	100
4	What are the benefits of exclusive breastfeeding to you (nursing mother)?	430	88.3
	Breastfeeding may protect mother against breast or ovarian cancer	430	88.3
	Cracks mother's nipple	57	11.7
	Overall	487	90.9%

The result on Table 3 shows the percentage responses on the demographic determinants of knowledge on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis. It shows that 461(94.1%) of the respondents indicated that they have received information on exclusive breastfeeding before delivery of your baby. Majority of the respondents, 410(84.2%) indicated that exclusive breastfeeding is giving only breast milk for 6 months. Also, 470(96.5%) indicated that the key benefit of exclusive breastfeeding to the baby is that breast milk is hygienic and safe for the baby whereas 430(88.3%) indicated that the benefits of exclusive breastfeeding to the nursing mother is that breastfeeding may protect mother against breast or ovarian cancer, and the overall percentage was 90.9%, from the above data this shows that knowledge on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis was high.

Research question 2: What are the demographic determinants of practice on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis?

Table 4: Mean responses on the demographic determinants of practice on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis.



Criterion mean= 2.50

Table 4 shows mean responses on the demographic determinants of practice on exclusive breastfeeding among mothers attending post-natal care in Port Harcourt metropolis, it shows that age of baby is vital in the consideration of exclusive breastfeeding (M=2.86, SD=1.22) this was followed with the type of food given as (M=2.89, SD=0.79), duration of exclusive breastfeeding (M=2.43, SD=0.81) and the frequency of breastfeeding (M=1.62, SD=0.84). The grand mean 2.45 SD= 0.81, the fact that the grand mean is 2.45 shows that their level of practice is low.

H₀₁: There is no significant difference between demographic determinants of postnatal mothers and knowledge of exclusive breastfeeding.

Table 5: Summary of factorial design ANOVA on the difference between demographic determinants and knowledge of exclusive breastfeeding among respondents

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected model	7.963 ^a	18	.442	10.195	.000
Intercept	60.043	1	60.043	1383.569	.000
Age	.652	3	.217	5.010	.002*
Marital status	.617	4	.154	3.555	.007*
Occupation	3.347	4	.837	19.283	.000*
Educational attainment	1.072	3	.357	8.234	.000*
No of Children	.038	2	.019	.437	.646
Babyage	.031	2	.015	.352	.704
Error	20.310	468	.043		
Total	1419.938	487			
Corrected Total	28.273	486			

(*) significant

Table 5 shows the summary of factorial design ANOVA on the difference between demographic determinants and knowledge of exclusive breastfeeding among respondents. It shows that age ($F_{3, 468}=5.010$, $p<.05$), marital status ($F_{4, 468}=3.555$, $p<.05$), occupation ($F_{4, 468}=19.283$, $p<.05$) and educational attainment ($F_{3, 468}=8.234$, $p<.05$) respectively had significant difference on the postnatal mothers' knowledge of exclusive breastfeeding. We reject the null hypothesis in these cases. However, the number of children ($F_{2, 468}=.437$, $p>.05$) and baby age ($F_{2, 468}=.352$, $p>.05$) had no significant difference on the postnatal mothers' knowledge of exclusive breastfeeding. The null hypothesis one was retained in these cases.

H_{02} : There is no significant difference between demographic determinants of postnatal mothers and practice of exclusive breastfeeding.

Table 6: Summary of factorial design ANOVA on the difference between demographic determinants and practice of exclusive breastfeeding among respondents

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected model	25.893 ^a	18	1.439	7.254	.000
Intercept	149.923	1	149.923	756.016	.000
Age	.581	3	.194	.976	.404
Marital status	3.291	4	.823	4.149	.003*
Occupation	2.846	4	.711	3.587	.007*
Educational attainment	.212	3	.071	.356	.785
No of Children	.033	2	.016	.083	.920
Baby age	15.453	2	7.727	38.963	.000*
Error	92.808	468	.198		
Total	3035.063	487			
Corrected total	118.701	486			

(*) Significant at $p<.05$

Table 6 shows the summary of factorial design ANOVA on the difference between demographic determinants and practice of exclusive breastfeeding among respondents. It shows that marital status ($F_{4,468}=4.149$, $p<.05$), occupation ($F_{4, 468}=3.587$, $p<.05$) and baby age ($F_{2, 468}=38.963$, $p<.05$) respectively had significant difference on the postnatal mothers' practice on exclusive breastfeeding. We reject the null hypothesis in these cases. However, age ($F_{3, 468}=.976$, $p>.05$) and educational attainment ($F_{3, 468}=.356$, $p>.05$) had no significant difference on the postnatal mothers' practice on exclusive breastfeeding. The null hypothesis two was retained.

5. DISCUSSION OF FINDINGS

From Table 3 above, the findings from the assessment of knowledge from the respondents revealed that 90.9% respondents had good knowledge of exclusive breastfeeding. This finding is consistent with findings of [13], who found out that the respondents in his study had a good knowledge regarding exclusive breastfeeding. It is also consistent with the finding from a study conducted [14], that showed majority of the respondents knew that feeding with only breast milk without the addition of water or food for six months was what EBF entailed. Also, [15] in his study explained that majority of his respondents knew the correct definition and

duration of exclusive breastfeeding. [16] found out the respondent in her study had good knowledge of exclusive breastfeeding. This is suggested that an accurate knowledge of the benefits may play a vital or pertinent role in providing solution to issues regarding exclusive breastfeeding.

The findings from table 4.3 assessment of the respondents regarding their level of practice towards exclusive breastfeeding revealed that respondents indicated a very low practice regarding exclusive breastfeeding with grand mean ($M=2.45$, $SD=0.49$). The findings are consistent with the study carried out [14] and [17] which revealed that there was poor practice of exclusive breastfeeding discovered among mothers. Also, another study carried out by [13,16,18,19] all revealed that despite the fact that breastfeeding remains the simplest and least expensive, and healthiest feeding method for infants, its prevalence is reported to be very low. The findings of this study were in line with 2016-2017 Multiple Indicator Cluster Survey, (MICS) which showed that Nigeria's breastfeeding rate remains low with only 23.7 per cent of babies born in the country being breastfed exclusively.

6. CONCLUSION

From the findings of the study, postnatal mothers understood what EBF was, they have received more information on it and the benefits of exclusive breastfeeding to the child and to them (mothers), though high percentage noted that postnatal mothers have knowledge of exclusive breastfeeding, and their level of practice was low. However, age, marital status, occupation and educational attainment had significant difference on postnatal mothers' knowledge towards exclusive breastfeeding, while number of children and baby age had no significant difference on postnatal mothers' knowledge towards exclusive breastfeeding. Also, marital status, occupation and baby age had significant difference on postnatal mothers' practice towards exclusive breastfeeding, while, age and educational attainment had no significant difference on postnatal mothers' practice towards exclusive breastfeeding.

7. RECOMMENDATIONS

Based on the findings of this study, the following recommendation was here by made:

1. The media and health workers should continue encouraging and educating mothers on the importance of exclusive breastfeeding.
2. For working class mothers, there should be six months maternity leave and early closing of work that is implemented by the government and other organization for them to practice
3. There should be crèche established in any organization in order for mothers to have quick access with their babies for exclusive breastfeeding practice.

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