



## **Influence of Level of Education on Safe Motherhood Practice of Childbearing Mothers: Implication to Early Exceptionalities**

**Adama, Grace Ngozi, Chika Hannah Dimkpa & Godwin Ejike Oke**

Department of Special Needs Education

**Corresponding Author:** grace.adama@unn.edu.ng

### **Abstract**

This study sought to determine the influence of education on safe motherhood practices of childbearing mother and its implication for early childhood in Nsukka Enugu State Nigeria. Four research questions and one hypothesis guided the study and were analyzed using percentage, mean and standard deviation. The findings revealed that education of child bearing mothers did not influence their practice of safe motherhood initiative namely prenatal care, intrapartum care, postnatal care, and abortion care. The finding was not expected therefore a surprise. This is because the educational level of any group or individuals is expected to inform and influence their practice of a health-related behavior. Hence, the study recommended that mothers with formal and informal levels of education should be encouraged to seek health care services during prenatal care, intrapartum care, postnatal care and abortion care. The acquisition of levels of education should not be criteria for seeking safe motherhood initiative. The conclusion, implication to early exceptionalities and recommendation were proffered.

**Keyword:** Influence, education, practice, safe mother, child bearing mother, early exceptionalities.

### **Introduction**

Education has been described differently from various perspectives. Education remains a veritable instrument in the hands of the possessor (the individual and society at large). Education has great influence on individuals and nation development. In individuals the end of extreme poverty is certain, human potentials are unlocked, Nyege, Agabi, & Anthony, (2018). When productivity in the informal sector is actualized there is likely to be a better health and resilience. Hence, obtaining a quality education lays the foundation to actualizing peoples' potentials, improving their lives and attaining sustainable development (Nwabueze & Adama, 2018). To the nation, education brings about national growth and development in areas of science, technology, art, and so on. Education affects all aspects of life endeavour. Child bearing mothers are not exceptional when it comes to learning. Some have formal education and some non formal education.

The level of educational attainment may influence expectant mothers' performance and actions. In addition, Nyede, Agbai and Anthony, (2018), envisaged that influence of education on individuals may offer employment opportunities, health, nutrition, shelter, social strata and benefits

flow to further education and experiences. From very elementary to more complicated learning experience, embracing all fields and levels of education represents a broad section of the education ladder, which is the progression programme groups that may occur at that particular stage of the progression (Brick, 2006) According to Higher Education Authority, HEA, (2024), the level of education as it pertains to practice of safe motherhood initiative by childbearing mothers may greatly determine the health status of mother and child. Furthermore Stonewall (2006) and Campbell (2006) discovered in a study on level of education that people (expectant mothers inclusive) that have high level of education perform better than people with low level of education, .

In order to enhance the utilization of safe motherhood in Nsukka Health Districts mothers are expected to possess formal or informal education. Acquisition of level of education is expected to improve the utilization of safe motherhood. Anthony and Thomas (2005) stated that level of education develops reasoning and scientific approach in solving problems. And for the aim of safe motherhood to be actualized among childbearing mothers, childbearing mothers should

be enlightened and encouraged to attend school. Seminars organized in the community, village square may also serve as informal education to understanding the need for safe motherhood initiative. Observations, especially during antenatal have shown that some childbearing mothers struggle over issues like; how they should take their drugs, when to come again, which hospital to deliver their babies, whether to take immunization and its effect on the babies, whether to take contraceptive or not, among other issues. All these may be traced to the academic level of the childbearing mothers and this formed the bedrock of the present study. The various studies reviewed have seen education as a determinant factor in utilization of safe motherhood among childbearing mothers. From afar mentioned observations in the antenatal, level of education of child bearing mothers may improve or mar the health conditions of mothers and their babies in Nsukka health District.

Research has shown that association between education and health care services utilization may be due to several factors, including the tendency of educated mothers to obtain safer, better jobs, have greater level of health literacy, take preventive health care measures, avoid risky behavior and experiences efficacy or level of control in their lives (UNFPA, 2016). Many studies have found maternal educational level to have strong positive impact on the utilization of safe motherhood components (Afolayon & Oladimeji 2012, Desalaw, Beleke, Kadir, Fagbamigbe & Idemuolia, 2015). However, Behrman and Wolfie (1987), had earlier stated that female education has no significant influence on health seeking behavior.

Furthermore, Audu, Takai and Bukar (2010), also discovered that young illiterate women who have no formal education have higher incidence of maternal mortality rate. Fred (1992) summarized the characteristics of educated women as delayed first birth, schooling and employment, limited number of children, more likely to use contraceptives which culminate in positive maternal health during pregnancy and childbirth. Corroborating this assertion, Ojong, Nwkwue, Uka and Obi (2019), reported that a study in china showed that acceptance of intrapartum care from hands of medical professionals was higher among the educated women than women with low educational status. The researcher also opined that clients with higher educational level had a good perception of intrapartum care than those with first secondary education level. This also agrees with researchers who investigated the relationship between formal education and the perception of

intrapartum care among pregnant women in Nigeria (Olatinje & Sule 2001; Onah, 2009). He found out that formal education was significantly correlated to perception and attitude, pregnant women have concerning intrapartum care.

### Research Questions

1. What is the level of education of childbearing mother practice of selected intrapartum care?
2. What is childbearing mothers' level of education to practice of selected intrapartum care?
3. What is child bearing mothers' level of education to practice of selected postnatal care?
4. What is child bearing mothers' level of education to practice of selected abortion care?

### Hypothesis

H<sub>0</sub>: Level of education has no statistically significant influence on childbearing mothers' practice of safe motherhood initiatives.

### Materials and Methods

#### Research Design

Descriptive survey design was adopted for the study.

#### Research Site

The study site is among Nsukka health district clinics that are functional in Nsukka. They were selected for this study because many childbearing mothers and pregnant women patronize the clinic. This is because of the trained medical personnel that are working in the clinic.

#### Target Population

The target population were all the childbearing mothers attending maternal and child health clinics in Nsukka health District. The functional clinic in this district include Nsukka health center 300, Opi health center 50, Aku health center 100, Ekwegbe health center 50, Obimo health center 203 and Ibagwa ani health center 220 These were nursing mothers or pregnant women that were found in Nsukka health District. These summed up to 923.

#### Sample and sampling technique

Systematic sampling technique was used to select the respondents from their clinic register. Each clinic has its own booklet for registering mothers that are coming in the clinic so from the booklet the researcher selects the mothers to work with. The names of mothers were selected alternatively from the clinic register booklet. The sampled size was 363.



### **Instrument for data collection.**

A self-validated questionnaire was used to elicit data from the respondents. The instrument was divided into two sections. Section A sought information on respondent's socio-demographic data, (level of education, type of care she is seeking, intrapartum, postpartum or abortion care), while section B comprised of child bearing mother practice of safe motherhood initiatives.

### **Validity of instrument**

Face validity of the research instrument was established by the researchers from department of health, physical education departments and department of psychology. The inputs were immensely used to restructure the questionnaire.

### **Reliability of the instrument**

In order to determine the reliability of the instrument, the split-half was utilized. The instrument was administered on thirty childbearing mother that attended MCH clinic in Udi Health clinic, Enugu state. The responses of the split instruments were analyzed using pearson product moment correlation and spear- Brown correction formula statistics. Cronbach Alpha coefficient statistics was utilized to establish the internal consistency of the instrument due to polychotomous scored instrument. Factor analysis was used to determine the reliability co-efficient of each sub-

scale item of the instrument, Kuder- Richardson-21 formula statistic was used since nominal data with dichotomous response options of Yes and No was generated in the instrument and the reliability estimation of 0.82.

### **Method of data collection**

Questionnaire was administered to the respondents face to face by the researcher and the same were completely filled and retrieved at the spot.

### **Data analysis procedure**

The data that was collected was analyzed using percentage and frequency while hypothesis was tested using the chi- square statistics test analysis at 0.05 level of significance.

### **Ethical consideration**

The director of the health clinic in Nsukka District was sought and consent gained. The research assistants from each clinic attended explained to the mothers the purpose of the research. Hence, consent of the respondents was gained to enable them give necessary information. The researcher reassured the respondents that the information is only for academic purposes so as to maintain confidentiality and anonymity.



Influence of level of education on childbearing mothers' practice

Level of education	NFE				FSLC				NECO/WAEC				NCE/OND				HND/B.Sc/B.A			
SMI components	(n=19)				(n=71)				(n=118)				(n=99)				(n=56)			
POPC	Yes		No		Yes		No		Yes		No		Yes		No		Yes		No	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Ever made use of ultrasound scanning recommended by MCH staff	11	59.9	8	42.1	35	49.3	36	50.7	62	52.5	56	47.5	63	63.6	36	36.4	46	82.1	10	17.9
Regular observation of hygienic practices	17	89.5	2	10.5	65	91.5	6	8.5	108	91.5	10	8.5	88	88.9	11	11.1	51	91.1	5	8.9
Consultation with doctor for diagnosis of pregnancy related problems	15	78.9	4	21.1	64	90.1	7	9.9	101	85.6	17	14.4	83	83.8	16	16.2	52	92.9	4	7.1
Eating of adequate diet during pregnancy	16	84.2	3	15.8	63	88.7	8	11.3	111	94.1	7	5.9	93	93.9	6	6.1	54	96.4	2	3.6
Average POIC	78.1		21.9		79.9		20.1		80.9		19.1		82.6		17.4		90.6		9.4	
Use of hygienic materials for personal hygiene	17	89.5	2	10.5	56	78.9	15	21.1	100	84.7	18	15.3	85	85.9	14	14.1	52	92.9	4	7.1
Ever made use of machine to deliver a child	12	63.2	7	36.8	22	31.0	49	69.0	36	30.5	82	69.5	41	41.4	58	58.6	16	28.6	40	71.4
Consultation with Nurse, Midwives during labour	16	84.2	3	15.8	55	77.5	16	22.5	111	94.1	7	5.9	91	91.9	8	8.1	48	85.7	8	14.3
Use of hospital facility for child delivery	15	78.9	4	21.1	60	84.5	11	15.5	105	89.0	13	11.0	86	86.9	13	13.1	46	82.1	10	17.9
Average POPN	78.9		21.1		67.9		32.1		74.6		25.4		76.5		23.5		72.3		27.7	



Feeding babes with artificial milk	6	31.6	13	68.4	17	23.9	54	76.1	30	25.4	88	74.6	23	23.2	76	78.8	15	26.8	41	73.2
Use of methylated spirit to clean umbilical stump	18	94.7	1	5.3	61	85.9	10	14.1	108	91.5	10	8.5	90	90.9	9	9.1	51	91.1	5	8.9
Regular immunization of child against killer diseases	16	84.2	3	15.8	62	87.3	9	12.7	112	94.9	6	5.1	89	89.9	10	10.1	55	98.2	1	1.8
Consultation with whenever the child is sick	17	89.5	2	10.5	65	91.5	6	8.5	112	94.9	6	5.1	91	91.9	8	8.1	52	92.9	4	7.1
Average POAB	75.0		25.0		72.2		27.8		76.7		23.3		73.9		26.1		77.3		22.7	
Ever had feeling of vaginal uneasiness prior to the unset of bleeding	14	73.7	5	26.3	40	56.3	31	43.7	77	65.3	41	34.7	63	63.6	36	36.4	28	50.0	28	50.0
Use of pills to induce abortion	8	11	42.1	57.9	22	31.0	49	49.0	50	42.4	68	57.6	45	45.5	54	54.5	16	28.6	40	71.4
Use of hospital facility during abortion	17	2	89.5	10.5	51	71.8	20	28.2	91	77.1	27	22.9	74	74.7	25	25.3	29	51.8	27	48.2
Ever consulted with doctors during abortion	14	5	73.7	26.3	54	76.1	17	23.9	92	78.0	26	22.0	71	71.7	28	28.3	31	55.4	25	44.6
Average	69.8		30.2		58.8		41.2		65.7		34.3		63.9		36.1		46.5		53.5	

**Key:** POPC=Practice of prenatal care; POIC= Practice of intrapartum care; POPN= Practice of postnatal care; POAB= Practice of abortion care.

Table 1 indicates that childbearing mothers across levels of education practiced POPC: HND/B.Sc/B.A (90.6%), OND/NCE (82.6%), WASC/WAEC/GCE O' Level (80.9%), FSLC (79.9%) and NFE (78.1%). Also, mothers irrespective of levels of education, practiced POIC: NFE (78.9), OND/NCE (76.5%), HND/B.Sc/B.A(72.3%), WASC/WAEC/GCE O' Level(74.6%), and FSLC (67.9%). Consequently, childbearing mothers' educational level did not influence POIC. The table further reveals that respondents regardless of educational level practiced POPN: HND/B.Sc/B.A (77.3%), WASC/WAEC/GEC O' Level(76.7%),

NFE (75.0%), OND/NCE (73.3%), and FSLC (72.2%). Considering POAB, mothers with NFE had 69.8%, mothers with WASC/WAEC/GCE O' Level had 65.7%, mothers with OND/NCE had 63.9%, mothers with FSLC had 58.8% while mothers with HND/B.Sc/B.A had 46.5%. The result on POAB suggests that level of education did not influence practice of abortion. Data in table 1 above in general suggest that except for POAB where mothers with NFE had high percentage (69.8%), mothers' level of education influenced their practice of safe motherhood.

Table 2 Chi-square ( $\chi^2$ ) Analysis of influence of level of Education on Childbearing Mothers' practice of SMI components (n=363)

VARIABLE	N	df	$\chi^2$ -cal value	$\chi^2$ -Crit value
level of education	NFE 19	FSLC 71	WASC/GCE 'O' LEVEL/ 118	NECO 71.32
				NCE /OND 52
				HND 69.83
				B.Sc 99
				B.A& Equivalent 56

Table 2 shows that  $\chi^2$ -Cal value of test of hypothesis of level of education has no statistically significant influence on childbearing mothers' practice of SMI components ( $\chi^2 = 71.32 > 69.83$ ,  $df = 52$ ,  $p < .05$ ) is greater than the observed or tabled  $\chi^2$  - value. The hypothesis that level of education of childbearing mothers has no statistically significance influence on practice of SMI is therefore, accepted.

### Discussion of Findings

Data on POPN- This table revealed that level of education influenced the practice of prenatal care HND/B.SC/B.A=90%, OND/NCE=82.6%, WASC/WAEC/GCE O level= 80.9%, FSLC=79.9%, NFE=78.1%. This result is not surprising because educational level of any given group is expected to influence their knowledge and eventually their practice. This is in line with the findings of Afolayon and Oladimeji (2012) who discovered that maternal educational level has strong impact on the utilization of health-related behaviour. However, Bahrmn and Wolfe (1987) had earlier stated that female education has no significant influence on health seeking behavior. This disagreement may be due to subject composition (rural and urban).

Data on POIC: revealed that education did not influence the practice of intrapartum care. This also is a surprise to me because it is expected that

childbearing mothers with higher educational qualification are expected to influence their level of practice of intrapartum care. Contrary Ojong, et al (2019) reported that a study in China showed that women with higher educational status accepted intrapartum from the hands of medical professional than women with low educational staus. Ojong, et al(2019) also opined that women with higher educational level have good perception than women with secondary school attainment.

Data on POPC: showed that education has no influence on postnatal care of childbearing mothers' practice. This is quit surprising because level of education is expected to impact on the practice of postnatal care. Contrary, Fagbamigbe and Idemudia (2015) have found that maternal education has positive impact on health-related behavior.

Data on POAB: showed that level of education has no influence on the childbearing mother practice of abortion care. This is equally surprising because according to Fred (1992) educational women are more likely to use contraceptives than uneducated women.

### Conclusion

Based on the findings, the level of education of childbearing mothers did not influence intrapartum care, postnatal care and abortion care but the level of education influenced prenatal care. The level of

education is expected to have good positive impact to safe motherhood initiative in order to curb maternal and child health problems.

### Implication to early exceptionalities.

Early exceptionalities are those early disabilities seen in newborn as a result of abnormalities in the newborn accruing from biological and environmental factors such as drugs, poisoning, alcohol, sepsis during pregnancy (prenatal or abortion care), intrapartum care and postpartum care. It has been researched that childbearing mothers with high level of education tend to seek health care services which may avert those abnormalities that may cause early exceptionalities seen in the newborn Ojong, et al (2019) & Fred, (1992). Thus, Ojong, et al (2019). and Fred, (1992) agreed that childbearing mothers that utilize the health care services are not likely to have early exceptional babies with intellectual disabilities, learning disabilities, autism, visual impairment, hearing impairment and other disabilities.

### Recommendations

1. Mothers with formal and informal levels of education should be encouraged to seek health care services during prenatal care, intrapartum care, postnatal care and abortion care.
2. The acquisition of levels of education should not be a yard stick or criteria for seeking safe motherhood initiative.
3. Government should empower women to seek healthcare services during pregnancy through subsidizing prices of services and drugs.

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