Promoting Birth Control Through Environmental/cultural Population Education among Women in Rivers State

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Abstract

The study examines methods of promoting birth control through environmental/ cultural population education among women in rivers state. To achieve the purpose of the study, research questions and hypothesis guided the study. The population of the study comprises of 25,115 women within reproductive age of 15-49 years visiting in all the 385 health facilities spread across Rivers State. A sample size of study 394 was determined by using Taro Yamenne's formula. The descriptive research design was adopted for the study. A self- structured instruments titled "promoting birth control through environmental/ cultural population education among women in Rivers State" (PBCTEPAWRS) was using for the study. The instrument was validated by the researcher's supervisor and two other experts in the Faculty of Education and Department of Measurement and Evaluation, Cronbach Alpha was used to achieve the reliability of the instrument. The data gathered were analyzed using mean and standard deviation while ANOVA was used to test the null hypotheses at 0.05 level of significant. The findings revealed that to a moderate extent, the roles of, environmental and cultural components of population education enhanced the achievement of birth control among women in Rivers State. Consequently, the researcher made the following recommendations that there should be a strong engagement of the citizens around discussion forums, town hall meetings and sensitization programs. This should be organized to make the populace understand the contents as well as familiar with the roles of environmental and cultural components of population education in the achievement of birth control among women in Rivers State.

Keywords: Roles, Environment, culture, Components, Population, Education & Achievement

1.1 Introduction

Recently, national population commotions carried out an enlighten and awareness programme on the importance of birth control in the society. United States of America also in their legislation propagated a law or degree that helped in the regulation of birth control, but these policies and laws are not effective in Nigeria because of the personal cultural economic, biological, political and legislative factors limiting the women from practicing birth control. Nevertheless, government has introduced population education to ensure effective orientation and awareness of birth control in the society. It is against these bed rocks or problems, that the study tends to examine the roles of population education in the achievement of birth control among women in Rivers State.

1.3 Purpose of the Study

- 1. Identify the roles of environmental components of population education in the achievement of birth control among women in Rivers South East, Rivers East and Rivers West Senatorial District in Rivers State.
- 2. Identify the roles of cultural components of population education in the achievement of birth control among women in Rivers Southeast, Rivers East and Rivers West Senatorial District in Rivers State.

1.4 Research Ouestions

- 1. To what extent do the roles of environmental components of population contribute to the achievement of birth control among women in Rivers Southeast, Rivers East and Rivers West Senatorial District in Rivers State?
- 2. To what extent do the roles of cultural components of population education contribute to the achievement of birth among women in Rivers Southeast, Rivers East and Rivers West Senatorial District in Rivers State?

1.5 Hypotheses

To guide this study, the following hypotheses was formulated and tested at 0.05 level of significance.

- 1. There is no significant difference in the mean responses of women from Rivers-South-East, Rivers-West and Rivers-East Senatorial District on the extent to which the roles environmental components of population education play a role in the achievement of birth control among women in Rivers State.
- 2. There is no significant difference in the mean responses of women from Rivers South-East, Rivers-West and Rivers-East Senatorial District on the extent to which the cultural components of population education play a role in the achievement of birth control among women in Rivers State.

2.0 Literature Review

2.1 Concept of Birth Control Through Environmental/ cultural Population Education

Several definitions have been given to environment in determination of the concepts involving environmental components. Meriam-Webster (2021) defined environment as the totaling of water,

air and land among themselves and the relationship between it and living organism and property which involves physical and biological surrounding of man. It implies that the demand and how it affects man including childbearing mothers positively or negatively. Oyewale, Ayo and Taiwo identified maternal under nutrition as factors that lead causes of unhealthful and morality which resulted from scarcity and imbalance feeding of childbearing mother. Oyewale, Ayo and Taiwo (2020) further captured other predictors of under nutrition in women of reproductive age in the society which include attained level of education, empowerment or working status, marital status and living in a shanty house also affects childbearing mothers if proper attention is not given. Wardlaw and Kessel (2002) as cited in Uche and Olubukola (2015) penned that pregnancy risk factor in an environment as aspect of pregnancy that may cause the life of the mother and baby to death if wrongly managed. These conditions may involve poor nutrition of the woman. Child spacing, maternal age (under 15 years and over 35 years), lifestyle attitudes (for example smoking, alcoholic intake rates, drug abuse and unsafe sex). Kazaura, Kidanto & Massawe (2006) as coined in Uche and Olubukola (2015) disclosed that many risk factors affects neonatal mortality and these factors include; family, race, age, smoking, marital status, gestation age, birth weight, antenatal complication, labour complication, antenatal care, previous unsafe outcome like stillbirth, neonatal death, poor socio-economic conditions, poor nutritional status during pregnancy has been linked with irreversible damage to the infant brain and central nervous development system causing poor brain development and intelligence.

Also, there is no single and accepted way of define cultural. Though, several scholars had made effort to define culture in their own perspectives. To Hofstede (1991), Trompenaars (1993) and Ron (1993) as cited in Antonia (2013) upheld culture to be anchored on languages, economy, policies, religion, class, social institutions, values, status, attitudes, manners, customs, material items that influence a group of people. It simply implies that the above-mentioned factor affects childbirth control positively or negative to an extent in a given society. Further findings from Barczak, McDonough and Athanassiou (2006) as stated in Antonia (2013) dissimilar languages, culture and different environment creates complexity to the already different challenges, planning, organizing, directing and controlling of people with diverse functional and backgrounds on birth control methods in different environment that may lead to either low or high birth control achievement.

2.3 Empirical Review of Literature

Sherbinin *et al.*, (2016), examined population and environment. The study investigates the interactions between human population dynamics and the environment which has often been viewed mechanistically. This review elucidates the complexities and contextual specificities of population-environment relationships in a few domains. It explores the ways in which demographers and other social scientists have sought to understand the relationships among a full range of population dynamics (e.g., population size, growth, density, age and sex composition, migration, urbanization, vital rates) and environmental changes. Reviews a number of theories for understanding population and the environment were done in the study. Also, a state-of-the-art review of studies that have examined population dynamics and their relationship in five environmental issue areas was made. The study concludes by relating population-environment research to emerging work on human-environment systems. Alex et al (2016) did not capture any

review of number of theories for understanding population and the environment in the study which is noted as error while the present researcher used the Malthusian theory, the theory of reasoned action of Ajzen and Fish Burin, and the integrated behavioral model (IBM) theories to addressed the work as to close the missing gap.

Falode and Akintaro (2014), examine the methods of family planning used over a period of one and a half years in Olorunda Local Government Area of Ogun State, Nigeria. The study was carried out in four international centers using descriptive survey technique. The population was considered based on 2006 population census record and figure about 126, 374. The male and female population was considered to be 49 .4 % and 50.6% respectively. The sample for the study was 494 Clients who attended the clinic between October 2005 and April 2007. However, simple random sampling technique was used in selecting samples for descriptive statistics of frequency counts and percentage distribution were used to analyze data obtained from the respondents. The result showed that the member of those who use modern technique were slightly more than the traditional method. Sequel to the above facts, recommendations were made that efforts aimed at educating the people be made to promote the benefits of new birth control technique. Falode and Akintaro (2014) had a population size of 126, 374 derived from 2006 census population and a sample of 494 clients through random sampling technique who attended their clinic between October 2005 and April 2007 in Olorunda local government area of Ogun State, Nigeria. However, the present study use 25, 115 as population and 394 as sample size of women that visited 385 health facilities. Though both studies discussed socio-cultural component of population education but differs in sample size, population, location and it is locally based.

Irala et al., (2011) investigated factors determining the choice of birth control methods among European women and the role of partners and providers. This study was carried out in five European countries (Germany, France, UK, Romania and Sweden). The population of the study was comprised of all female indigenes of these countries while sample size was about 1137 women randomly selected within the range of 18-49 years old. The study used cross-sectional survey and logistic regression statistics method to identify variables associated with partner's participation in choice of birth control measures. The results show that oral contraception were commonly used in Germany (54.5%), France(50.5%), Sweden (34.6%) while Romania had the lowest use of Birth control measures which were attributed to the influence of socio-cultural and personal factors. In conclusion, hormonal contraceptive and intrauterine devices were recommended by providers and partners preferences were taken into consideration in the use of needed method. Though, previous study investigated factors the choice of birth control method among European women and the role of partners and provider in five European countries (German, France, UK, Romania and Sweden). The population of the study consist of all female indigene of these countries aforementioned without population of the study consist of all female indigene of these countries aforementioned without disclosing the actual population rather discloses a sample size of 1137 women that questionable and a cross-sectional survey and logistic regression statistic was used to identified variable associated with partner's participation in choice of birth control measure. While the present study 25, 115 of women that visited 385 health facilities in Rivers State and a sample of 394 was gotten through Taro Yamen definite sample and a descriptive survey was applied.

Though, the previous study is foreign based while the present study is local and addressed missing gaps.

Cookey (2000) carried out an investigation on the attitude of literate and illiterate women towards birth control in Opobo Town. Five research questions were raised and two hypotheses were formulated. A sample of 120 women was randomly selected from Opobo town, Rivers State. Data analysis was carried out using t-test hypothesis and simple percentage for questions. The result showed that most illiterate women graduates in Rivers South East, Rivers East and Rivers West Senatorial in Rivers State University responded that births should be spaced for 2 years interval 65% responded of illiterates were willing to undergo births control measures in the same vein 88% of literate women graduates' respondent positively towards birth control to have specific number of children. Twenty-three (23) persons out of the forty-nine respondents among the illiterate do not know about contraceptive and six (6) persons among the literate women graduates could not mention any type of contraceptive and this could be concluded as an obstacle to the proper practice of birth control by a large group of women. The previous work captured Opobo Town, five research questions and two hypotheses which result showed that most illiterate women graduates in Rivers State University responded that birth should be spaced for 2 years interval responded if illiterate were willing to undergo birth control were used for generalization is termed to be a flaw due to the usage of a town and a local government in Rivers State. While the present research work capture entire Rivers State, 7 research questions and 7 hypotheses that covers more variable and bridge the missing gap.

Also, Olujide, Oluremi, Adeusi, and Adenike. (2013), examined proximate determinants of women's use of birth control method in Ola, Ogun State. The population of the study comprises of women from Ola, Ogun Stat, while sample for study was made up of a total of 143 respondents. The sampling technique was stratified and simple random sampling. The research design was descriptive survey using an instrument consisting of sixteen (items). In the analysis, the study used frequency counts, percentage, t-test and regression analysis while this was done with the aid of SPSS software for data analysis. Results indicate a good knowledge of types of birth control measures with more than a third (83%) awareness on the use of condom as a method of birth control measures however very few women were aware of modern control measures such as implants (9%) and spermicidal (5%). The study revealed that employment status $\beta = 1.955$, t =2.257, p < 0.05 and age β = 1.955, t = 2.257, p < 0.05 were determining factors that influence women's choice of birth control measures based on contraceptive self-efficacy t = 3.387, p<0.05. Sequel to these findings, recommendations were made for strong advocacy, enlightenment, and community mobilization for improvement awareness. Olujide, Oluremi, Adeusi and Adenike (2013) study did not disclose population but captured 143 respondents and a sample size with findings, recommendations were made for strong advocacy, enlightenment and community mobilization for improvement awareness was used for generalization, while the present unravels 25,115 population and a sample of 394 was derived through Taro Yamane and the present study addresses missing gaps.

METHODOLOGY

This section focuses the research design and method used in the study. It includes the following: Research design, Population of the study, Sample and Sampling Technique, Research Instrument and Instrumentation, Validity of Instrument, Reliability of instrument, Administration of instrument and Method of data analysis. Descriptive design was adopted for the study. According to Ezeji, 2004 survey research design is considered most appropriate because, information was gathered by means of self-report, which could be designed as the subject's response to questions asked by the researcher. This research design was considered appropriate for the study. Because it help the researcher to be able to collect data generated from sample drawn from a target population which describes certain features of the sample as they are at the time of the study without manipulating the variables. The population for this study comprises of 25.115 women within reproductive age of 15-19 years in all the 385 health facilities spread across Rivers State (Rivers State, Primary Healthcare Management Board Records, 2021). The population table below was applied to illustrate this formula.

Results

Research Question 1: To what extent do the environmental components of population education play a role in the achievement of birth control among women in Rivers State?

Table 4.1: Mean and Standard Deviation Responses of Rivers South East, Rivers West and Rivers East Women on the roles of Environmental Components of Population Education in the Achievement of Birth Control among Women in Rivers State

S/N	Item Instrument	River East (n=1)		outh-	River (n=13	rs Wes 31)	t	River (n=13	s East 81)	
		\overline{X}_1	SD_1	R K	\overline{X}_2	SD ₂	RK	\overline{X}_3	SD 3	RK
47	Awareness and sensitivity to the people within a particular environment help in determining the achievement of birth control among women	3.3	0.59	M E	3.54	0.6	VH E	3.60	0.6 9	VHE
48	Awareness about the danger of generatings unsustainable household waste help in determining the rate of birth control among women	3.1	1.14	M E	2.95	1.2 7	ME	3.16	1.1 2	ME
49	Awareness about the danger of Overcrowding	3.1 8	0.78	M E	3.32	0.6 8	ME	3.39	0.7 9	ME

50	in an environment determine the rate of urge among women in a particular place Natural Resource	3.3	0.48	M	3.61	0.4	ME	3.67	0.4	VHE
30	Depletion play	7.5	0.40	E	3.01	9	IVIL	3.07	8	VIIL
	significant role in	,		L					O	
	determining the									
	achievement of birth									
	control among women									
51	Global warming play		1.14	M	2.99	1.2	ME	3.18	1.1	ME
	significant role in	8		E		7			4	
	determining the achievement of birth									
	control among women									
52	Loss of biodiversity	3.1	0.76	M	3.31	0.6	ME	3.18	0.7	ME
	reduces the number of	8		E		7			6	
	genes which control the									
	risks of unwanted									
5 0	pregnancy	2.1	1 11	3.6	2.07	1.0) (E	2.10	1 1) (F
53	Ozone layer depletion reduces the number of	3.1	1.11	M E	2.97	1.2 6	ME	3.10	1.1 1	ME
	genes which control the	U		E		O			1	
	risks of unwanted									
	pregnancy									
	Grand	2.8		\mathbf{M}		0.7			0.7	
	Mean \overline{X} /SD	1	0.75	E	2.84	8	ME	2.91	6	ME

Table 4.1 shows mean and standard deviation responses of Rivers South East, Rivers West and Rivers East women on the roles of environmental components of population education in the achievement of birth control among women in Rivers State. The result shows that the grand means for these women are higher than the decision mean of 2.5 (that is 2.81,2.84, and 2.91>2.50), an indication that all the women groups share similar opinion that to a moderate extent environmental components of population education play major roles in the achievement of birth control among women in Rivers State. Following the item by item analysis of respondent's perception and feelings about environmental components of population education and some of the roles environmental components of population education play include creating awareness about; the sensitivity of the people within a particular environment sex.; the danger of generating unsustainable household waste; the danger of overcrowding in an environment, natural resource depletion, the significant role global warming play in determining the achievement of birth control among women, how loss of biodiversity reduces the number of genes which control the risks of

unwanted pregnancy and ozone layer depletion reduces the number of genes which control the risks of unwanted pregnancy. This is further confirmed by the items by item analyses which mean ratings for these groups are higher than the bench mark of 2.5 with low standard deviations showing the homogeneity in their responses.

Research Question 2: To what extent do the cultural components of population education play a role in the achievement of birth control among women in Rivers State?

Table 4.2: Mean and Standard Deviation Responses of Rivers South East, Rivers West and Rivers East Women on the roles of Cultural Components of population Education in the Achievement of Birth Control among Women in Rivers State

		River	îs.	South-		rs West			rs East	
S/ N	Item Instrument	East (n=13	32)		(n=131)			(n=13		
11		\overline{X}_1	SD_1	RK	\overline{X}_2	SD_2	RK	\overline{X}_3	SD_3	RK
54	Cultural believe of female genital mutilation help in the achievement of birth control among women	3.42	0.49	ME	3.61	0.49	ME	3.42	0.49	ME
55	Female circumcision regulate women urge for sex which could help in birth control	3.17	1.14	ME	2.98	1.27	ME	3.17	1.14	ME
56	strong family belief system can enhanced the achievement of birth control among women	3.24	0.77	ME	3.34	0.67	ME	3.24	0.77	ME
57	Supportive community- based programs can regulate the rate of early childbearing	3.42	0.50	ME	3.61	0.49	ME	3.42	0.50	ME
58	Television and other media education of sexual issues can regulate the rate of early childbearing	3.12	1.15	ME	2.99	1.27	ME	3.12	1.15	ME
59	Values and beliefs that can even affect women's urge for sex that could affect birth control	3.23	0.77	ME	3.34	0.67	ME	3.23	0.77	ME

r i t	towards sexual relationships is helpful in the achievement of birth control among women		0.48	ME	3.59	0.49	ME	3.88	0.48	VHE
61 2 8 t		3.13 2.90	0.71 3	ME ME	2.99 2.94	1.27 0.74	ME ME	3.53 3.01	1.12 0.65	VHE ME

Table 4.2 contains mean and standard deviation responses of Rivers South East, Rivers West and Rivers East women on the roles of cultural components of population education in the achievement of birth control among women in Rivers State. The result shows that the grand means for these women are higher than the decision mean of 2.5 (that is 2.81,2.84, and 2.91> 2.50), an indication that all the women groups share similar opinion that to a moderate extent cultural components of population education play major roles in the achievement of birth control among women in Rivers State. Following the item by item analysis of respondent's perception and feelings about cultural components of population education and some of the roles cultural components of population education play include creating awareness about the female genital mutilation, female circumcision, strong family belief system, enhancing strong family belief system, through television and other media education, values and beliefs and less faire attitudes towards sexual relationship. This is further confirmed by the items by item analyses which mean ratings for these groups are higher than the bench mark of 2.5 with low standard deviations showing the homogeneity in their responses.

Hypothesis 1: There is no significant difference in the mean responses of Rivers South East, Rivers West and Rivers East women on the roles of environmental components of population education in the achievement of birth control among women in Rivers State.

Table 4.3: Summary of Analysis of Variance (ANOVA) on the Mean ratings of Rivers South East, Rivers West and Rivers East Women on the roles of Environmental Components of Population Education in the Achievement of Birth Control among Women in Rivers State

Source of Variation	SS	Df	MS	Means Rivers S/East	Rivers West	Rivers East	F-cal	F-crit	Decision
Between	0.024	2	0.012	2.81	2.84	2.91	0.857	0.746	
Groups									Reject
Within	5.282	391	0.014						-
Groups									
Total	5.307	393							

Table 4.3 shows ANOVA of the difference between the mean ratings of Rivers South East, Rivers West and Rivers East women on the roles of environmental components of population education in the achievement of birth control among women in Rivers State. The results show the degree of freedom (df)(2,391), 0.05 level of significance ,F-critical (Fcrit=0.746) and F-calculated(F-cal=0.857). Since F-crit=0.746< F-cal=0.857, we reject the hypothesis which says "there is no significant difference in the mean responses of Rivers South East, Rivers West and Rivers East women on the roles of environmental components of population education in the achievement of birth control among women in Rivers State". Therefore, we accept the alternative hypothesis which says that" there is significant difference in the mean responses of Rivers South East, Rivers West and Rivers East women on the roles of environmental components of population education in the achievement of birth control among women in Rivers State". This simply means that there is variation in the roles of environmental components of population education in the achievement of birth control among women across the three senatorial districts in Rivers State.

Hypothesis 2: There is no significant difference in the mean responses of Rivers South East, Rivers West and Rivers East women on the roles of cultural components of population education in the achievement of birth control among women in Rivers State.

Table 4.4: Summary of Analysis of Variance (ANOVA) on the Mean ratings of Rivers South East, Rivers West and Rivers East Women on the roles of Cultural Components of Population Education in the Achievement of Birth Control among Women in Rivers State

				Means						
Source of Variation	66	Df	MS	Rivers	Rivers	Rivers	E sol	E owit	Decision	
Variation	33	Ы	MIS	S/East	West	East	r-cai	r-crit	Decision	

Between	0.035	2	0.018	2.94	2.94	3.01	1.636	0.600	
Groups									Reject
Within	4.287	391	0.011						· ·
Groups									
Total	4.321	393							

Table 4.4 contains ANOVA of the difference between the mean ratings of Rivers South East, Rivers West and Rivers East women on the roles of cultural components of population education in the achievement of birth control among women in Rivers State. The results show the degree of freedom(df)(2,391), 0.05 level of significance, F-critical (Fcrit=0.746) and F-calculated(F-cal=1.636). Since F-crit=0.600< F-cal=1.636; we reject the hypothesis which says "there is no significant difference in the mean responses of Rivers South East, Rivers West and Rivers East women on the roles of cultural components of population education in the achievement of birth control among women in Rivers State". Therefore, we accept the alternative hypothesis which says that" there is significant difference in the mean responses of Rivers South East, Rivers West and Rivers East—women on the roles of cultural components of population education in the achievement of birth control among women in Rivers State". This simply means that there is variation in the roles of cultural components of population education in the achievement of birth control among women across the three senatorial districts in Rivers State.

Environmental component of population education influenced roles of population education in the achievement of birth control among women in Rivers State to a moderate extent as unraveled in the data collated from research question six. There was no significant difference in the mean responses of women from Rivers South East, Rivers West and Rivers East senatorial districts on the extent to which the roles of population achievement of birth control among women in Rivers State.

Cultural components of population education influenced roles of population education in the achievement of birth control among women in Rivers Southeast, Rivers West and Rivers East to a moderate extent as revealed in the data collated from research question seven. There was no significant difference in the mean responses of women from Rivers Southeast, Rivers West and Rivers East senatorial districts on the extent to which the roles of population in the achievement of birth control among women in Rivers State.

4.3 Discussion of Findings

The Roles of Environmental Components of Population Education enhanced the Achievement of Birth Control among Women in Rivers State

The result of research question 1 indicates the mean and standard deviation responses of Rivers south-east, Rivers west and Rivers east senatorial districts women on the roles of environment components of education in the achievement of birth control among women in Rivers State to a high extent. This disagree with the study of Wardlaw and Kessel (2002) as coined in Uche and

Olubokola (2015) assertion that pregnancy risks factors in an environment as aspect of pregnancy that may cause the life of the mother and the baby to death if wrongly managed. The findings of this study are also contradicted by Kazaula, Kidnanto and Massawe (2006) as cited in Uche *et al* (2015) who noted that many risk factors affect neonatal mortality and these factors, family, race, age, smoking, marital status, gestation age, birth weight, antenatal complication, labour complication, antennal care, previous unsafe outcome like stillbirth, neonatal death, poor socioeconomic condition, poor nutritional status during pregnancy that has been linked with irreversible damage to the infant brain and central nervous development system causing poor brain development and intelligence. The test of hypothesis on table 4.3 uphold that there is no significance difference in the mean ratings of Rivers south-east, Rivers west and Rivers East senatorial districts women on the roles of environmental component of population education in the achievement of birth control among women in Rivers State.

The Roles of Cultural Components of Population Education Enhanced the Achievement of Birth Control among Women in Rivers State

The result of research question 2 unfolds the mean and standard deviation responses of Rivers south-east, Rivers west and Rivers East senatorial districts women on the roles of cultural component of population education in the achievement of birth control among women in Rivers State to a high extent responses. The findings of this study is at variance with Barczak, McDonough and Athanassio (2006) as penned in Anthonia *et al* (2015) who reported that dissimilar languages, culture and different environments creates complexity to the already different challenges, planning, organizing, directing and controlling of people with diverse functionality and background on birth control methods in different environment that may lead to either low or high birth control achievement. The test of hypothesis on table 4.4 revealed that there is no significance difference in the mean ratings of Rivers south-east, River's west and Rivers east women in the roles of cultural component of population education in the achievement of birth control among women in Rivers State.

5.2 Conclusion

Based on the responses of respondents, it is obvious that the roles of environmental components of population education and cultural components of population education enhanced the achievement of birth control among women in Rivers State.

5.3 Recommendations

The main recommendation from this study centers on the fact that the government should incorporate the civil society and the public at large in creating awareness about the roles and implementation of population education. There should be a strong engagement of the citizens in discussion forums, town hall meetings and sensitization programs. This should be organized to make the populace understand the contents as well as familiar with the roles of:

1. Environmental components of population education in the achievement of birth control among women in Rivers State.

2. Cultural components of population education in the achievement of birth control among women in Rivers State.

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