

Determinants of Contraceptive Usage: Lessons from Women in Osun State, Nigeria.

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Abstract

This paper analyses the awareness and utilisation of modern contraceptive methods among 408 women of reproductive age 15-49 years in a Local Government area of Osun State, Nigeria. Results showed that although knowledge of contraceptive methods was high among these women, only 30.1% ever used any of the known methods and less than a tenth were currently using any modern method at the time of the survey. Logistic regression result did not significantly support the hypotheses that knowledge of a method and number of children ever born will likely impact the use of modern contraceptive methods in the study area.

Introduction

The relatively high birth rate in Nigeria which has been accompanied by steady declines in death rates has resulted in high rates of population growth (Ebigbola and Ogunjuyigbe 1998). Nigeria's annual rate of population growth of about 2.87 percent has been a major cause of concern for population experts and policy makers for some time. With an estimated doubling period of less than 25 years at the current rate of population growth, the current level of consumption can only be maintained if production of goods and services will also double in less than 25 years. Unfortunately, this is almost impossible to achieve as all available evidence indicates that the rate of growth of the economy has been lower than the rate of growth of the population. Standards of living tend to worsen when the rate of population growth exceeds the rate of economic growth (Feyisetan and Bamiwuye 1998). Within the last four decades, there have been increased pressures towards family limitations in Nigeria. These are the results of the rapid growth of the large towns, the very great extension of educational facilities, and among the elite, the far greater difficulty of securing top jobs that have come with independence (Ebigbola and Ogunjuyigbe 1998). In response to the situation highlighted above, national policy on population for development, unity, progress and self-reliance was formulated in 1988 and revised in 2004. A major goal of the policy is a reduction in fertility through increased adoption of contraception (Federal Government of Nigeria 2004).

Understanding the factors that influence contraceptive use is critical to the efforts of programmes to increase prevalence. Much unmet need for family planning persists, even in settings where knowledge of contraceptive methods is high. Studies suggest that many potential users choose not to use more reliable methods due to misperceptions and concern about health-related risks. For example, a study in Maldives found that knowledge of family planning was universal, but only 30% of couples were using a contraceptive method. Several studies, including one from Malaysia, found that non-use of contraceptives was linked to fears about side effects (Population Reports 1999; Oyedokun 2004).

Female education has been seen as a key determinant of contraceptive use (NPC and ORC Macro 2004). Better-educated women are argued to be more willing to engage in innovative behavior than are less educated women, and in many Third World contexts, the use of contraception remains innovative (Caldwell 1979; Dyson and Moore 1983). Better educated women are also argued to have more knowledge of contraceptive methods or of how to acquire them than are less educated women because of their literacy, greater familiarity with modern institutions, and greater likelihood of rejecting a fatalistic attitude towards life. There is good evidence that for whatever reason, women's education does indeed promote the use of contraception in most developing countries outside of tropical Africa (Cochrane 1979). Koc (2000) finds a positive association between the educational level of both spouses and the use

of contraceptive methods in Turkey. After all individual, cultural, fertility and contextual variables were controlled, a woman's education was found to be a stronger predictor of method use and method choice than that of her husband. The study also shows that, to a great extent, contraceptive use and choice of modern method depend on the sex of a couple's living children, implying some preference for sons, although generally women prefer to have children of both sexes.

Furthermore, female autonomy and seclusion, equality between spouses linked with spousal communication, have been argued to influence contraceptive use (Dyson and Moore 1983; Beckman 1983; Hollerbach 1983; Narzary 2001). Shrestha (2000) found in a study in Nepal that spousal communication on family planning, spousal communication on family size preference, child loss, place of residence and women's involvement in income-earning activities are the significant predictors of contraceptives use in the study area. In another study by Chacko in 2001, among married women, in four villages in rural West Bengal, India, it was found that factors that most influence a woman's use of contraception include her age, the number of living sons she has, and her religious affiliation. The study also shows that the availability and quality of permanent village-based government health care affects the use of modern contraception. In a study in Guatemala, it was reported that after controlling for socio-demographic factors, access to services emerged as a significant correlate of contraceptive use among Mayans (Bertrand et al. 2000).

Data from Nigeria Demographic Health Survey 1999 reveals that on overall use of family planning methods, among all women, about a quarter (27%) have ever used a method and less than a fifth (17%) have used a modern method. The percentage of married women who ever used a contraceptive method is highest among the 30-34 age group (36%) and expectedly lowest among the 15-19 age group (7%). This finding is expected since younger women are more likely than older women to want another child soon (NPC 2000).

In most developing countries surveyed by the Demographic Health Survey (DHS) in 1988, more than three-quarters of women can name at least one modern method of contraception spontaneously—that is, without prompting. In several Sub-Saharan countries, many married women are not able to name any modern family planning method after prompting. In Nigeria, for example, the 1990 NDHS reported that only 44% of married women recognized any family planning method, modern or traditional, even after being prompted while in 1999, the proportion had grown to 64%. One of the hypotheses to be put to test in this paper is the assumption “that women who know of at least one method are more likely to use modern contraceptives than their counterparts who know no method”. Contraceptive prevalence is lowest in Sub-Saharan Africa, where prevalence exceeds the average for the developing world only in Zimbabwe, at 45%. In only two other countries does prevalence exceed 25%— Botswana, at 35%, and Kenya, at 27%. Prevalence is below 10% in Burundi, Liberia, Mali, Niger, Nigeria, Sudan, and Uganda. In Nigeria, the level of ever use has increased significantly since 1990. In 1990, only 14% of married women reported having ever used a contraceptive method; by 1999, this proportion had doubled to 29% (FOS 1990). Current use of family planning methods refers to the use of contraceptive methods at the time of the survey. Analysis of current use of family planning methods was conventionally based on women who were currently married since they were the most likely to be regularly exposed to the risk of pregnancy. Only 15% of married women were currently using any method, while 9% were using a modern method (NPC and ORC Macro 2004).

The data from a study covering three States of South-Western Nigeria reveal about 63% of men compared to just 35% of women would approve of the use of family planning. About 36% of the respondents gave an indication that their spouses would not stop them from using family planning methods (37.3% males versus 35.5% females). Education, attitude and children ever born were also found to be significant socio-economic and demographic factors that influence husband's knowledge and use of contraceptive. It is hypothesised therefore, “that women with more children ever born are more likely to use modern contraceptive methods than their counterparts with fewer children ever born”.

Lastly, access to source of information has been found to be positively related to contraceptive use and women who have adequate knowledge of family planning source are substantially more likely to be using family planning than women who do not know a source (Ebigbola and Ogunjuyigbe 1998).

Promoting family planning on radio or television can be an important means of raising awareness, improving knowledge and stimulating use of modern contraceptive methods (Feyisetan and Ainsworth 1984; Olaleye and Bankole 1994; Parr 2002). Current contraceptive prevalence rate in Nigeria stands at 8%, while results from the Integrated Baseline Health Survey (IBHS) indicate that contraceptive prevalence rate is still low in Nigeria and it varies by demographic and socio-economic characteristics (NPC and ORC Macro 2004). Although there have been so many family planning programmes (disseminated through the media and through some other sources) in Nigeria, the level of use, especially of modern contraceptive methods is still very low. This low level of use in spite of various programmes points to the need for more research in that arena and understanding the determinants of contraceptive use in Nigeria is still very crucial to the achievement of population and development goals. Hence, this paper aims at examining the determinants of contraceptive use by identifying the factors influencing the use of modern contraceptives, and by investigating specifically whether knowledge of the respondents and the number of children ever born (CEB) has any impact on modern contraceptive use in Ife-North local government area of Osun State, Nigeria.

Theoretical Background

The theoretical background which guides the hypotheses tested in this paper rest on the arguments of the socio-economic development school and that of the socio-psychological school. Socio-economic development school argued that there has been no socio-economically developed nation whose fertility is not low and in most cases, the initial cause of birth control is more of the achievement in modernisation method of contraception as advocated by the supporters of the socio-psychological school. That is to say, the currently developed nations began to adopt small family norm only after reaching a stage in socio-economic progress in which there has been a breakdown in traditional or prenewtonian mentality as it bears on procreation. In place of tradition emerged a high degree of individuality in which individuals rather than the extended family or kinship system control more and more of their own lifestyle. It is argued that socio-psychological approach tends to take culture as given in a form of ideal laboratory experiment in which individuals in the society can be manipulated in a way that they will respond in a given direction as may be dictated by the researcher. The socio-economic development school further contends that the approach of the socio-psychological school is clinic-oriented, medically directed and is aimed at the woman (Adewuyi 1979).

The proponents of the socio-psychological school contended that the arguments of the proponents of the socio-economic development school are dated. For instance, by the time the currently developed nations began to experience rapid rate of socio-economic progress, their rate of population growth though high, was less than half the rate of the currently developing nations (Caldwell 1969 cited in Adewuyi 1979); besides there were vast empty spaces of land yet unoccupied and into which millions of Europeans migrated in the seventeenth, eighteenth and nineteenth centuries; and that such lands are no longer available today. The alternative will be to initiate family planning programme early in the course of socio-economic progress of the developing nations.

The belief is that if the attitudes of the people from the less developed areas can be changed in favour of contraception and they have necessary knowledge of the contraceptive methods and the contraceptives are available and can easily be obtained, it would not be difficult to reduce the high birth rate characteristic of less developed areas. It therefore follows from the arguments above, all other things being equal that "women with knowledge of modern contraceptive methods will be more likely to use them when compared to their counterparts without such knowledge" and that given the level of socio-economic development in Nigeria, there is currently a reversal of wealth flow from children to parent. That is, it is now costly and burdensome to have many children. Therefore, it is reasonable to investigate whether women with more children ever born (CEB) will be more likely to use modern contraceptive methods in the study area.

Methodology

The Study Area

The study was carried out in Ife–North Local Government Area of Osun State, Nigeria. Two communities were randomly selected, namely: Ipetumodu representing the semi-urban area and Asipa, representing the rural area. Ipetumodu is the Local Government headquarters with moderate social amenities like school, electricity, pipe-borne water, supermarket, post-office, police-barracks, dispensaries, clinics, hospitals, and bank (e.t.c.) Asipa is a typical rural area with few social amenities and it is situated very close to Ipetumodu. In these two survey areas, the major ethnic group is the Yorubas and it is a typical patriarchal community where men are the major decision-makers regarding fertility and fertility control.

Data Sources and Methods

The data used in this paper is from a sample survey of Ife-North Local Government Area of Osun State, Nigeria. It is a primary data collected purposely for a study titled “Domestic Violence and Contraceptive Use in Ife-North Local Government Area of Osun State, Nigeria”. This was a study conducted in partial fulfillment of the requirements for award of Master of Science degree in the department of Demography and Social Statistics, Obafemi Awolowo University, Ile-Ife, Nigeria. Ife-North according to the 1991 census, has the total population of 133,258 (NPC 1992) but when projected to 2004 using the exponential growth formula ($P_t = P_0 e^{rt}$) with the growth rate of 2.83% and time interval of 13 years, the projected total population was put at approximately 192,518. The data needed for this study were collected at the individual level. On the whole 408 women respondents were interviewed.

The sampling design used in this study was multistage random sampling technique to ensure that the sample is representative of the entire population of the study area. In the semi-urban area selected, that is, Ipetumodu, two hundred and fifty-five eligible respondents were selected because of its size and the heterogeneous nature of its population. Five streets were randomly selected out of eighteen (18) major streets namely: Ajebamidele–Okooko road otherwise known as Ipetumodu–Asipa road, Sooko Street, Isale-Ola Street, Baakun Street and Ayetoro Street. The listing of all the households in the randomly selected streets was done and a total of fifty-one (51) households were selected from each street using systematic random sampling technique. Hence, a total of fifty–one (51) households were systematically selected from each street. From the randomly selected households, a listing of all the members of the households was done and one eligible female respondent was randomly selected for the interview. Eligibility was based on age and marital status. In a situation where there was more than one eligible female respondent in the selected household, lottery method was used to select the respondent that was interviewed. However, if there was no eligible respondent in the selected household, the next household was selected from the same street.

Asipa, being the rural area selected was divided based on the compounds and eligible female respondents interviewed due to its smallness and homogeneity. All the nine compounds were covered, namely Balogun’s, Animun’s, Asipa’s, Akinfambi’s, Oosa’s, Eesarun’s and areas like Oke-Ola, Obada and Oke-odo. Within each compound however, a listing of all the households were done and a total of 17 households were selected from each compound using systematic random sampling technique. A listing of all the members within the selected households was done and one eligible female respondent was randomly selected for the interview based on age and marital status criteria. In a situation where there was more than one eligible female respondent in the selected household, the lottery method was used to select the respondent that was interviewed. However, if there was no eligible respondent in the selected household, the next household was selected from the same compound. In all, one hundred and fifty-three respondents were selected in Asipa.

The questionnaire for the study was specially designed and prepared to compile information relating to the objectives of the study. In this regard, the questionnaire was constructed using simple questions to elicit information on the background characteristics of the respondents, their husbands’

socio-economic characteristics, husband-wife relationship, knowledge, attitude and practice of contraception (e.t.c.). Generally, the data collected were analysed at three levels. The first level analysis involved an examination of the distribution of the respondents according to each of the selected background characteristics. Therefore, to know the structure of the population, data summarising procedures such as frequency distributions and associated statistics were adopted. The second level analysis involved the examination of the patterns of association between the dependent and independent variables. Level three of the analysis involved the use of logistic regression model to examine the patterns of association between the dependent and independent variables. The extract of the Focus Group Discussions (FGDs) is not presented in this paper. Data management was done using EPI INFO Version 6 and actual analysis was done using SPSS PC+ version 11.

The general model of the logistic regression equation used in the analysis is of the form:

$$\text{Log} [P / 1-P] = b_0 + b_1X_1 + b_2X_2 + \dots + b_kX_k$$

where X_1, X_2, \dots, X_k are set of independent variables, b_0 is a constant while b 's are regression coefficients. P is the probability of using modern contraceptives without husband's permission. Binary logistic regression is particularly relevant here because of the dichotomous nature of the response to the dependent variable which is modern contraceptive use.

The procedures followed for the data collection were approved by the Obafemi Awolowo University's Human Ethics Committee otherwise known as the University Postgraduate Committee and they were in accordance with the World Medical Association Declaration of Helsinki (Ethical Principles for Medical Research Involving Human Subjects) (originally adopted in 1964, and amended in 1975, 1983, 1989, 1996, 2000, 2002 and 2004). The purpose of the study was explained to the respondents by the trained interviewers and the fact that their participation was voluntary. Informed consent sheets were read and signed by the respondents before the commencement of the interviews and the FGDs. To ensure confidentiality of information supplied, the questionnaires were made anonymous and the tape-recorded discussions were destroyed after the analysis. Also, some of the respondents benefited directly from the refreshments served during the FGDs, and others indirectly through the opening up of the entire community to the services of some civil society organizations (CSOs) currently working in the area. To the best of my knowledge, no risk whatsoever was reported as a result of this study.

The limitations of the study reported in this paper are as follows: First, the sampling frame was limited to a small area of the whole country. It is a small-scale research that is not representative of the whole of Osun State. Second, the sample size is only limited to women of childbearing age (15-49 years). It does not tell us anything about women outside the specified age groups (especially very young sexually-active female adolescents). Third, responses to the question on use of contraceptives are self-reported and the validity of the respondents' claims was never ascertained.

The Results of the Study

Profile of Respondents

Table 1: Background Characteristics of Respondents

Variable	Frequency	Percent
Age		
15-19	5	1.2
20-24	34	8.3
25-29	81	19.9
30-34	66	16.2
35-39	74	18.1
40-44	72	17.6
45-49	76	18.6
Total	408	100.0
Mean age	34.76 years	
Educational Level		
No formal education	64	15.7
Primary	97	23.8
Secondary	150	36.8
Tertiary	97	23.8
Total	408	100.0
Children Ever Born (CEB)		
0	11	2.7
1-4	287	70.3
5 and above	110	27.0
Total	408	100.0
Mean CEB	3.49 Children	
Marital Status		
Married	368	90.2
Widowed	28	6.9
Divorced	4	1.0
Separated	8	2.0
Total	408	100.0
Ethnicity		
Yoruba	400	98.0
Ibo	5	1.2
Hausa	3	0.7
Total	408	100.0
Type of marriage		
Monogamous	283	69.7
Polygynous	123	30.3
Total	406	100.0
Income (\$U.S per annum)		
Less than \$U.S 833.33	229	76.3
\$U.S 833.33 and above	71	23.7
Total	300	100.0
Mean annual income	\$U.S 570.89	
Religious Affiliation		
Christianity	337	82.6
Moslem	70	17.2
Others (Jehovah's Witness)	1	0.2

Total	408	100.0
Currently working?		
Yes	388	95.1
No	20	4.9
Total	408	100.0
Type of Occupation		
Farming	6	1.5
Artisan	50	12.7
Petty trading	191	48.5
House wife	10	2.5
Business	47	11.9
Civil Service	69	17.5
Professional	15	3.8
Others	6	1.5
Total	394	100.0
Husband's Educational Level		
No formal education	51	12.8
Primary	38	9.5
Secondary	143	35.8
Tertiary	167	41.9
Total	399	100.0
Husband's Occupation		
Farming	103	25.6
Artisan	60	14.9
Petty trading	19	4.7
Business	52	12.9
Civil Service	112	27.8
Professional	38	9.4
Others	19	4.7
Total	403	100.0

Note: Some of the frequency figures do not add up to 408 because of missing values (non-response category)

Table 1 above reveals that about a fifth of the women are in age group 25-29, with only 1.2% in age group 15-19. More than half of the women attained secondary school education and above with only 15.7% having no formal education. A larger proportion of the women had between one and four children (70.3%), with only 2.7% having no children at the time of the survey. Also, majorities of the women are married (90.2%) and Yoruba-speaking (98.0%). More than two third of the women are in monogamous union, and majority of them reported annual earning of less than \$U.S 833.33 (76.3%). Moreover, majorities of the women are Christians (82.6%), and are currently working (95.1%). Data on type of occupation reveals that about half of the respondents are petty traders (48.5%), with only 21.3% in formal employment. Result on respondent's husbands' educational level shows that 77.7% attained secondary school level and above, with only about 13.0% having no formal education. On husbands' occupational type, quarters of the men are into farming and 37.2% are in formal employment.

From table 2, 82.4% have heard about contraceptive methods in the survey area. Condom topped the list of methods known (64.2%), and Norplant the least known method (5.9%). The reported

highest source of information about contraception is the Hospital/Clinic (51.2%), followed by Radio (45.6%). Less than half of the women reported discussing the issue about use of contraceptives with their husbands (44.8%). Only 56.2% of the women approved of a contraceptive method, while 30.1% had ever used a method in the study area. More than a quarter reported that condom is their main method ever used, while the least reported method is female sterilization (0.8%). On current use, only 7.8% were currently using a method at the time of the survey and the methods mostly in use were Pill, IUD/Coil, Condom and Norplant (18.8%) respectively.

Table 2: Respondent's Knowledge, Attitude and Practice of Contraception

Variable	Frequency	Percent
Ever heard about contraceptive methods		
Yes	336	82.4
No	72	17.6
Total	408	100.0
Methods heard about		
Pill	222	54.4
Coil	167	40.9
Injections	221	54.2
Jelly/Spermicides	50	12.3
Condom	262	64.2
Female Sterilisation	59	14.5
Male Sterilisation	38	9.3
Norplant	24	5.9
Source/Medium of information		
Television	107	26.2
Radio	186	45.6
Hospital or Clinic	209	51.2
Printed Materials	35	8.6
Husband	25	6.1
Others	19	4.7
Spousal communication about contraceptive methods		
Yes	154	44.8
No	190	55.2
Total	344	100.0
Approve of any contraceptive method		
Yes	182	56.2
No	142	43.8
Total	324	100.0
Ever used any of the methods		
Yes	123	30.1
No	285	69.9
Total	408	100.0
Modern method ever used		
Pill	26	21.1
IUD/Coil	19	15.5
Injectables	17	13.8
Condom/Durex	35	28.5

Female Sterilization	1	0.8
Norplant	9	7.3
Others	16	13.0
Total	123	100.0
Currently using any of the methods		
Yes	32	7.8
No	376	92.2
Total	408	100.0
Modern method currently using		
Pill	6	18.8
IUD/Coil	6	18.8
Injectables	5	15.6
Condom/Durex	6	18.8
Female Sterilization	2	6.3
Norplant	6	18.8
Others	1	3.1
Total	32	100.0

Note: Questions relating to methods heard about and source of contraceptive information allows for multiple responses. Only those who indicated “yes” to the options provided were reported in this table.

Bivariate Analysis

Table 3: Chi-square test results showing association between some selected variables and Use of modern contraceptives in Ife-North Local Government Area of Osun State, Nigeria.

Variable	Ever Use			Current Use		
	Pearson Square value	Chi-	P-value	Pearson Square value	Chi-	P-value
Age	25.570**		0.000	4.341		0.631
Educational Level	36.161**		0.000	16.148**		0.001
Marital Status	1.979		0.577	3.135		0.371
Type of marriage	2.688		0.101	2.193		0.139
Religion	1.248		0.536	0.146		0.930
Ethnicity	0.261		0.878	0.694		0.707
Children Ever Born (CEB)	3.244		0.198	2.670		0.263
Currently working	1.028		0.311	0.135		0.713
Income	1.203		0.273	4.027*		0.045
Husband's educational level	24.846**		0.000	8.890*		0.031
Husband's occupation	38.856**		0.000	15.271*		0.018
Decision-maker on contraceptive use	10.172*		0.038	16.340**		0.003
Decision-maker on time to have sexual intercourse	0.122		0.941	2.003		0.367
Decision-maker on number of children to have	3.364		0.339	5.411		0.144
Knowledge about						

contraceptive methods	20.565**	0.000	2.302	0.129
Spousal communication about contraceptives	108.302**	0.000	13.042**	0.000
Approve of any contraceptive method	115.317**	0.000	14.504**	0.000
Partner ever objected using contraceptive method	0.124	0.725	0.522	0.470

** P<0.01; * P<0.05

The results of the chi-square test show that there is a significant association between age, educational level of the respondents and their partners, partners' occupation, decision-maker on contraceptive use, knowledge about contraceptive methods, spousal communication about contraception, approval of a contraceptive method and ever use of modern contraceptives. Also, there is a significant association between educational level of the respondents and their partners, respondent's income, partners' occupation, decision-maker on contraceptive use, spousal communication about contraception, approval of a contraceptive method and current use of modern contraceptives.

Multivariate Analysis

Table 4: Binary logistic regression models predicting the odds of Contraceptive Usage in Ife-North Local Government Area of Osun State, Nigeria.

Variable(s)	Ever Use		Current Use	
	B (Odd Ratio)	S.E	B (Odd Ratio)	S.E
Age				
15-19	-.727	1.703	3.144	120.639
20-24	-1.109	1.200	-5.180*	2.196
25-29	-.525	.828	-2.510	1.372
30-34	-.700	.866	-1.497	1.288
35-39	-.518	.856	-.218	1.308
40-44	-1.584	.844	-.806	1.143
45-49	R.C	R.C	R.C	R.C
Educational Level				
No formal education	1.669	1.031	7.438	41.518
Primary	.901	.697	1.695	1.047
Secondary	1.224*	.603	1.811	.886
Tertiary	R.C	R.C	R.C	R.C
Children Ever Born (CEB)				
0	.479	1.825	7.292	91.324
1-4	.107	.558	1.355	.761
5 and above	R.C	R.C	R.C	R.C
Income (\$ per annum)				
Less than \$833.33	.078	.528	.014	.759
\$833.33 and above	R.C	R.C	R.C	R.C
Partner's Educational level				

No formal education	-.701	1.174	4.672	42.642
Primary	-.967	.881	-3.906**	1.399
Secondary	-.627	.628	-1.337	.993
Tertiary	R.C	R.C	R.C	R.C
Partners' Occupation				
Farming	-1.184	1.610	-8.499	62.611
Artisan	-1.160	1.571	-7.498	62.609
Petty trading	-1.090	1.768	0.396	106.768
Business	-3.386*	1.627	-10.543	62.614
Civil Service	-2.133	1.555	-10.267	62.610
Professional	-2.946	1.666	-11.700	62.611
Others	R.C	R.C	R.C	R.C
Decision-maker on contraceptive use				
Partner/husband	0.122	1.022	-8.051	49.175
Wife	-0.576	1.183	-9.422	49.177
Joint decision	0.449	0.968	-6.779	49.173
Partners' relatives	5.721	25.829	-0.288	180.408
Others	R.C	R.C	R.C	R.C
Knowledge about contraceptive methods				
Yes	0.751	1.482	-10.590	83.438
No	R.C	R.C	R.C	R.C
Spousal communication about contraceptives				
Yes	-2.231**	0.533	-1.713	1.023
No	R.C	R.C	R.C	R.C
Approve of any contraceptive method				
Yes	-3.080**	0.699	-2.119	1.397
No	R.C	R.C	R.C	R.C
Constant	5.153	2.637	33.214	115.344
-2 log likelihood	159.082		82.389	
Model Chi-square	141.173		66.083	

** P<0.01; * P<0.05

R.C- Reference Category

S.E- Standard Error

The result of the binary logistic regression models is presented as relative odds in Table 4 above. Modern contraceptive use (ever use and current use) takes a value of one if the respondents reported use and zero if otherwise. The reference category of each dichotomously measured independent variable has a value of one and the values for other categories are compared to that of the reference category. A value less than one imply that individuals in that category have a lower probability of reporting ever use or current use of modern contraceptives than individuals in the reference category. For continuously measured independent variable, a value less than one implies a decline and a value greater than one, an increase in the likelihood of reporting ever use or current use of modern contraceptives as value of that variable increases.

Educational level of the respondents, partners' occupation, spousal communication about contraception and approval of a contraceptive method were found to have significant impact on ever use of modern contraceptives in the study area. The significant impact is positive only for educational level of the respondents, while it is negative for the other three variables. The impact of spousal communication about contraception and approval of a contraceptive method were particularly pronounced when there is spousal communication about contraception and when the respondents approve a method of contraception. It is however a negative one. Moreover, age and educational levels of the husbands were found to have negative significant impact on current use of modern contraceptives. The impact of educational levels of the partners is particularly pronounced for those having only primary level education.

Discussions and Conclusions

Some of the important findings from the analyses merit attention. First, although knowledge of contraceptive methods was high among women in the area, reported level of current use of contraceptives was low. This suggests that knowledge about methods does not translate to practice in the study area. Majority of the women interviewed felt that they needed more babies and that since they needed more babies, using any family planning method is unnecessary. Also, the result of the analyses and the extract from the focus group discussions (not presented in this paper) shows that majority of the women had fear about side effects, although their fears were based on rumours which they can not prove.

Second, those women who discussed with their partners about contraception and those women who approved of some methods of contraception were found to be less likely to ever use any modern contraceptive methods ($p < 0.01$). This suggests that women's approving a method of contraception does not necessarily mean that they will ever use any of the approved methods. The result indicates that men are the primary decision-makers on issues relating to fertility and fertility control. If men are not open to using modern contraceptive methods, then the women are greatly limited in their own discussions and approval of contraceptive use.

Third, an appropriate strategy to stimulate increased use of modern contraception is educating potential users on the benefits of family planning, the types of methods available, the relative effectiveness and side effects of the various methods. Different strategies may have to be adopted to reach potential users in different circumstances and settings, including the health facilities. In fact, in the study area, health facilities were important sources of information about contraception.

Fourth, results from the logistic regression models did not significantly support the hypotheses that women who know of at least one method are more likely to use modern contraceptives than their counterparts who know no method. Also, that those women with more children ever born are more likely to use modern contraceptive methods than their counterparts with fewer children ever born. The likely reason for this may be because the women under study are young with the average age of thirty-five years and as a result, some of them still want more children. For the majority of women in the study, modern contraceptive usage was deemed necessary for those who have either reached their reproductive goal or reached menopause.

In conclusion, women of reproductive age in Nigeria and their partners should be the focuses of interventions aimed at improving awareness of the benefits of modern contraceptive methods with the ultimate goal of helping women (with the cooperation of their partners) make informed and responsible choice about their use. Improving the educational and economic status of the women and educating men; and planning programmes that will improve discussions at the family level on fertility-related issues will likely improve the level of use of modern contraceptives. Also, emphasis should be placed on the dynamics of childbearing and on parental aspirations for the children. Reference to the economic conditions and demands of modern society, and indeed, the hardships a father faces in the process of bringing up his children will likely appeal to men, and this should be part of the information, education and communication (IEC) programmes.

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References

- Adewuyi, A.A. 1979. Overview and conclusion. In: L.A. Adeokun (ed.), 1971-75 National Survey of Fertility, Family and Family Planning, Phase 1: S.W. Nigeria. *DSS Monograph No. 1*. Department of Demography & Social Statistics, Faculty of Social Sciences, University of Ife, Ile-Ife, Nigeria. Pp. 126-130.
- Beckman, L.J. 1983. Communication, power, and the influence of Social networks in couple decisions on fertility. In: R.A. Bulatao and R.D. Lee et al. (eds.) *Determinants of Fertility in Developing Countries* (Washington, D.C.: National Academy Press). Pp. 856-878.
- Bertrand, J.T., Seiber, E., Escudero, G. 2000. Contraceptive dynamics among the Mayan population of Guatemala: 1978-1998. Chapel Hill, North Carolina, University of North Carolina at Chapel Hill, Carolina Population Center [CPC], MEASURE Evaluation, 2000 Jun. [35] p. *MEASURE Evaluation Working Papers* WP-00-2; USAID Cooperative Agreement No. HRN-A-00-97-00018-00.
- Caldwell, J.C. 1979. Education as a factor in mortality decline: An examination of Nigerian data". *Population Studies*, (November) 33: 395-413.
- Chacko, E. 2001. Women's use of contraception in rural India: a village-level study. *Health and Place*, 2001; 7(3): 197-208.
- Cochrane, S.H. 1979. *Fertility and Education: What Do We Really Know?*. Baltimore: Johns Hopkins University Press.
- Dyson, T., and Moore, M. 1983. On kinship structure, female autonomy and demographic behaviour in India. *Population and Development Review* (March) 9: 35-60.
- Ebigbola, J.A., Ogunjuyigbe, P.O. 1998. Contraceptive Knowledge and Practice by women attending antenatal Clinic in Nigeria. *Ife Social Sciences Review*, Vol. 15, No. 1, 1998. Pp. 20-29.
- Feyisetan, B.J. and Ainsworth, M. 1984. The impact of the availability of price, and quality services on the demand for contraception in Nigeria. The World Bank, Policy Research Department, Washington. D.C.
- Feyisetan, B.J., Bamiwuye, S. 1998. Postpartum Counselling and Contraceptive Use in Nigeria. *Ife Social Sciences Review*, Vol. 15, No. 1, 1998. Pp. 30-41.
- Hollerbach, P.E. 1983. Fertility decision making processes: A critical essay. In: R.A. Bulatao and R.D. Lee et al. (eds.), *Determinant of Fertility in Developing Countries* (Washington, D.C.: National Academy Press). Pp. 797-828.
- Koc, I. 2000. Determinants of contraceptive use and method choice in Turkey. *Journal of Biosocial Science*. 2000 July, 32(3): 329-42.
- Federal Government of Nigeria 2004. National Policy on Population for Sustainable Development. *Policy Document*. 68p.
- Federal Office of Statistics 1990. Nigeria Demographic and Health Survey, 1990 Macro International Inc. Calverton, Maryland.
- Narzary, P. K. 2001. An investigation into contraceptive use in Assam, Mumbai, India. International Institute for Population Sciences, 2001 Apr 27. 16, [7] p.
- NPC 1992. 1991 Population Census of the Federal Republic of Nigeria: Analytical Report at the National Level. Lagos, Nigeria. National Population Commission 1992.
- NPC 2000. Nigeria Demographic and Health Survey 1999. National Population Commission, Abuja, Nigeria 2000.
- NPC and ORC Macro 2004. Nigeria Demographic and Health Survey 2003. Calverton, Maryland: National Population Commission and ORC Macro. 333p.
- Olaleye, D.O. and Bankole, A.1994. The Impact of Mass Media Family Planning Promotion on Contraceptive Behaviour of women in Ghana. *Population Research and Policy Review*, 13:161-177.

- Oyedokun, A.O. (2004). Domestic violence and contraceptive use in Ife-North Local Government area of Osun State, Nigeria. *Unpublished M.Sc. thesis* submitted to the department of Demography and Social Statistics, Obafemi Awolowo University, Ile-Ife, Nigeria. 169p.
- Parr, N. 2002. Family planning promotion, contraceptive use and fertility decline in Ghana. *African Population Studies*. 2002; 17(1): 83-101.
- Population Reports 1999. Ending Violence Against Women. Series L, Number 11, Volume XXVII, Number 4, December 1999.
- Shrestha, D. P. 2000. Determinants of current contraceptive use among Nepalese women: an analysis of NFH survey 1991. *Nepal Population and Development Journal*. 2000 July: pp.1-9.