

Self-efficacy in negotiating sexual activity and condom use among married women in Nigeria: evidence from DHS.

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Abstract

Using 2013 Nigeria Demographic and Health Surveys dataset, the study examined the relationship between self-efficacy in negotiating sexual activity and condom use among married women in Nigeria. Binary logistic regression model was employed in data analysis with a view to understanding factors in women's self-efficacy and condom use. The results showed that age, education, religion, work status, household wealth, fertility desire and preference, number of living children, exposure to radio and television, knowledge of a source of condom and that condom can reduce the risk of getting HIV were found to be significantly associated with married women's ability to negotiate sex and condom use ($P < 0.05$). Further analysis revealed that religion, equal fertility preference of spouses and self-efficacy were significant factors in consistent condom use ($P < 0.05$). The study concluded that religion, fertility preference of spouses and self-efficacy were important in condom use.

Introduction

There is a high incidence of sexually transmitted infections (Dube, Nkomo and Khosa, 2017) and low usage of contraceptives among women in many sub-Saharan African countries (NPC and ICF Macro, 2014).

Studies have shown that effective, consistent and correct use of condoms cannot only prevent pregnancy but also sexually transmitted infections (Melvin, 2006 and Ajayi and Akpan, 2018). In addition, condoms are easy to use, easily accessible and have very few side effects. However, gender role and power inequalities have great effects on women's contraceptive and sexual behaviour (Gage, 1995; Hogan, Berhanu, and Hailemariam, 1999; Weiss, Whelan and Gupta, 2000; Gilbert and Walker, 2002; Lotfi, Tehrani, Yaghmaei, Hajizadeh, 2012 and Salaudeen, Musa, Ojotule, Yusuf, Durowade, Omokanye, 2014). Men are the heads of families in many homes in Nigeria. Men's leadership role is supported and enhanced by religion and tradition and put women in subordinate position. The disadvantaged position is further reinforced by the facts that in many families, men are mostly the older partners and the breadwinners of the families. The economic vulnerability of many women has also made them susceptible (Varg, 2003). Infidelities among women are frowned at while those of men are condoned (Varg, 1997). The International Conference on Population and Development held in 1994 emphasised the role of couples in responsible reproductive behaviour. The use of contraceptives, condom inclusive (15%) is minimal among women in Nigeria (NPC and ICF Macro, 2014). Sexual negotiation or a request for the use of condom by either of the spouses may lead to suspicion of infidelity, promiscuity, doubt or mistrust on the part of other partner (Wood, Maforah and Jewkes, 1998, Blanc, 2001, Shearer et al., 2005 and Anyanwu and Fulton, 2017). Women who are not sure about their husbands' fidelity and who may want their husbands to use condom in order to protect themselves from sexually transmitted diseases are not empowered to protect themselves (Chimbiri, 2007 and Do and Fu, 2011). This imbalance in gender roles underlines the need for research on factors in married women's self-efficacy in negotiating sexual activity and condom use. Effective communication and autonomy have been established as a factor in contraceptive use of couples (Oladeji, 2008; Stokes, Harvey and Warren, 2016; de Sousa, Martins, de Menezes, Pereira, Cordeiro, Pinheiro, de Souza Aquino and Barbosa, 2016). Interactions and gender roles can influence condom use and sexual behaviour of partners (Pulerwitz and Baker, 2007).

Extent of communication and relationship of women with their spouses strongly influences their decision whether they will use contraceptive methods to protect themselves from sexually transmitted diseases and unwanted pregnancies (Speizer, Whittle and Carter, 2005). Studies revealed that inability to control sexual behaviour was associated with low consistent use of condom and an increased risk of HIV infection among women (Varga, 2003 and Pettifor et al., 2004).

Protection from reproductive health risks has been associated with self-efficacy of women in sexual negotiation (Lauby et al, 2001). Self-efficacy model of safe sexual behaviour as proposed by Bandura (1990) emphasised safe-sex knowledge and skills but these may not be sufficient for the practice of safe sex. Self-efficacy is important in sexual relationships (O'Leary et al, 1992 and Murphy et al, 2001). Self-efficacy has been found to be a strong predictor of condom use (Gomez and Marin, 1996). Women negotiating power is an important determinant of condom use (Greig and Koopman, 2003). Studies in developed countries of the world had found strong relationship between self-efficacy of women, their sexual behaviour and contraceptive use, this relationship has not been thoroughly explored among married women in Nigeria.

Data and Methods

The data used for this study came from 2013 Nigeria Demographic and Health Survey (NDHS) dataset. The survey was design to obtain information on fertility, family planning awareness and use, breast-feeding practices, nutrition of mothers and young children, early childhood mortality and maternal mortality, maternal and child health, and awareness and behaviour regarding HIV/AIDS and other sexually transmitted infections. The dataset were both national and representative. Detailed explanation of the sampling procedures and description is available in the survey report (NPC and ICF Macro, 2014). The study sample included 38,948 women aged 15-49. The target population was married women. The data of 26, 402 women eligible for the study were considered for data analyses. Weight was used to reduce errors that may occur due

to sampling variability. Binary logistic regression technique was employed to establish the relationship between self-efficacy and condom use and women's characteristics.

Dependent Variables

The study includes three outcome variables. The first one is self-efficacy, which is the ability of married women to negotiate sex and the use of condom with their partners. A woman is captured and considered as having self-efficacy if she responded yes to the following two questions "Respondent can say no to sex and respondent can ask partner to use condom". The second outcome variable is measured by condom use at last sexual intercourse with most recent partner while the third outcome variable is captured by condom use every time had sex with most recent partner in the last 12 months preceding the surveys. The study did not differentiate the use of condom either for disease prevention or for family planning. The outcomes variable is binary, this informed the used of binary logistic regression model.

Independent Variables

Background and other relevant variables that may be associated with condom use and self-efficacy of women were considered in the study. The key independent variables considered were residence (rural/urban), age, education, ethnicity, household wealth, work status, religion, fertility desire, fertility preference, number of living children, exposure to radio and television, sources of condom and belief whether condom use can prevent HIV.

Residence was classified into two categories: 1 = urban and 2 = rural. Age had three categories, 1 = 15-24, 2 = 25-39 and 3 = 40-49. Educational attainment was reclassified into three as 1 = at most primary education, 2 = secondary education and 3 = post secondary or higher education. Ethnicity was dichotomized between the major three ethnics group and the several minority groups. Household wealth as reported by DHS was classified into five categories based on ownership of household items and household materials. For the

purpose of this study the five categories were reduced to three; 1= poor (poorest and poorer), 2 = middle, 3 = rich (richer and richest). Work status had two groups; 1 = others and 2 = working. The study also considered religious affiliation of respondents. Two major religious groups (Christianity and Islam) were involved. The number of other religious groups was very small and also insignificant to warrant inclusion in data analysis. Christianity was coded one while Islam was coded two. Fertility desire and fertility preference have three groups each. The three groups of fertility desire were equal desire = 1, husbands desire more = 2 and wives desire more = 3 while that of the fertility preference were both want another = 1, both want no more = 2 and others = 3. Number of living children was collapsed into two categories and coded 0 – 4 children =1 and 5 children plus = 2. Responses on exposure to radio and television had two categories each; yes = 1, if listened to radio or watch television at least once a week, otherwise others = 2. Answers of respondents to questions on sources of condom was dichotomized, coded yes = 1 if respondents knew a source of obtaining condom otherwise coded no = 2. Believe on whether condom use can prevent HIV was also dichotomized as yes = 1 and no = 2.

Findings

Demographic and Socio-economic characteristics of married women

Table 1 showed the percentage distribution and bivariate associations by selected characteristics according to self-efficacy and condom use behaviour among married women in Nigeria. Majority of women lived in rural areas (64.0 percent). More than half of the women belonged to 25-39 age bracket while about one fourth (25 percent) belonged to each of the 15-24 and 40-49 age brackets respectively. Most (68.6 percent) had at most primary school education, 24.0 percent had secondary education and 7.4 percent had post secondary (higher) education respectively. Most (66.2 percent) of the women belonged to the majority ethnic group. Also majority (69.3 percent) were working. Household wealth as a variable was a function of component analysis

of household's possessions and some related socio-economic variables. In all, 45.5 percent of women belonged to poor household category, 17.9 belonged to middle household category while 36.6 percent belonged to rich household category. Percentage distribution according to fertility desire of spouses revealed that 44.1 percent had equal desire, 51.0 percent indicated husbands desire more while only 4.5 claimed wives desire more. As regards fertility preference of spouses, most (70.7 percent) wanted more children while 18.3 percent indicated they wanted no more children. For the purpose of this study, number of living children was grouped into two. Majority (70.7 percent) indicated they had 0-4 number of children while those who claimed to have five and more children were 29.3 percent. About three (29.0 percent) out of every ten women listened to radio at least once in a week while about four (37.0 percent) out of every ten women watched television every week. Knowledge that condom use can reduce risk of getting HIV was high. A little less than four out of every ten women indicated condom use can reduce risk of getting HIV. About one third of the women reported self-efficacy. These women indicated they could negotiate sex and condom use.

Self-efficacy: ability of women to negotiate sexual activity and condom use with their husbands

The following column in Table I showed bivariate relationships between selected characteristics of married women and their self-efficacy in sexual activity negotiation and the use of condom. Findings as in Table 1 revealed that urban residence, education above primary school, age beyond 15-24 age bracket, household wealth, being employed, knowledge of a source of obtaining condom, knowledge that condom can reduce risk of getting HIV and at least weekly exposure to radio and television had positive relationship with self-efficacy of women. For instance, 30.6 percent of women in rural area as against 46.6 percent of women in urban area could negotiate sexual activity and condom use with their husbands. Only 31.7 percent of respondents who belonged to 15-24 age bracket could negotiate sexual activity and condom use with their husbands compared with 38.7 percent and 35.0 percent of respondents who belonged to 25-39 and 40-49 age brackets respectively. Women with more education were able to negotiate sexual activity and condom use

with their husbands compared with women with lower education. For example, only 27.6 percent of women with at most primary school education compared with 50.0 percent and 63.0 percent of women with secondary and higher education respectively. Distribution according to household wealth and self-efficacy showed that 24.8 percent of women from poor household as against 49.4 percent of women from rich household could negotiate sexual activity and condom use with their husbands. More of ability to negotiate sexual activity and condom use was noticed among minor ethnic group (39.3 percent) compared to major ethnic group (34.5). Ability to negotiate sexual activity and condom use was higher among women who were Christians (47.9 percent) compared to their counterparts who were adherents of Islam (27.8 percent). Workers showed greater self-efficacy (38.9 percent) compared to respondents in other (29.8 percent) categories of work status. Women who indicated equal fertility desire with their husbands were more likely to report self-efficacy (42.1 percent) than were women who indicated husbands desire more (31.8 percent) and those who desire more than their husbands (47.6 per cent). In addition, having preference for no more children (43.2 percent) was associated with greater self-efficacy between husbands and wives compared to the spouses who indicated both wanted more children (34.1 percent) and those who gave other reasons (36.8 percent). Women who had 0-4 children were more likely to report self-efficacy (38.0 percent) than women who reported 5 and more children (32.4 percent). Women's exposure to radio and television were positively related to self-efficacy. More than half (50.3 percent) of women who knew a source of obtaining condom compared to less than a quarter (24.5 percent) of those who indicated no knowledge of a source of obtaining condom claimed they could negotiate sexual activity and condom use with their husbands.

Condom Use during the last sexual activity

The next column after the one on self-efficacy in table 1 showed bivariate relationship between selected women's characteristics and condom use during the last sexual activity. Urban residence, education, household wealth, work status, ethnicity, exposure to radio and television, knowledge of a source of condom

and its ability to reduce risk of HIV transmissions were positively associated with condom use in the last sex. Age of women was partially while ethnicity was negatively related to condom use in the last sex. Women in urban area, more educated, wealthier, working and who were exposed to radio and television, who had knowledge of a source of condom and its ability to reduce HIV transmissions were more likely to use a condom at last sex. Condom use at last sexual activity was highest among women in the 25-39 (3.3 percent) age bracket compared to 15-24 (2.0 percent) and 40-49 (2.2 percent) age brackets. Women who were Christians (4.8 percent), with 0-4 number of living children (3.3 percent), who desire more children than the husbands (5.7 percent) and who indicated they both (husbands and wives) had no preference for more children were more likely to use condom at last sex.

Consistent condom use in the last 12 months preceding the survey

The last column of the table 1 showed bivariate relationship between selected women's characteristics and consistent condom use in the last 12 months preceding the survey. It should be noted that women who claimed they use condom during the last sex were further considered for this analysis. Urban residence, education beyond primary level, household wealth beyond poor level category, work status, ethnicity, exposure to radio and television, knowledge of a source of condom and its ability to reduce risk of HIV transmissions were positively associated with consistent condom use in the last 12 months preceding the survey. Age of women had partial relationship. Adherents of Islam used condom more consistently in the last 12 months compared to adherents of Christianity. Surprisingly, women who had 0-4 number of living children were more likely to report consistent use of condom in the last 12 months preceding the surveys. Table 1 also revealed condom use in the last 12 months preceding the survey was highest among women who claimed they had equal fertility with their husbands and among women including their husbands who had preference for no more children.

TABLE 1: Percentage distribution and bivariate associations by selected characteristics according to self-efficacy and condom use behaviour, Nigeria, 2013

CHARACTERISTICS	TOTAL	SELF-EFFICACY	CONDOM USE AT LAST SEX	CONSISTENT CONDOM USE
Residence				
Rural	64.0	30.6	1.4	58.5
Urban	36.0	46.6	5.3	64.7
Age				
15-24	23.4	31.7	2.0	62.0
25-39	54.2	38.7	3.3	60.8
40-49	22.4	35.0	2.2	70.4
Education				
At least primary	68.6	27.6	1.1	61.0
Secondary	24.0	50.0	5.4	63.6
Higher	7.4	63.0	8.1	62.4
Ethnicity				
Majority	66.2	34.5	3.0	66.7
Minority	33.8	39.3	2.3	53.5
Work Status				
Others	30.7	29.8	1.7	59.3
Working	69.3	38.9	3.2	63.5
Household Wealth				
Poor	45.5	24.8	0.6	46.8
Middle	17.9	36.2	1.8	66.7
Rich	36.6	49.4	5.6	64.1
Fertility Desire of Spouses				
Equal desire	44.1	42.1	4.3	65.4
Husband desire more	51.0	31.8	1.4	58.3
Wife desire more	4.9	47.6	5.7	63.3
Fertility Preference of Spouses				
Both want another	70.2	34.1	2.5	58.3
Both want no more	18.3	43.2	4.4	72.3
Others	11.5	36.8	1.7	58.5
Number of Living Children				
0-4 children	70.7	38.0	3.3	62.7
5 and more children	29.3	32.4	1.6	62.6
Listen To Radio At Least Once A Week				
At least once a week	29.9	42.8	4.3	64.6
Others	70.1	32.3	1.8	60.0

Watch TV At least Once a Week				
At least once a week	37.0	50.8	5.3	65.0
Others	63.0	29.7	1.6	59.4
Knows a Source for Obtaining Condom				
No	57.1	24.5	0.6	46.5
Yes	42.9	50.3	5.3	64.8
Condom use can reduce risk of getting HIV				
No	39.6	24.2	1.4	54.1
Yes	60.4	46.1	3.8	64.4
Self-Efficacy				
No	64.1	-	1.2	54.7
Yes	35.9	-	5.5	65.8

Multivariate Analysis

Self-efficacy of women in negotiating sexual activity

The relationship between self-efficacy and some selected characteristics of woman was examined as revealed in Table 2. Several characteristics of woman were associated with self-efficacy. Women who belonged to 40-49 age bracket were 0.79 times as likely to negotiate sexual activity and condom use compared with women who belonged to 15 -24 age bracket. Compared with women who had at most primary school education, those who had secondary education were 1.38 times as likely and those who had higher education were 1.98 times as likely to negotiate sex and the use of condom with their husbands. Women who were adherents of Islam had lower self-efficacy (OR=0.82) compared to their Christian counterparts. Self-efficacy was also higher among women who were working (OR=1.11), those who indicated husbands had more desire for children compared to their own (OR=1.11). Those who listened to radio (OR=1.82) and television (OR=1.25), those who knew a source of obtaining condom (OR=2.21) and that condom use can reduce risk of getting HIV (OR =2.21). Conversely, and surprisingly, women self-efficacy was lower among women who had five and more children (OR=0.91). The study revealed residence and ethnicity of woman were not related to their ability to negotiate sexual activity and condom use.

The use of condom during the last sex

Residence, age in the 40-49 age bracket, education, ethnicity, religion, household wealth in the rich category, number of living children, knowledge of a source for obtaining condom and knowledge that condom use can reduce risk of getting HIV and self-efficacy of women were associated with condom use at last sex. An increased likelihood of condom use at last sex by women was associated with urban residence (OR=1.31), living in a wealthy household (OR =1.52), preference for no more children (OR= 1.62), knowledge of a source for obtaining condom (OR =3.04), knowledge that the use of condom can reduce risk of getting HIV (OR =1.40) and ability to negotiate sexual activity and condom use (OR=2.38). Conversely, women's in the age 40–49 age bracket (OR =0.67), in minority ethnic group (OR=0.71), who were adherents of Islamic religion (OR=0.71), whose husbands desire more children (OR=0.77) than them and who had five and more children (OR=0.79), were associated with decreasing likelihood of using condom at last sex. Surprisingly, work status, exposure to radio and television were not found to be associated with condom use at last sex.

The use of condom consistently for the last twelve months

Self-efficacy of married women was found to be a strong determinant of consistent condom use. Women who indicated they could negotiate sex and condom use with their husbands were 31 percent more likely to report the use of condoms consistently compared to women who indicated they did not have the ability to negotiate sex and condom use with their husbands (OR=1.31). Other factors significant in consistent condom use among married women were religion and fertility preference of spouses. For instance, adherents of Islamic religion (OR=1.85) were 85 percent more likely to report consistent use of condoms than their Christian counterparts. Spouses who reported they did not want more children (OR=1.90) were 90 percent more likely to report consistent use of condom than spouses who reported both wanted more children. Similar to the

finding from the analysis of condom use at last sex, self-efficacy, religion and fertility preference of spouses were predictors of consistent condom use among married women.

TABLE 2: Odds ratios by selected characteristics, according to women’s self-efficacy in negotiating sexual activity, condom use at last sex, and condom use in the past 12 months, Nigeria, 2013.

CHARACTERISTICS	SELF-EFFICACY	CONDOM USE AT LAST SEX	CONSISTENT CONDOM USE
Residence			
Rural (R)	1.00	1.00	1.00
Urban	1.01	1.31**	0.82
Age			
15-24 (R)	1.00	1.00	1.00
25-39	0.98	0.83	0.83
40-49	0.79***	0.55**	0.99
Education			
At least primary (R)	1.00	1.00	1.00
Secondary	1.38***	1.57**	0.814
Higher	1.98***	1.67**	0.80
Ethnicity			
Majority (R)	1.00	1.00	1.00
Minority	0.94	0.67***	0.65
Religion			
Christianity (R)	1.00	1.00	1.00
Islam	0.82***	0.71**	1.85*
Work Status			
Others (R)	1.00	1.00	1.00
Working	1.11**	1.22	0.89
Household Wealth			
Poor (R)	1.00	1.00	1.00
Middle	1.22***	1.27	1.30
Rich	1.21***	1.52*	1.07
Fertility Desire of Spouses			
Equal desire (R)	1.00	1.00	1.00
Husband desire more	1.11**	0.77*	0.75
Wife desire more	1.03	1.10	0.97
Fertility Preference of Spouses			
Both want another (R)	1.00	1.00	1.00
Both want no more	1.25***	1.62***	1.90*
Others	1.71***	1.02	0.79
Number of Living Children			
0-4 children (R)	1.00	1.00	1.00
5 and more children	0.91*	0.79*	0.68

Listen To Radio At Least Once A Week			
No (R)	1.00	1.00	1.00
Yes	1.82***	1.18	0.94
Watch TV At least Once a Week			
No (R)	1.00	1.00	1.00
Yes	1.25***	0.85	1.14
Condom Use Can Reduce Risk of Getting HIV			
No (R)	1.00	1.00	1.00
Yes	2.21***	1.40**	1.21
Knows a Source for Obtaining Condom			
No (R)	1.00	1.00	1.00
Yes	2.21***	3.04***	1.94
Self-efficacy			
No (R)	-	1.00	1.00
Yes	-	2.38***	1.31*

***P<0.001, **P<0.01, *P<0.05

Discussion of Findings

The study considered the characteristics of married women and their ability to negotiate sexual activity and condom use. Ability of women to negotiate sex and condom use is important to child health, reduction of maternal mortality and responsible fertility and reproductive behaviour. Sexual intercourse (unprotected sex with many partners) is a major source of HIV infection and other sexually transmitted infections. In addition, it can also lead to unwanted pregnancies. Ability of married women to negotiate sex and condom use can go a long way to reduce this life threaten menace.

Women characteristics like age, education, religion, work status (Malema, 2012; Marak and Bhatnagar, 2015 and Sharma and Nam, 2018), household wealth, fertility desire and preference, number of living children, exposure to radio and television, knowledge of a source of condom and that condom can reduce the risk of getting HIV (Nnedu and McCorvey, 2008 and Sharma and Nam, 2018) were found to be significantly associated with married women's ability to negotiate sex and condom use. Age, education and employment status of women can empower them to participate in decision making in the family. In addition, condom use at last sex was more among urban residence and married women in 40-49 age bracket. Urban residence

exposes women to many facilities that can encourage and also empower them to participate in family decision making especially those ones that affect them. Education (Sharma and Nam, 2018) and household wealth were positively related to condom use at last sex. Educated women will cherish good standard of living and desire fewer children than their counterparts. Ethnicity also related significantly with married women as regards condom use for last sex. Majority ethnic group use condom more at the last sexual activity compared to the minority group. Similar explanation was found among religious groups. Christians used condom more than Muslims at the last sexual activity and women in the rich household used condom more compared to other households categories. The rich are most likely to be educated and enlightened, live in urban areas; have access to health facilities and also gainfully employed. All these may enhance condom use and their desire for fewer children. Condom use for the last sex was more among spouses who indicated they wanted no more children and surprisingly less among women who had 5 and more children compared to those with 0-4 children. Knowledge of a source of condom and its ability to reduce risk of getting HIV were both related to last condom use. Self-efficacy was found to be associated with condom use at last sex by married women (Closson, Dietrich, Lachowsky, Nkala, Palmer, Cui, Beksinska, Smit, Hogg, Gray, Miller and Kaida, 2017).

Further analysis considering consistent use of condom among married women revealed, religion, equal fertility preference of spouses and self-efficacy were significant factors in consistent condom use. This finding showed the importance of religion, fertility preference of spouses and self-efficacy in condom use (Condom use at last sex and consistent condom use).

Strategies to put in place in order to enhance self-efficacy of married women should put into consideration married women's age, level of education, religion, work status, household wealth, fertility desire and preference, number of living children, exposure to radio and television, knowledge of condom source and of

it ability to reduce the risk of getting HIV. Strategies targeting increase in the use of condom among married women should give particular attention to religion, fertility preference and self-efficacy of married women.

Strengths and Limitations of the Study

Demographic and Health Surveys (DHS) data are nationally representative. DHS use standard data collection procedures to ensure reliability. In addition, DHS used multistage probabilistic sampling methodology to select clusters and households that cover the entire country. However, this study was based on self-reported data which is subject to recall bias and social desirability. DHS data are cross-sectional therefore causality cannot be examined.

Conclusion

The study concluded that religion, fertility preference of spouses and self-efficacy were important in condom use. Policies, intervention programmes and strategies targeting increase in the use of condom among married women in Nigeria should put religion, fertility preference and self-efficacy of married women into consideration.

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