



Original Research Article

Male gender engagement in sexual and reproductive health services in Nigeria- A comparative study

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Male gender involvement in sexual and reproductive health (SRH) is essential for the realization of socio-cultural and economic development. The significance of the male involvement cannot be overemphasized as the head of the house because of his strong influence on decision-making in the family. This study sought to investigate the differences in the level of male involvement in SRH services between rural Mpape and urban Gwarinpa communities in the Federal Capital Territory of Nigeria. This research was guided by using a comparative cross-sectional survey in which qualitative and quantitative data were collected. Primary data was obtained using questionnaires and in-depth interview guides. A multistage sampling technique was used to select married men with at least one child from the two communities to assess their involvement in SRH services and their support and willingness to support their partners in assessing SRH services. In-depth interviews were carried out among women, healthcare providers and community leaders to examine the involvement of men in SRH in both communities. The data collected was processed and analyzed using the Statistical Package for the Social Sciences (SPSS) version 21. The study showed an average willingness of male involvement in sexual and reproductive health services (SRHS) of 41.6%, a value statistically and significantly lower in rural communities of Mpape (28.3%) compared to that of urban Gwarinpa (54.9%) ($p=0.000$). The implication is that men in Mpape rural communities are less willing and supportive of their spouses than their urban counterparts. In conclusion, the willingness and attitudes of men to accompany their partners for SRH services were averagely poor in Nigerian communities with the rural communities worse than their urban counterparts. There is therefore need to create a public health awareness campaign and to legalize the participatory role of the male gender in SRHS in Nigeria.

Keywords: Male gender engagement, sexual and reproductive health, family planning, sexual reproductive health services, maternal child health, antenatal care

INTRODUCTION

The Sexual and Reproductive Health Services (SRHS) is a public health strategic approach to preserve maternal and child health well-being by curbing maternal mortality and morbidity rates, infant mortality rate, unsafe sex practices (sexual disorientations) and promoting child spacing through family planning (FP) (Omo-Aghoja, 2013).

Sexual and reproductive health services include more

than just family planning clinics and sexually transmitted illness treatment (IPPF and UNFPA, 2017). It entails improvements in antenatal, perinatal, postpartum, and newborn care; cost-effective family planning services, which entails infertility services; safe abortions; prevention and treatment of sexually transmitted infections, such as Human Immunodeficiency Virus (HIV), reproductive tract

infections, cervical cancer, and other maternal comorbidities; and healthy sexuality education which are the five core pillars of sexual and reproductive health care (Glasier et al., 2006).

During the 1980s, there was an unspoken acknowledgment within health promotion that men were an important determinant in women's and children's health (Hogan et al., 2010). Although studies have revealed that maternal mortality has decreased in developing nations over the previous three decades, it still accounts for 99% of worldwide maternal mortality in countries with low income, which amounts to 287,000 deaths each year (Hogan et al., 2010). The engagement of men in reproductive health is recommended as an important basic intervention to improve maternal health outcomes, according to the 1994 International Conference on Population and Development (ICPD) in Cairo, which also noted that men needed SRH and that their involvement was crucial. (Omo-Aghoja, 2013; WHO) (2015; Bishwajit et al., 2017).

Unsafe sex is the ninth biggest cause of disability and death in affluent nations, and it is the second leading cause in the world's poorest populations (Glasier et al., 2006). Low-cost, effective interventions can be used to prevent unintended pregnancies, provide safe abortions, support pregnant women through childbirth safely, and prevent and treat sexually transmitted disease (Glasier et al., 2006). Statistics from around the world show that more than 120 million couples lack access to contraception, 80 million women become pregnant unintentionally (45 million of which end in abortion), more than 500,000 women pass

away from complications during pregnancy, childbirth, and in periods of postpartum, and 340 million people get new cases of gonorrhoea, syphilis, chlamydia, or trichomonas every year (Glasier et al., 2006). In the majority of developing nations, women are disproportionately affected by problems with their sexual and reproductive health and their lack of power.

In many countries, because people find discussions about sexual activity and sexuality uncomfortable, services tailored to reproductive health are either unavailable, of poor quality, or underutilized. Additionally, the growing global influence of conservative political, religious, and cultural forces threatens to undo the progress that has been made since 1994 (Bishwajit et al., 2017). The promotion of men's support for women's needs, rights, and choices, as well as men's own sexual and reproductive health needs and behaviours, will then be accomplished through complete male involvement in reproductive health care programs (Jessica et al., 2016).

Moreover, the involvement of men in reproductive health is a complicated process that necessitates societal and behavioural changes for males to be more active in their roles in fostering optimal sexual and reproductive health, it emphasizes men's acceptance of contraceptive usage and indicates the need to improve men's views and behaviours toward women's health, pushing men to be more supportive of women's use of health care services, including childbearing (Franklin et al., 2015).

According to research conducted in 176 countries, primarily in Sub-Saharan Africa, 30 to 40% of maternal fatalities and 90% of induced abortion-related pregnancy deaths could have been avoided if all women who wanted to use contraception knew where to get them (Quamrul et al., 2013).

Furthermore, the use of contraceptive services plays a significant role in reducing baby, neonatal, and under-five death rates, it is projected that 1.8 million child fatalities could be avoided in poor nations if all pregnancies were spaced by at least three years (Clara et al., 2015). It is anticipated that reducing fertility by one kid per woman in Nigeria would result in a 13 percent boost in Gross Domestic Product (GDP) per capita within 20 years (Quamrul et al., 2013).

Nigeria, on the other hand, is a low-income country with the fourth worst reproductive health outcome for women and children in the world, the 11th worst place to give birth, the world's 3rd highest infant mortality rate, and is ranked 163rd out of 191 countries in terms of health care system (Glasier et al., 2006). Nigeria is the world's seventh most populated country, with an estimated population of 183 million people and a projected population of 285 million by 2050 (Hogan et al., 2010). There are around 35 million women of childbearing age in the country, with approximately 7 million births per year and a yearly population growth of 3.2 % (Shrestha et al., 2014). A high total fertility rate (TFR) of 5.5 children per woman is to blame for the country's rapid population increase (Joseph and Jessica, 2009). Condoms, natural family planning, vasectomy, and withdrawal are all approaches to family planning that require men's direct involvement (Shrestha et al., 2014). Contraceptive use lowers the frequency of pregnancy, unplanned pregnancies, induced abortions, and the fraction of high-risk pregnancies, resulting in lower maternal deaths, better maternal and child health and a boost in Gross Domestic Product (GDP) per capita (WHO, 2015; Bishwajit et al., 2017).

However, the percentage of men engaged in Family Planning (FP) decision-making varies around the world. Male involvement in FP is high in America, with rates ranging from 55 percent to 56% (Jessica et al., 2016). In Ethiopia, however, only 8.4% of married men participated in FP discussions with their partners, whereas in Southwest Nigeria, 37% of interviewed women reported making a joint decision on FP with their partners (Jessica et al., 2016). In addition, research conducted in Ibadan revealed that 37.9% of respondent sexual partners were asked about their use of FP, with 19% currently using FP and only 4.8 percent having ever been involved in FP (Jessica et al., 2016). Furthermore, the current contraceptive prevalence rate in Nigeria is 15%, with an unmet demand for FP of 18% among the 37 states of Nigeria, ranging from 6% to 31% (Jessica et al., 2016).

Moreover, men serve as gatekeepers in accessing health care services for their families in the majority of undeveloped countries, they are the major decision-makers who have a direct role in the health of their partners and children (Jessica et al., 2016). Their choices influence

resource allocation and seeking needs of his family in accessing health-care services, contraceptive use and child health care, food availability, and women's workload (Franklin et al., 2015). Apart from their function as family decision-makers, their actions of abuse or neglect have a direct effect on their partner's and children's health. Because of their enormous economic and social supremacy in their family, men's active role in their involvement in their partners' and children's health has a serious implication in the attainment of optimal SRH of their wives (Joseph and Jessica, 2009).

Although men play an important role, they lack adequate knowledge of Maternal and Child Health (MCH) (Joseph and Jessica, 2009). The disparity in the authority to make decisions on numerous areas of reproductive health is a result of the deep-rooted societal systems of developing cultures (PATH, 1997). Furthermore, when men are the sole breadwinners in the family, they pay less attention to family health and are less involved in reproductive health (PATH, 1997). As a result, women are the primary target of most health education and awareness efforts, while men are mostly ignored, this exclusion reveals an enthralling explanation of why males are unable to make informed judgments in emergencies and are less engaged in their partners' and children's health (Clara et al., 2015).

While the number of women's health service providers is increasing, women consider men's lack of support for safe motherhood services as a barrier in assessing SRH programs which has been portrayed as obstructive or non-existent (Quamrul et al., 2013). They either make it difficult for women to choose whether or not to utilize family planning methods, or they become unresponsive because of their lack of interest (PATH, 1997). During labour, it is also customary for women to be helped by family members of the same sex (Quamrul et al., 2013).

Additionally, societies, where men participate less in sexually transmitted infections (STIs), especially HIV prevention activities, have shown a rise in sexually transmitted diseases (Macellina et al., 2010).

Hence a holistic approach to men's involvement in reproductive health is required. This entails that effective decision-making and greater outcomes in SRH should be predicted if men and women are viewed as equal partners (Yargawa and Leonardi-Bee, 2015). This has resulted in many reproductive health programs being tailored and looked at through a variety of challenges via the lens of gender (Bhatta, 2013). Men's involvement has been evaluated in various contexts and has been proven to be beneficial in different areas, including family planning, HIV prevention, birth preparedness and availability of emergency obstetrics, women's workload throughout pregnancy, and emotional support and communication (Osamor and Grady, 2016). Despite sufficient evidence of the importance of engaging men in women's reproductive health outcomes and their low level of involvement, little is known about the in-depth understanding of the factors that influence this in Nigeria (Bhatta 2013; Lewis et al., 2015). The purpose of the research is to study the participation prevalences of male gender in sexual and reproductive

health services between two communities in Abuja Metropolis, Nigeria.

METHODOLOGY

Study Area

The study area was the Abuja Municipal Area Council within which are Gwarinpa and Mpape communities. Abuja is the administrative and political capital of Nigeria situated in the geographic centre of the country within the Federal Capital Territory (FCT). It shares a boundary on the north with Kaduna State, on the southeast with Nasarawa State, on the southwest with Kogi State and on the west with Niger State. The city of Abuja has a population estimate of 1,405,201 individuals disaggregated into 740,489 males and 664,712 females according to the 2006 national census, with an annual growth rate of 9.3%, the current metro area population projection of Abuja in 2021 is 3,464,000, a 5.67% increase for 2020, making it one of the ten most populous cities in Nigeria. Gwarinpa is an urban district in Abuja Municipal Area Council. It has the largest single housing estate in Nigeria. Mpape is one of the numerous communities in the suburbs of Abuja that lies on the foothills and on the top of the famous Mpape rocks that are easily sighted from the neighbouring Maitama District. Being the FCT of Nigeria, Abuja has a fair representation of all the geo-political regions of the country. This made it an ideal study site for this research study.

Study Design

The study employed a mixed-method design, comprising of combined qualitative, quantitative and cross-sectional study designs. In this research design, a subset of the population was selected, and data from the sub-populations were analyzed qualitatively and quantitatively to answer some research questions of interest (Osamor and Grady, 2016). This method will help understand and explain causal links and pathways in the levels of knowledge of respondents (male/female) in Mpape and Gwarinpa communities on the relevance of male involvement in SRH services which are family planning, maternal health, child health and prevention of STIs. Also, the case study approach will help to capture information on more explanatory questions "how", "what" and "why". Therefore, the aim was to comprehend the subject under study by using mixed methods to reduce the deficiencies that are bound by the use of a single research approach.

Study Population

The study population comprised respondents drawn from the rural Mpape community and urban Gwarinpa community as follows:

Quantitative component: will comprise married men with children

Qualitative component: will comprise of

- i. Healthcare providers
- ii. Community leaders such as religious group leaders, village heads (counselors), youth associations, occupational groups and tribal association
- iii. Married women

Sample Size Determination

Quantitative component sample size estimation

In conducting this research, determining the appropriate sample size is a crucial step to ensure that the study has sufficient statistical power to detect a meaningful difference between Mpape and Gwarinpa communities on the relevance of male involvement in SRH services (Dupont and Plummer, 1990). In the case of comparing two independent proportions, the sample size calculation involves several factors, including the expected difference in proportions, the desired level of statistical significance, the homogeneity of the study participants, the acceptable level of risk for Type I and Type II errors, the anticipated rate of participant attrition and the desired power of the test (Kumar et al., 2014; Suresh and Chandrashekar 2012).

The sample size of respondents for the household interviews was estimated using the formula for calculating sample size for the comparison of two independent proportions (Charan and Biswas, 2013).

$$N / \text{group} = \frac{2(Z^{\alpha} + Z^{\beta})^2 \pi (1 - \pi)}{d^2}$$

n = minimum sample size

Z^{α} = standard normal deviate corresponding to the probability of making a type 1 error at 5% = 1.96

Z^{β} = standard normal deviate at 90% statistical power, corresponding to the probability of making a type 2 error = 1.28

π = mean of 2 proportion P_1 and $P_2 = P_1 + P_2 / 2$

P_1 = proportion of patients associated with the outcome of interest (Gwarinpa)

P_2 = proportion of patients associated with the outcome of interest (Mpape)

d = the desired level of differences between the two groups P_1 and P_2

P_1 = Assuming that the outcome prevalence of interest is 30% from a study of men's involvement in reproductive health care services in Nigeria (Nwankwo and Oshonwoh, 2013). Thus, 30% will be used in this study to detect the difference of 15% between the two groups.

$$P_1 = 30\% = 0.30$$

$$P_2 = 30\% + 15\% = 45\% = 0.45$$

$$P_1 - P_2 = 0.15$$

$$\pi = 45 + 30 / 2 = 37.5\% = 0.375$$

$$1 - \pi = 1 - 0.375 = 0.625$$

$$n = 2 (1.96 + 1.28)^2 * 0.375 * 0.625 / (0.15)^2$$

$$n = 2(1.96 + 1.28)^2 * 0.375 * 0.625 / 0.0225 = 218.7$$

$$n = 218.7 \text{ minimum sample size for each group}$$

Assuming 15% attrition rate = $219 * 100 / 85 = 258$ per group

The total sample size for the 2 groups = 516

The total number selected for the sample was drawn from the housing district in both Gwarinpa and Mpape communities using a multistage sampling technique which will amount to 516 questionnaires (258 from Gwarinpa community and 258 from Mpape community) will be distributed.

Qualitative component sample size estimation

A total of 50 participants was selected across health care providers working in health care facilities, married women who were attending any reproductive health service in the health care facilities and various community groups in both Mpape and Gwarinpa communities using a purposive sampling technique to compare male involvement in sexual and reproductive health service between rural Mpape and Urban Gwarinpa communities.

Sampling Procedure

Sampling procedure for the quantitative component

A multistage sampling technique was used in this study. This is a method used to obtain a sample from a population by dividing the population into smaller and smaller groups and then taking samples from these resulting groups (Wu et al., 2023). This technique was used to select participants from the two communities using both cluster sampling by dividing the selected communities into groups and systematic sampling was used. The study participants were all married men.

In each community, a cluster sampling technique was used to select married men from each housing district selected cluster in the two communities, followed by using a systematic random sampling technique to select participants at regular intervals (that is, for every 50th house a married male respondent was selected in both communities) from homogenous groups within the population.

The sampling procedure for the qualitative component

The study employed a purposive sampling technique using a semi-structured interview guide to collect data from selected key informants and interviewed participants from health facilities and various community groups both rural Mpape and urban Gwarinpa communities.

Data Collection Technique

Quantitative data collection technique

A structured interview-assisted household questionnaire was used for this study, the questionnaire consists of two sections; A and B. Section A consists of questions that were used to elicit socio-demographic characteristics information of the study participants, while section B will consist of the statement seeking information on their the awareness of men on the various RHS, factors that hinders

male participation in RHS which are family planning, maternal health, child health and prevention of STIs, to assess whether men are willing to participate in women's RH, to assess if men's involvement in women SRH would affect them positively in exercising their SRH rights.

Qualitative data collection technique

A qualitative interview guide with open-ended questions was used to collect data from selected in-depth interview participants from healthcare facilities and various community groups in both rural Mpape and urban Gwarinpa communities. Health care providers, married women with at least one child from various health care facilities and community groups in both communities were interviewed on their knowledge of the importance of male involvement and responsibilities regarding sexual and reproductive health services. All interviews were audio-recorded and field records were taken for all participants' responses.

Data Collection

Data were collected from both the Gwarinpa and Mpape communities. Both qualitative and quantitative methods were used for data collection. A Qualitative in-depth interview guide which was developed by the researcher was used to collect information and the questions were modified and used in the quantitative (questionnaire) data collection tool.

Secondary data were obtained from published documents, articles, and books. These data were collected from sources such as Nigeria Demographic and Health Surveys (NDHS), existing reports and other relevant materials. The sources also included internet sources and other published literature, academic journals and resources were also utilized.

Data Analysis

The quantitative data generated was analyzed using the Statistical Package for Social Sciences (SPSS) Version 21. Using descriptive statistics such as frequency, percentage, and inferential Statistics (such as comparing the mean between the two groups) to answer the research questions. Cross tabulation was done to obtain Pearson Chi-square value for testing the hypothesis at 0.05 level of significance. while qualitative variables were transcribed, coded and grouped according to themes that address the research questions which were presented in a narrative form. The difference in the willingness of men to participate in their spouses' sexual and reproductive health activities in the two communities was compared using paired t-test and supported using chi-square which indicated both positive and negative willingness and its p-value was used to determine both communities' willingness to accompany their wife in receiving SRHS which was also confirmed using the qualitative responses in both communities.

Ethical Considerations

Ethical clearance for the study was obtained from the Federal Capital Territory Health Research Ethics Committee, Abuja. The study was conducted abiding by all the standard ethical guidelines. Written informed consent was obtained from all respondents before the commencement of the study including administering questionnaires. The anonymity of the respondents and confidentiality of the data volunteered were upheld throughout the study. The data collected was used only for research purposes. The questionnaires were kept safely in a locked cupboard. Data entered on the computer was protected and accessible to the researcher and data entry clerk only.

RESULTS

Descriptive Characteristics

This was a comparative cross-sectional study design using a mixed method of data collection comprised of a total of 516 married male participants for quantitative analysis and 50 purposefully selected participants from health care providers. Community leaders such as religious group leaders, village heads (counselors), youth associations, occupational groups tribal associations and married women with at least one child for the qualitative analysis. The results are presented below (Tables 1-4):

The result of Table 1 above shows the socio-demographic characteristics of respondents. From the result above 2 (0.5%) of the total respondent are within the age group of 15-24 years, 32(7.4%) of the total respondent are within the age bracket 55-64 years, 88 (20.4%) of the total respondent are within the age bracket 45-54 years, 136 (31.6%) of the total respondent are within the age bracket 25-34years and the highest respondent which is 168 (39.0%) are aged 35-45 years. The Chi-squared value is 15.176 and $P < 0.05$ rejects the null hypothesis. Therefore, we conclude that there is a significant difference in the age group of respondents concerning residence.

Socio-demographic characteristics of the study participants

The result of marital status in Table 1 above shows that 2 (0.5%) of the respondents are separated, 24 (5.6%) of the respondents are single and 404 (94%) of the total respondents are married. The chi-squared result shows that there is a significant difference in the marital status of respondents based on location with $P < 0.05$ rejecting the null hypothesis of no significant difference.

The result of the educational level of the respondents in Table 1 reveals that 5 (1.2%) of the total respondents are primary school leavers, 9 (2.2%) of the total respondents have no formal education, 88 (21.2%) of the total respondent are a secondary school certificate holder and 313 (75.4%) of the total respondent attain tertiary

Table 1. Socio-demographic characteristics of male respondents

Study Communities					
Variables	Mpape n= 258 n (%)	Gwarinpa n=258 n (%)	Total n=516 n (%)	Chi Square	p-value
Age category (Years)					
15 - 19	0 (0.0%)	1 (0.4%)	1 (0.5%)		
20 - 24	0 (0.0%)	1 (0.4%)	1 (0.5%)		
25 - 29	18 (8.78%)	27 (12.2%)	45 (10.5%)		
30 - 34	25 (12.1%)	66 (29.8%)	91 (21.3%)		
35 - 39	36 (17.56%)	42 (19.0%)	78 (18.3%)		
40 - 44	31 (15.1%)	59 (26.6%)	90 (21.1%)	15.176	0.010
45 - 49	25 (12.1%)	18 (8.1%)	43 (10.0%)		
50 - 54	22 (10.1%)	23 (10.4%)	45 (10.5%)		
55 - 59	8 (3.9%)	17 (7.69%)	25 (5.86%)		
60 - 64	5 (2.4%)	2 (0.9%)	7 (1.64%)		
Study Communities					
Variables	Mpape n= 258(%)	Gwarinpa n=258 (%)	Total n= 516(%)	Chi Square	p-value
Number of children					
0 - 4	159 (91.9%)	218 (87.2%)	377 (89.1%)	4.787	0.91
Greater than 5	14 (8.1%)	32 (12.8%)	46 (10.9%)		
Family type					
Monogamous	147 (84.5%)	214 (83.9%)	361 (84.1%)	0.024	0.876
Polygamous	27 (15.5%)	41 (16.1%)	68 (15.9%)		

education. The chi-squared result shows that there is a significant difference in the educational level of respondents based on location with $P < 0.05$ rejecting the null hypothesis of no significant difference.

The employment status result shows that 21 (5.1%) of the total respondents are unemployed, and 392 (94.9%) are employed. The Chi-squared result shows that there is a significant difference in the employment status of respondents based on location (Rural and Urban) with $P < 0.05$ rejecting the null hypothesis of no significant difference.

The demographic result based on religion shows that none of the respondents are traditional worshipers, 156 (35.8%) of the total respondents are Muslim and 280 (64.2%) are Christian. The Chi-squared result shows that there is no significant difference in the religion of respondents based on location (Rural and Urban) with $P > 0.05$ of accepting the null hypothesis of no significant difference.

The demographic result based on the number of children in Table 1 above reveals that 46 (10.9%) of the total respondents have children greater than five (5), and 377 (89.0%) of the total respondents have between 0 and 4 children. The Chi-squared result shows that there is no significant difference in the number of children of respondents based on location (Rural and Urban) with $P > 0.05$ of accepting the null hypothesis of no significant

difference.

The demographic result based on family type in Table 1 reveals that 68 (15.9%) of the total respondents are polygamous and 361 (84.1%) of the total respondents are monogamous. The Chi-squared result shows that there is no significant difference in the family type of respondents based on location (Rural and Urban) with $P > 0.05$ of accepting the null hypothesis of no significant difference.

Willingness of men to be involved in women's sexual and reproductive health

The result in Table 2 above is the comparison of the positive and negative willingness of men to participate in their wife's reproductive health in the two communities. The results show a statistically significant difference in the willingness of the two communities with $p < 0.05$ rejecting the null hypothesis. Therefore, we conclude that the responses are different in the two communities. The result shows that negative willingness is more in the rural area (Mpape) with 49 (11.3%) of the total response while the urban community (Gwarinpa) has 24 (5.5%) of the total population not willing to accompany their wives to receive SRHS.

These results were confirmed in the qualitative analysis based on the views from respondents from both communities when asked about men's willingness to be

Table 2. Comparison of the willingness of men to be involved in women's SRH between Mpape and Gwarinpa communities among the study groups.

Study Communities	Positive n(%)	Negative n(%)	Total	Chi-Square	p-value
Mpape	123 (28.3%)	49 (11.3%)	172 (39.5%)	64.054	0.000
Gwarinpa	239 (54.9%)	24 (5.5%)	263 (60.5%)		

Table 3. Comparison of the willingness of male to accompany their wife to access SRHS between Mpape and Gwarinpa communities

Sexual and reproductive health services	Mpape n (%)	Gwarinpa n(%)	Total n (%)	Chi-square	p-value
Family Planning	25 (34.2%)	48 (65.8%)	73 (100%)	1.190	0.275
VCT	2 (66.7%)	1 (33.3%)	3 (100%)	0.898	0.343
PMTCT	5 (45.5%)	6 (54.5%)	11 (100%)	0.142	0.706
Delivery Services	60 (43.5%)	78 (56.5%)	138 (100%)	2.471	0.116
STIs/STDs	3 (27.3%)	8 (72.7%)	11 (100%)	0.756	0.384
Antenatal Care	3 (25.0%)	9 (75.0%)	12 (100%)	1.150	0.284
Reproductive cancers	5 (22.7%)	17 (77.3%)	22 (100%)	2.865	0.091
Postnatal care	1 (12.5%)	7 (87.5%)	8 (100%)	2.560	0.110
Abortion	0 (0%)	0 (0%)	0 (100%)	0	1
Fertility	18 (40.0%)	33 (60.0%)	51 (100%)	2.287	0.470

Table 4. Comparison of men's involvement in women's SRH between Mpape and Gwarinpa communities among the study groups

Study communities	Positive (Yes) n (%)	Negative (No) n (%)	Total n (%)	Chi-square	p-value
Mpape	141 (36.1%)	28 (4.2%)	169 (40.3%)	44.386	0.0000
Gwarinpa	250 (63.9%)	0 (0%)	250 (59.7%)		

involved in women's SRH, most informants in both communities expressed that "*many husbands would be interested and willing in participating in their spouse's reproductive health services if they were invited to do so*". When asked about what reproductive health service men in their community are likely to be involved in, most informants from both communities agreed to antenatal clinics, delivery clinics, FP, circumcision of their male child, immunization of their children and the use of condoms by men. These views are in support of the result in Table 2 as their responses to involvement were delivery service, fertility services, family planning (the use of condoms) and Antenatal care (ANC).

The result in Table 3 shows that SRHS males are willing to help their partner access care. In order of decrease, they are delivery (138 of the total respondents), family planning (73 of the total respondents), Fertility (51 of the total respondents), reproductive cancer (22 out of the total respondents), antenatal care (12 out of the total respondents), STIs/STDs (11 out of the total respondents), PMTCT [full meaning of abbreviation?] (11 out of the total respondents), postnatal care (8 out of the total respondents), VCT [full meaning of abbreviation?] (3 out of the total respondents) and the least is Abortion with none of the respondent willing to accompany their partner to access. However, all these services are not statistically

significantly different from each other between the two communities with $p > 0.05$ as displayed.

Comparison of men's involvement in women's sexual and reproductive health (SRH) between rural and urban communities in Nigeria

The result in Table 4. above displays the respondents' view on how men's involvement in their wives' reproductive health impacts their wives in exercising their sexual reproductive health rights. The entire respondent 250 (63.9%) from the urban community (Gwarinpa) believes that their involvement in their wife's reproductive health services will cause their wife to exercise their sexual reproductive health rights. The majority of the respondents [males?] (141 of 169) from the rural community (Mpape) believe that their involvement in their wives' reproductive health services will cause their wives to exercise their sexual reproductive health rights while the remaining 28 respondents (4.2% of the total respondent to the question) believes that their involvement in their wives' reproductive health services does not cause their wife to exercise their sexual reproductive health rights. The $p < 0.05$ shows that there is a statistically significant difference in involvement based on the two communities.

These results were confirmed in the qualitative analysis

based on the views from respondents from both communities when asked about men's effect and roles in women exercising their sexual and reproductive health rights, most informants in both communities expressed their opinion on the importance of having men participate actively in their spouses attaining an optimal sexual and reproductive health by proffering ways in which their involvement can be beneficial to the entire family as a whole.

Thus, a male Gynaecologist at Gwarinpa General Hospital said:

"Good relationship between the spouses, confidence and love between the couples, will improve women's SRH and help in promoting a healthy community"

Another respondent (a woman (CWO leader in Gwarimpa) opined that;

"Male involvement can help in child spacing which can increase productivity in women's places of work and also prevent infections"

In comparison with the responses from the Gwarimpa community;

Another respondent (a religious Muslim Cleric in Mpape) opined that;

"Male involvement can reduce issues arising from family planning failure, the husbands will be aware and this can help in better communication, reliability and good sexual health"

Another respondent Nurse in Mpape opined that:

"Male involvement can enhance proper child spacing, it will reduce population boom, reduce insecurity and improve life expectancy"

Another respondent community leader (Man) Gwarinpa opined that;

"Male involvement can cause men to respect their partners and reduce horrendous behaviour that can endanger wives for example through raping their partner, reduce STIs and reduce the rate of which women get pregnant"

Others also added that *"men's involvement can reduce maternal death through men's support of their wives"*. Hence, the qualitative review indicated that all the respondent from the two communities feels men's involvement in their wives' SRHS will affect their wives positively as out of the 50 respondents, 31 are from rural communities and 19 from the urban community are in favour of man participation in helping their spouses exercise their reproductive health right.

DISCUSSIONS

This comparative study of male involvement in sexual and reproductive health services between rural Mpape and urban Gwarinpa communities was carried out in the Federal Capital Territory, (FCT). This was a comparative cross-sectional study using a mixed method design which comprised a total of 516 married male participants for quantitative analysis and 50 purposefully selected participants.

The global low ranking of the Nigerian healthcare system

occasioned by poor health financing is a major drawback to access to healthcare services including sexual and reproductive healthcare services (Glasier et al., 2006). About 41.6% of the male gender from this study showed willingness to access SRHS. It is even worse in rural communities where the prevalence was 28.3%. Although there is a paucity of data on male gender participation in SRHS from previous studies, however, we find more data on male involvement in delivery services, family planning, fertility clinics and oncology clinics. About 34.2%-65.8% of male respondents were willing to be involved in family planning between rural and urban communities. However, in high-income countries like the U.S.A., 55-56% male involvement in family planning is recorded, a prevalence higher than 8.6% recorded in Ethiopia (Jessica et al., 2016). In a closely related study in Nigeria, it was the female gender sub-populations that were used to assess the rate of engagement of their male partners in family planning where about 37% opined of their male spouses' likelihood of involvement in family planning (Jessica et al., 2016).

In investigating the comparison of the communities' respondents' view on how men's involvement in their wives' reproductive health can affect their wives exercising their sexual reproductive health rights, the result showed that in the urban Gwarinpa community, all respondents believed that their involvement will cause their wives to exercise their SRH rights while in rural Mpape community, majority of the respondent 141 out of 169 believes that their involvement will cause a better outcome in their wife assess to reproductive health services while 4.2% of the total respondent believes that their involvement in their wife reproductive health services does not cause their wife to exercise her sexual reproductive health rights. On the other hand, the in-depth interview supported the study indicating that men's involvement will help in improving their partners in exercising their SRH rights more effectively.

The in-depth review of respondents suggested ways in which men's involvement can help women exercise their SRH rights. A woman respondent opined that *"Male involvement can help in child spacing which can increase productivity in women's places of work and also prevent infections"* Another respondent man also agreed by stating that *"Male involvement can cause men to respect their partners and reduce horrendous behavior that can endanger wives for example through raping their partner, reduce STIs and reduce the rate of which women get pregnant."*

The willingness of men to participate in their wives' SRHS between the two communities indicated that men in rural communities are less willing to accompany their partners to receive SRHS as compared to men in the Gwarimpa community whereas both communities had similar views on the type of SRHS that both are willing to accompany their partners which are FP, fertility clinic and oncology clinic and less involvement in antenatal clinic, abortion, VCT, postnatal care, PMTCT and STIs visits. The comparison of the impact between men's involvement in women's SRH and women's exercise of their SRH rights in the two communities indicated that the two communities believed

that their involvement would cause their wife to exercise her SRH rights but compared to men in Gwarimpa which indicated 100% response, 4.2% of men in Mpape community still had doubt that their involvement in their spouses SRHS does not cause their wife to exercise her sexual reproductive health. There is therefore need to create awareness and legalize the participatory role of the male gender in SRHS in Nigeria. These will play a vital role in changing their narratives, hence promoting equitable gender contribution in SRHS in Nigeria.

CONCLUSION

The study has explored the men's involvement in women's SRH through the demonstration of socio-demographic variables of importance in SRHS, the willingness of men to involve in women's SRH and to support their access to SRHS such as Family Planning, ANC, Delivery Services, Postnatal care clinic, Prevention of Mother to Child Transmission clinic (PMCT), Voluntary Counselling & Testing (VCT), STIs/STD clinic, Reproductive cancer clinics, Fertility clinic and abortion clinic. Other factors explored include the participation prevalences of men in women's SRH in Nigerian settings and comparison of men's involvement in women's SRH between an urban (Gwarimpa) and rural (Mpape) community settings. The theoretical framework of this study was derived from health believe model. The outcome of this study was to educate the male gender on his role in the optimal care of the mother and child via access to SRHS; to scale up positive attitudes among men towards improving the health indices of the mother and child and to engage them actively towards participating and supporting the mother and child. The hallmark of men's involvement in women's SRH include reduced total fertility rate, reduced maternal-morbidity/mortality rate, reduced infant mortality rate, reduced frequency of pregnancy, reduced STI/STD/HIV infections, reduced unplanned pregnancy/induced abortion, reduced high-risk pregnancy, improved MCH indices and improved GDP per capita of the nation.

Although this study has some limitations especially with respect to direct involvement of men in this study, future studies will proffer possible ways to strengthen these weaknesses.

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of the paper.

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