

## ORIGINAL RESEARCH

# Modern Family planning practices, male involvement and unmet fertility needs among rural and urban Nigerian women: Findings from a mixed method study in the Southwest Region

*Ifeoma P. Okafor, Mobolanle R. Balogun, Adekemi O. Sekoni, Duro C. Dolapo*

---

### Introduction

About a third of Nigeria's huge population is made up of women of child bearing age.<sup>1</sup> Given its high birth rate,<sup>2</sup> the population can only continue increasing astronomically. In fact, Nigeria is the only African country listed alongside five Indian and Asian countries (Bangladesh, China, India, Indonesia, Nigeria and Pakistan), that contribute hugely to annual global births.<sup>3</sup> Our Maternal Mortality Ratio (MMR) is also very high.<sup>4</sup> Following similar trends in sub-Saharan countries, abortion-related deaths are also high.<sup>6,7,8</sup>

---

Ifeoma P. Okafor, MBBS, MPH

Title: Dr

Affiliation: Department of Community Health & Primary Care, College of Medicine, University of Lagos, Nigeria  
Email: ipokafor@cmul.edu.ng

Mobolanle R. Balogun, MBBS, MPH

Title: Dr

Affiliation: Department of Community Health & Primary Care, College of Medicine, University of Lagos, Nigeria  
Email: mbalogun@cmul.edu.ng

Adekemi O. Sekoni, MBChB, MPH, PGDHM, MSc (Epid)

Title: Dr

Affiliation: Department of Community Health & Primary Care, College of Medicine, University of Lagos, Nigeria  
Email: aosekoni@cmul.edu.ng

Duro C. Dolapo, MBBS, MPH

Title: Dr

Affiliation: Leverage Consulting Ltd, Road 425, Zone 6, Federal Capital Territory, Abuja, Nigeria  
Email: durodolapo@gmail.com

**Submitted:** 11/28/2106

**Revised:** 5/7/2018

**Accepted:** 5/7/2018

It is estimated that since 2008, 44% of maternal deaths have been averted by contraceptive use. If current unmet Family Planning (FP) needs were addressed there would be a 29% further reduction in maternal deaths.<sup>9</sup> Unfortunately, unsafe abortion is increasing in developing countries.<sup>10</sup> It is common among both rural and urban dwellers, mostly procured illegally, and many women become hospitalized or die from complications.<sup>11,12,13</sup>

Several African countries are making efforts to change the laws so as to reduce maternal mortality.<sup>14</sup> Physicians and policy makers in Nigeria would rather promote pre-marital abstinence and use of contraceptives as effective means of reducing maternal mortality.<sup>15,16</sup> Other countries, such as Cambodia, have significantly reduced maternal mortality through poverty reduction and improved primary education, especially for girls. Nonetheless, lack of access to FP remains a major challenge.<sup>17</sup> This further buttresses the importance of FP.

There is a relationship between contraceptive use, total fertility rate and abortion.<sup>18,19</sup> Contraceptive use is key in controlling population growth especially in countries with high growth rates. Use of modern contraceptives also impacts on child mortality rates as it helps women to appropriately space birth intervals. FP doesn't just prevent maternal death, it improves the quality of life of women. It becomes obvious then, that women should have access to these contraceptives and use them.

The United Nations Population Division (UNPD) estimated that in 2007, 61.7% of women that were either married or in cohabiting unions in developing countries used a contraceptive method. However,

11.2% of married women had an identified unmet need for family planning; 22.2% in Africa and 24.2% in Sub-Saharan Africa.<sup>20</sup>

Nigeria's population is becoming increasingly urban (50.3%),<sup>2</sup> suggesting potentially better access to healthcare. The Total Fertility Rate (TFR) is still high at 5.5 and rural areas have a higher TFR than urban areas.<sup>21</sup> In a recent national survey in Nigeria, 13% of the females and 18% of the males were using some FP method but for modern methods (barrier, hormonal methods, Intra uterine devices, sterilization), the proportion was 10% for females and 16% for males.<sup>22</sup> Further analysis of the results from the survey showed marked regional and inter-state variations as well as rural-urban disparities.<sup>23</sup> Other African countries reported higher use of FP in rural as opposed to urban areas.<sup>24,25</sup>

Several factors such as area of residence (rural vs. urban), age, education, occupation, parity and spousal approval have been found to influence contraceptive use.<sup>25,26,27</sup> There is usually a difference between the desired and actual number of children (unmet fertility needs)<sup>28,29</sup> with higher figures in the rural areas.<sup>29</sup> Male child preference, health and religious reasons, as well as socio-economic factors are reasons which have been given for desired and actual number of children.<sup>30,31</sup>

Men in less developed countries are generally against modern family planning.<sup>32,33</sup> However, including them in FP programs has positive effects in improving maternal health.<sup>34</sup> Men usually desire more children and in addition, their social, cultural and religious background may foster their lack of involvement in FP programs.<sup>35,36</sup> Male involvement may come in the form of encouragement or accompanying their wives to the FP center, especially those who have some knowledge about FP or are really interested in limiting family size.<sup>37</sup> The Nigerian Primary Health Care Free Maternal Health Package now covers family planning services and commodities. The National Health Insurance Scheme has been revised to include family planning commodities. These and other on-going initiatives are directed at improving uptake of modern family planning methods as a means of improving maternal health and a tool for nation building.

This study was conducted to examine predictors of modern FP use among rural and urban women in Lagos State, Nigeria in the context of social, demographic and other variables. It also set out to examine the role of men in family planning use and compare unmet fertility needs in both areas.

## **Methodology**

### *Study area and setting*

This community-based, cross-sectional, comparative study was done in Lagos. Lagos is a densely populated state in Nigeria with a population of over 10 million. Women of child bearing age constitute almost one third of this population.<sup>1</sup> There are 20 Local Government Areas (LGAs) in Lagos State, 16 urban and 4 rural. The study was conducted in 1 urban (Surulere) and 1 rural (Ibeju-Lekki) LGA. As at the time of study, the selected urban LGA had 6 primary health care centers (PHCs), 1 secondary health institution and numerous private health facilities, some of which offer FP services. The rural LGA had 13 PHCs and 7 health posts, 1 secondary health institution and about 20 private health facilities. Traditional Birth Attendants (TBAs) and other alternative healthcare providers are also present in both areas.

### *Sampling*

The study was done among women of child bearing age (15-45 years) who resided in the study areas and whose last confinement was not more than 2 years prior to the interview. An initial sample size of 554 was calculated for a power of 80% and 5% significance level. The figure was increased by about 10% for non-responders and rounded to 600; 300 urban and 300 rural. The questionnaire was pre-tested among similar women in different LGAs. A multistage sampling technique was used to select the respondents for the study. In the first stage, a simple random sampling method (ballot) was used to select one urban and one rural LGA. In the 2<sup>nd</sup> stage, 5 wards each were selected from the 23 wards (urban) and 20 (rural) by simple random sampling method (ballot). In stage 3, 1 street was chosen from each ward by simple ballot. Subsequently (4<sup>th</sup> stage), simple random sampling technique was used to determine the first house to be visited on the street

and then consecutive houses thereafter. If more than one eligible household in a house/compound, simple ballot was used to select the household to be included in the study. The final stage involved selection of respondents. Only one eligible respondent was interviewed in each house. If more than 1 were present, balloting was done to select only one. More streets were then selected by balloting until desired sample size was met.

In addition to the house-to-house survey, six focus group discussions (FGDs) were conducted among purposively selected women of child bearing age in both rural and urban settings. The FGD participants were selected with the assistance of women leaders in the community (using the criteria for the quantitative study) and invited for the FGDs.

#### *Data collection*

Quantitative data collection was done by face to face interview using the pre-tested questionnaires. They were administered by trained, female interviewers with a minimum of post-secondary education. FGDs were done with the aid of semi-structured interview guide. Each FGD comprised 7-9 discussants, principal investigators and note taker. Each session lasted about one hour. They were carried out mainly to explore other possible determinants and deterrents of modern FP use, issues on family size and male involvement in family planning. Discussions were tape recorded in addition to notes taken during the discussion.

#### *Data analysis*

The quantitative data was analyzed with Epi-info 2008 version 3.5.1. Descriptive and inferential statistics were carried out. Statistically significant variables in bivariate analysis were entered into multivariate logistic regression model for the final model. Qualitative data was translated to English as necessary and transcribed. Content analysis was employed and major themes which emerged formed the basis of reporting.

#### *Ethical considerations*

Approval was obtained from Health Research and Ethics Committee of the Lagos University Teaching

Hospital (LUTH). Formal consent was obtained from each study participant.

#### *Results*

The mean age was  $30.9 \pm 5.9$  years in the rural area and  $31.4 \pm 6.1$  years in the urban area (Student's t statistic = 1.08,  $p = 0.280$ ). A majority, of the women in both areas were married or co-habiting. Rural women had more children than the urban women. Only a few women in both groups had no formal education but the urban women were significantly more educated ( $p=0.001$ ). Sixty-five (21.7%) of the rural women were unemployed, versus 76 (32.0%) of urban women. Similarly, most spouses in both areas had some formal education. Eighty-four percent of women in the rural area and 86% of them in the urban area were aware of modern family planning methods. Knowledge of modern family planning methods was similar in both areas. The most common modern method mentioned by urban women was injectable 192 (64.0%) while contraceptive tablets 181(60.33%) and injectable 180 (60.0%) were most mentioned by the rural women. High rates of illegal abortion were also recorded among both groups of women; more than a quarter of them (26.7%) were performed by patent medicine dealers in the rural area. (Table 1) They are known as "patent medicine vendors" or "chemists" in these areas. They are medicine retailers who usually operate within the community.

Similar proportions of women in each group were current users of modern FP methods but significantly higher proportions of urban spouses approved of it. (Table 2) The prevalence of utilization of modern FP by couples (respondent and spouse combined) was 52% (rural) and 56.3% (urban) with no statistically significant difference ( $\chi^2=1.13$ ,  $p=0.287$ ). (Fig 1) A significantly higher proportion of urban spouses were using condoms. The decision to use modern FP in most cases was taken jointly. (Table 2) The commonest modern FP method being used by both groups was injectable. A significantly higher proportion of urban spouses approved the use of modern FP. (Table 2)

The highest proportion of both rural (62.2%) and urban (44.1%) had no reason for non-use. In the urban area, as much as 17.6% of them were afraid of the side effects while in the rural area, 12.2% of them

felt that they did not need it. One in ten urban women and approximately one in nine of the rural women cited non-approval by spouse/partner as their reason for not using modern FP.

In the rural area, the association between maternal age and use of modern FP was significant. Women between 41-45 years had the highest rate of modern FP use in the rural area while those between 21-25 yrs had the lowest rate. (Table 3).

Married women had the highest rate of use (58.1%). In the rural area, women with higher parity had significantly higher rates of utilization of modern FP methods ( $p=0.003$ ). In the urban area, women with 3 children constituted the highest proportion of users (72.4%) (Table 3).

Among rural women, higher level of formal education increased the use of modern FP methods with a significant difference ( $p=0.023$ ). In the urban area, women with no formal education had the lowest rate of utilization of modern FP methods (30.8%) with no significant differences. (Table 4) In the rural area, the lowest proportion of women who were using modern FP methods was among unemployed women (35.4%) with a significant difference. In the urban area, there was no significant association between maternal occupation and use of modern FP methods but the unemployed women also had the lowest rate of use (Table 4).

In the rural area, women whose spouses had no formal education had the lowest proportion of modern FP use (18.8%) with a significant difference. In the rural area, the least proportion of modern FP users was among unemployed spouses with a significant difference (Table 4).

In the rural population, the predictors of use of modern family planning were being a Christian, being employed, spouse having formal education and higher number of children. Muslims have the odds of a lower use of modern FP, 2 times lower (OR reciprocal) as Christians (OR=0.57, 95% CI=0.33-0.97). Unskilled workers were 5 times more likely to use modern family planning than the unemployed (OR=5.03, 95% CI=1.63-15.51). Using 'no formal education' as a reference category, respondents whose spouses had primary education were 8 times more likely to use modern family planning than those with no formal education (OR=8.22, 95% CI=1.86 to

36.31). As the number of children increased by 1, the respondents were 1.4 times more likely to use modern family planning (OR=1.43, 95% CI=1.16-1.76) (Table 5).

In the urban population, the predictor of use of modern family planning was having more children. Using 1 child as a reference category, women with 4 children have the odds of better use of modern family planning 3 times as high as those with 1 child (OR=2.70, 95% CI=1.17-6.23) (Table 5).

Having ever used FP significantly improved current use of modern FP in both rural and urban areas. Rural women who did not desire to have more children were significantly more likely to be current users of modern FP method ( $p<0.001$ ).

### Results of FGDs

In the rural area, 25 discussants between 20 and 42 years participated in the FGDs and about 30% of them had no formal education. In the urban area, there was a total of 23 discussants ranging from 23 to 45 years. About 35% of them had no formal education.

#### *Family size*

For both rural and urban women, the ideal family size was higher than the desired number of children. In the urban area, the ideal should be 4, but most desired 3 children. In the rural area, majority of the women felt that the ideal should be 5 or 6 children. Some of them felt that 10 children are not too many for a family. For their personal choices, most of them reported that they will settle for 4 children. Only few mentioned 3 or 2 children. The major reason cited by most of them in the two areas is the poor economic situation in the country especially high cost of education.

Surprisingly, one of the urban women would prefer many children, 'the more the merrier.' "Ideally, a family should have 4 children, it's not too big or too small. I want much more than that like 7 or 8 children. This is because I'm from a large family, we tend to be happier, we do things together, and life is more fun. Our parents are enjoying us." (32 years urban)

Preference for a particular sex also determines family size. Few women in the rural area disclosed

that they would have more than they desired because they don't have a particular sex yet (male usually), but for one woman, it was quite the opposite;

*“For me I would like to have 5 children so that I can instruct them in a good way and also have enough money to send them to school; but I have 4 boys already and I'm looking for a girl child. By God's grace, I will have a girl who will be my 5<sup>th</sup> child.”* (37 years rural)

#### *Knowledge and use of family planning*

The FP method most commonly mentioned to the rural women was injectable followed closely by the 'ring' (worn on the finger) and 'aseje' (a traditional concoction). Contraceptive tablets and IUCD were also commonly mentioned. In the urban area, the most commonly mentioned FP method was condom followed by contraceptive tablets, injectable and IUCD. Only very few of them in both areas did not know any FP method. In the rural area, the 'ring' and 'aseje' are procured from the TBA and are believed to be highly effective for 'highly fertile' women.

Few of the urban women who use modern FP use it to space their children whereas many of them use it to limit their family size. For spacing, they rely on the natural methods. The commonly cited reason for non-use is the fear of side effects like bleeding, weight gain and most importantly, failure to achieve pregnancy when desired. In the rural area, the same observation was made. Although many women were using modern FP methods, some others were non-users because of fear of side effects. According to one of the urban women:

*“In my community, women are scared of the modern FP methods. They believe that if you use modern FP, you will not be able to get pregnant again. They go for it when they have finished having all their children. If you use it for the purpose of spacing, you may not be lucky enough to get pregnant again.”* (26 years urban)

Women in the rural area complained that methods such as injectables do 'unnecessary work' moreover, some of them don't like taking injections and if they take tablets, some husbands will suspect that they

want to commit abortion. The side effects commonly cited were bleeding and irregular menstruation. One of them reported:

*“Non-use of modern FP depends on individual. Each woman uses what suits her.”* (26 years rural)

Another woman said, *“For those using the traditional methods, it is easy for them, they just wear the ring and they won't get pregnant. If it is the 'Ibile' (cooked concoction), if a women eats it, she won't get pregnant, unless they remove the ring or stop taking the concoctions.”* (32 years rural)

Many women in both areas agreed that most men don't like any FP method. Some of them don't like their wives using modern FP because they want a lot of children. However, some of them support their wives:

*“For those who use it, (i.e. modern FP), their husbands support them, most men don't like using condom so they allow their wives to use modern FP. Some men don't support their wives to use it.”* (34 years urban)

Some men personally take their wives to the health facility for modern FP to avoid unplanned pregnancy. Many of the rural women were of the opinion that generally, men show their support for the use of modern FP method by giving their wives money for it. They do not want many children so that they can cater for the ones they already have but one of the participants had a contrary observation;

*“Most men don't support their wives to do modern FP. The women who are using it do so secretly. The men don't mind if their wives get pregnant every year so the women use it secretly.”* (26 years rural)

Few of the women shared this opinion. They reported that it is the women who conclude that they have had enough children and thus decide to go for modern FP.

Educational level of the spouse was another important factor mentioned as being a determinant in the use or non-use of modern FP in the urban area.

Some men will agree only to use of natural methods. *“With the educated men, if the couple discusses the use of modern FP, the man most likely will approve because he is educated, but if he is not educated, he will not understand. He will tell the wife to continue giving birth that God will take care of the children.”* (32 years urban).

## Discussion

Respondents’ awareness of FP methods in both rural and urban areas was high and their use of FP is much higher than the national average. Other similar studies conducted in rural communities in Nigeria and other parts of Africa also reported high levels of awareness.<sup>38,39,40,41</sup> In concordance, other authors noted that most women were aware of modern contraceptives but adoption rates were low.<sup>42,43,44,45</sup>

A majority of the women knew at least one modern FP method, thus reflecting the improvement in knowledge that has been observed over the years in Nigeria but its use has increased only by two percentage points (among married women) over the past decade.<sup>21</sup> The poor knowledge of tubal ligation among both groups may reflect an aversion for terminal contraceptive methods.<sup>42,48,49,50,51,52</sup>

The rural and urban prevalence obtained in this study is much higher than figures from the 2008 NDHS, both National and Southwest Region. It is however the same with the NDHS prevalence rates in Lagos State (41% urban and 48% rural).<sup>23</sup> When combined with condom use by respondents’ spouses/partners, the figures went up to 56% urban and 52% rural. The rural prevalence is similar to figures obtained in a rural population in Zambia (54%).<sup>46</sup> This pattern of a reduced rural-urban difference was also observed in Dawro zone in Ethiopia.<sup>24</sup>

These figures surpass Nigeria’s goal of a 36% contraceptive prevalence rate by 2018<sup>53</sup> and further highlights the state-wide variations. The Federal Government realizes the vital role of family planning in national development and is taking steps towards achieving the unmet need for family planning in the country. At the London summit on family planning, it declared a 300% increment in the financial provision for contraceptive procurement over a four year period.<sup>54</sup>

The Federal Ministry of Health hosted its maiden National Conference on Family Planning in 2010 which was soon followed by another one in 2012. It has also launched the Saving One Million Lives campaign.<sup>54</sup> It is hoped that these interventions will greatly facilitate modern FP uptake in Nigeria in order to achieve the health, population and development goals of the Nation.

The significantly higher prevalence of implant among urban women may be due to cost and the expertise required for insertion. This may be a reflection of the inequitable distribution of health resources which needs to be addressed.

The gap between prevalence of ever use and current use indicate a drop out. Fear of side effects has been cited in some studies as the reason for discontinuation of use.<sup>56,57</sup> In the FGD, the women in the rural area complained that methods such as injectable caused unnecessary side effects. The aversion to using terminal methods may be related to cultural background and the non anti-natalist nature of the National FP policy but in places like rural India, use of terminal methods is common.<sup>59</sup>

This fear of side effects also has other negative implications for modern FP utilization. Both quantitative and qualitative data show that women in both areas would rather use modern contraceptives only to limit family size and not for spacing, mainly due to their perceived fear of side effects. It is possible that many may have obtained wrong information from unreliable sources. This is an area that should be targeted by health educators to dispel myths. Other researchers in other parts of Africa have made similar observations.<sup>42</sup>

It is surprising that married women in the urban area had the lowest proportion of modern FP use with a significant difference. This contradicts the national pattern.<sup>21</sup> It is possible that their spouses did not approve or they were afraid of side effects. In Ethiopia, a higher proportion of urban married women were users and they were also more likely to decide on modern contraceptive use than the rural women.<sup>24</sup> Similar to this study, a study in Mpwapwa Tanzania found that current number of living children was a factor that was significantly associated with current use of modern contraceptives.<sup>42</sup> A majority of the discussants

expressed unmet fertility desires especially in the rural areas. Preference for higher number of children by rural families was also reported in other parts of Africa.<sup>60,61,62,63,64</sup> Analysis of pooled data from several NDHSs showed that more than two-thirds of the sample had unmet fertility desires; more than half (52.4%) had fewer children than desired while only 18.1% had more than desired. Multivariate analysis showed that low levels of education, poor households, rural residence and previous child death increased risk of unmet fertility desires<sup>28</sup>. In rural Northern Nigeria, uncertainty about child survival and male preference influence decisions on family size.<sup>65</sup> This trend in unmet fertility desires obviously has implications for population control. More education on importance of having smaller families is needed in order to increase contraceptive uptake.<sup>42,58,62,63,64,66,67</sup> Furthermore, none of the discussants mentioned health reasons as the reason for unmet fertility needs. This exposes a knowledge gap among the women. Having many children especially in quick successions will likely take its toll on both mother and child and our already poor maternal and infant health indices will see no improvements. On the other hand, it appears that both rural and urban women appreciate the importance of formal education. Almost all of them cited poor economic conditions which limits their capability to provide formal education for their children as the main reason to curtail family size.

The significance of female empowerment and education is shown in this study. This compares with other rural studies where a significant association between higher level of education and use of modern family planning method.<sup>56</sup> Some authors have argued that education provides new outlook and freedom from traditions and further that highly educated women have more decision-making power within marriage, including decisions about reproductive health.<sup>42,68,69,70,71,72</sup>

Other researchers in Nigeria and other parts of Africa have found that male approval and decision making are very important in the utilization of FP services.<sup>42,55,56,73,74</sup> Here, spousal approval of use of family planning method was significantly higher in the urban area compared to rural but this did not reflect in the use of modern FP methods by the

spouses themselves as more rural than urban spouses were users. This indicates that spousal approval may not necessarily translate to use by the same spouse in the studied population.<sup>42,70,75,76,77,78,79,80</sup> Moreover, if the woman is using modern FP, then there may not be any need for the man to use. In 2009, the World Health Organization highlighted the non-involvement of men in FP interventions as a drawback to the success of FP activities<sup>81</sup> and non-consent of partners to FP methods ranked next to fertility concerns as barriers to FP use.<sup>58</sup> It was noted by one of the urban discussants that the men do not like using condoms and so they willingly consent to use of artificial contraceptives by their wives thus showing some involvement. It has been suggested that there is a need to carry men along in FP campaigns and to educate males on reproductive health issues as early as possible in their formative years.<sup>82</sup>

Despite the attendant health risks, induced abortion as seen among the respondents exposes the unmet need for modern FP. It is even possible that some of them maybe using abortion as a means of FP as was found in Ibadan, Southwest Nigeria.<sup>83</sup> This is against the backdrop of high prevalence of unsafe abortion in Nigeria where abortion is illegal.

## Conclusions

Prevalence of utilization is similar in both urban and rural areas and much higher than the National and regional average. Respondents' socio-demographic and economic factors as well as beliefs determine utilization.

In the rural area, the factors that were significantly associated with higher rate of use were younger age, lower parity, being employed and spouse in employment. Predictors of modern FP use in the rural area were being a Christian, being employed, spouse having formal education while in the urban area, it was having fewer children. For both rural and urban women, ideal family size was higher than the desired number of children. Most men in both areas do not like any FP method but some of them support their wives. Spousal approval for modern family FP use was significantly better in the urban areas.

Rural programs to improve female empowerment and formal education among males should be implemented. FP education programs for males should be implemented in both areas to improve male involvement. Well-designed Behavioral Change Communication (BCC) should also be targeted at women who have no reason for non-use to convince them on the benefits to the individual, community and the nation. More research is needed to further understand the different dimensions of contraceptive use in Nigeria.

## References

1. National Population Commission (NPC) Nigeria and ICF Macro. Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro, 2009.
2. United Nations, The Department of Economic and Social Affairs. World Statistics Pocketbook 2013;V(37):144. New York, United Nations; 2013 [http://www.un.org/ru/publications/pdfs/world%20statistics%20pocketbook%202011\\_en.pdf](http://www.un.org/ru/publications/pdfs/world%20statistics%20pocketbook%202011_en.pdf). Accessed April 6, 2014.
3. International Institute for Sustainable Development (IISD). A summary report of the Third Session of the World Urban Forum. World Urban Forum Bulletin 2006;125(6):1-16.
4. Nigeria Millennium Development Goals 2013 Report. <http://nphcd.org/wp-content/uploads/2014/03/NIGERIA-MDG-2013-REPORT.pdf> Accessed July 23, 2014.
5. Say L, Chou D, Gemmill A, Tuncap O, Moller A-B, Daniels J, et al. Global causes of maternal death: a WHO systematic review. *Lancet Glob Health* 2014;2(6):e323-e333.
6. Dinyain A, Omoniyi-Esan GO, Olaofe O, Sabageh D, Komolafe A, Ojo SO. Autopsy-certified maternal mortality at Ile-Ife Nigeria. *Int J Womens Health* 2014;6:41-6.
7. Akinola OI, Fabamwo AO, Tayo AO, Alokha M, Oshodi YA, Osinubi B. Unsafe abortion and post abortion care: patients profile and perceptions in Lagos, Nigeria. *Research Journal of Medical Sciences* 2010;4(3):170-4.
8. Ezegwui HU, Onoh RC, Ikeako LC, Onyebuchi A, umeora OUI, Ezeonu P, et al. Investigating maternal mortality in a public teaching hospital, Abakaliki, Ebonyi State, Nigeria. *Ann Med Health Sci Res* 2013;3(1):75-80.
9. Ahmed S, Li Q, Tsui AO. Maternal deaths averted by contraceptive use: an analysis of 172 countries. *Lancet* 2012;380(9837):111-25.
10. World Health Organization. Unsafe abortion global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. [http://www.who.int/reproductivehealth/publications/unsafe\\_abortion/9789241501118/en/](http://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241501118/en/) WHO, 2011. Accessed July 22, 2014.
11. Lema VM, Rogo KO, Kamau RK. Induced abortion in Kenya: its determinants and associated factors. *East Afr Med J* 1996;73(3):164-8.
12. Geelhoed DW, Nayembil D, Asare K, van Leeuwen JH, Schagen vRJ. Contraception and induced abortion in rural Ghana. *Trop Med Int Health* 2002;7(8):708-16.
13. Bankole A, Sedgh G, Oye-Adeniran BA, Adewole IF, Hussain R, Singh S. Abortion seeking behaviour among Nigerian women. *J Biosoc Sci* 2008;40(2):247-68.
14. Brookman-Amisssah E, Moyo JB. Abortion law reform in sub-Saharan Africa: no turning back. *Reprod Health Matters* 2004;12(24 Suppl):227-34.
15. Okonta PI, Ebeigbe PN, Sunday-Adeoye I. Liberalization of abortion and reduction of abortion related morbidity and mortality in Nigeria. *Acta Obstet Gynecol Scand* 2010;89(8):1087-90.
16. Okonofua FE, Hamed A, Nzeribe E, Saidu B, Abass T, Adeboye G, et al. Perceptions of policy makers in Nigeria towards unsafe abortion and maternal mortality. *Perspect Sex Reprod Health* 2009;35(4):194-202.
17. Liljestrand J, Sambath MR. Socio-economic improvements and health system strengthening of maternity care are contributing to maternal mortality reduction in Cambodia. *Reprod Health Matters* 2012;20(39):62-72.
18. Requena M. Abortion in Latin America. In: Hall RE, editor. *Abortion in a changing world*. New York: Columbia University Press; 1970.
19. Streatfield PK. Role of abortion in fertility control. *J Health Popul Nutr*. 2002;19(4):265-7.
20. United Nations Population Division DoEaSA. *World contraceptive use 2007 (wallchart)*. New York: United Nations; 2009.
21. National Population Commission [Nigeria] and ICF International. *Nigeria Demographic and Health Survey 2013*. Rockville, Maryland, USA: National Population Commission and ICF International 2014.



22. Federal Ministry of Health. National HIV/AIDS & reproductive health survey (NARHS Plus) 2007. FMOH, Abuja, Nigeria; 2008.
23. UNFPA Nigeria. Family planning analysis: selected demographic and socio-economic variables. UNFPA Nigeria, Abuja; 2010.
24. Bogale B, Wondafrash M, Tilahun T, Girma E. Married women's decision making power on modern contraceptive use in urban and rural southern Ethiopia. *BMC Public Health* 2011;11:342.
25. White JS, Speizer IS. Can family planning bridge the urban-rural divide in Zambia? *BMC Health Serv Res* 2007;7:143.
26. Ejembi CL, Alti-Muazu M, Chirdan O, Ezeh HO, Sheidu S, Dahiru T. Utilization of maternal health services by rural women in Zaria environs, northern Nigeria: has primary health care made a difference? *Journal of Community Medicine and Primary Health Care* 2004;16(2):47-54.
27. Subramanian L, McGrath N, Ndiovu H, Gafos M. Family planning methods among women in a vaginal microbicide feasibility study in rural Kwazulu-Natal, South Africa. *Afr J Reprod Health* 2008;12(2):45-63.
28. Ibisomi L, Gyimah S, Muindi K, Adjei J. Ideal versus actual: the contradiction in number of children born to Nigerian women. *J Biosoc Sci* 2011;43(2):233-45.
29. Matsumoto Y, Yamabe S. Family size preference and factors affecting the fertility rate in Hyogo Japan. *Reprod Health* 2013;10(6).
30. Haider S, Todd C, Ahmadzai M, Rahimi S, Azfar P, Morris JL, et al. Childbearing and contraceptive decision making among Afgan men and women: a qualitative analysis. *Health Care Women Int* 2009;30(10):935-53.
31. Ibisomi LDG. Fertility transition in Nigeria: exploring the role of desired number of children. *African Population Studies* 2008;23(2):207-22.
32. Istik S, Nacar M, Mazicioglu M, Cetinkaya F. Married men's opinions and involvement regarding family planning in rural areas. *Contraception* 2003;67(2):133-7.
33. Adongo PB, Phillips JF, Baynes CD. Addressing men's concerns about reproductive health services and fertility regulation in a rural sahelian setting in northern Ghana: the "Zurugelu Approach". In: Kulczycki I, editor. *Critical issues in reproductive health*. New York: Springer Books; 2013.
34. Karra MV, Stark NN, Wolf J. Male involvement in family planning: a study spanning five generations of Southern India family. *Stud Fam Plann* 1997;10(1):24-34.
35. Adongo PB, Phillips JF, Binka FN. The influence of traditional religion on fertility regulation among the Kassena-Nankana of northern Ghana. *Stud Fam Plann* 1998;10(1):23-40.
36. Matlala SF. Knowledge, attitudes and practices of rural men towards the use of contraceptives in Gasekororo, Limpopo Province, South Africa. *Prof Nurs Today* 2010;10(2):39-44.
37. Adongo PB, Tapsoba P, Phillips JF, Philip T-NT, Stone A, Kuffour E, et al. The role of community-based health planning and services strategy in involving males in the provision of family planning services: a qualitative study in Southern Ghana. *Reprod Health* 2013;10(36).
38. Ndiaye CA, Delaunay V, Adjamagbo A. Knowledge and Use of Contraceptive Methods in Rural Sereer, Senegal. *Sante* 2003;13(1):31-7.
39. Barret J, Buckley C. Constrained Contraceptive Choice: IUD Prevalence in Uzbekistan. *Fam Plann Perspect* 2007;33(2):50-7.
40. Nwankwu I, Obasi OO. Use of Modern Birth Control Methods Among Rural Communities in Imo State, Nigeria. *Afr J Reprod Health* 2008;12(1):101-8.
41. Moronkola OA, Ojediran MM, Amosun A. Reproductive Health Knowledge Beliefs and Determinants of Contraceptive Use Among Women Attending Family Planning Clinics in Ibadan, Nigeria. *Afr Health Sci* 2006;6(3):155-9.
42. Lwelamira J, Mnyamagola G, Msaki MN. Knowledge, Attitude and Practice (KAP) Towards Modern Contraceptives Among Married Women of Reproductive Age in Mpwapwa District, Central Tanzania. *Current Research Journal of Social Sciences* 2012;4(3):235-45.
43. Aryeetey RR, Kotoh AA, Hindin MJ. Knowledge, perceptions and Ever Use of Modern Contraception Among Women in Ga East District Ghana. *African Journal of Reproductive Health* 2010;14(4):27-32.
44. Opoku B, Kwaununu F. Knowledge and Practices of Emergency Contraception Among Ghanian Women. *African Journal of Reproductive Health* 2011;15(2):147-52.
45. Mathe JK, Kasonia KK, Maliro AK. Barriers to Adoption of Family Planning Among Women in Eastern Democratic Republic of Congo. *Afr J Reprod Health* 2011;15(1):69-77.
46. Mubita-Ngoma C, Kadantu CM. Knowledge and Use of Modern Family Planning Methods by Rural Women in Zambia. *Curationis* 2010;33(1):17-22.

47. Oyefara JL. Women Age at First Birth and Knowledge of Family Planning Methods in Yoruba Society, Nigeria. *Journal of Sociological Research* 2012;3(2):249-71.
48. Mahadeen AI, Khalil AO, Hamdan-Mansour AM, Sato T, Imoto A. Knowledge, Attitudes and Practices Towards Family Planning Among Women in the Rural Southern Region of Jordan. *East Mediterr Health J*. 2012;18(6):567-72.
49. Marchant T, Mushi AK, Nathan R, Mukasa O, Abdulla S, Lengeler C, et al. Planning a Family: Priorities and Concerns in Rural Tanzania. *Afr J Reprod Health* 2004;8(2):111-24.
50. Mqhayi M, Smit J, McFadyen M, Beksinka M, Conolly C, Zuma K, et al. Missed Opportunities: Emergency Contraception Utilization by Young South African Women. *Afr J Reprod Health* 2004;8(2):137-44.
51. Fantahun M. Quality of Family Planning Sources in Northwest Ethiopia. *Ethiopian J Health Dev* 2005;19(3):195-202.
52. Kebede Y. Contraceptive Prevalence in Dembia District, NorthWest Ethiopia. *Ethiopian J Health Dev* 2006;20(1):32-8.
53. Nigeria's announcement at the London summit on family planning 2013. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/67328/london-summit-family-planning-commitments.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67328/london-summit-family-planning-commitments.pdf). Accessed July 23, 2014.
54. SOML FRN. Nigeria's saving one million lives initiative (2012-2013). <http://www.everywomaneverychild.org/component/content/article/1-about/437-nigeria-launches-qsaving-one-million-livesq-initiative>. Accessed July 23, 2014.
55. Olugbenga-Bello AI, Abodunrin OL, Adeoni AA. Contraceptive Practices Among Women in Rural Communities in South-Western Nigeria. *Global Journal of Medical Research* 2011 Jul;11(2).
56. Aninyei IR, Onyesom I, Ukuhor HO, Uzuegbu UE, Ofili MI, Anyanwu EB. Knowledge, Attitude to Modern Family Planning Methods in Abraka Communities, Delta State, Nigeria. *East Afr J Public Health* 2008;5(1):10-2.
57. Yoder PS, Mouhamadou G, Momadou K. The Use of Family Planning Methods in Mali. *The How and Why of Taking Action*. ICF Macro 2011.
58. Adeleye OA, Akoria OA, Shuaib ZO, Ogholoh OD. Barriers and Knowledge of Benefits Regarding Family Planning Methods Among Women Attending Antenatal Clinics in a Southern Nigerian Community. *Asian j. med. sci.* 2010;2(4):190-4.
59. Nirmalya M, Gandhari B. Contraceptive methods in rural areas of West Bengal, India. *Sudanese Journal of Public Health* 2011;6(4):164-9.
60. Eyayou Y, Berhane Y, Zerihun L. Socio-Cultural Factors in Decisions Related to Fertility in Remotely Located Communities: The Case of the Suri Ethnic Group. *Ethiopian J Health Dev* 2004;18(3):171-4.
61. Keele JJ, Forste R, Flake DF. Hearing Native Voices: Contraceptive Use in Matemwe Village, East Africa. *Afr J Reprod Health* 2005;9(1):32-41.
62. Duze M, Mohamed ZI. Male Knowledge, Attitudes and Family Planning Practices in Northern Nigeria. *Afr J Reprod Health* 2006;10(3): 53-65.
63. Chipeta eK, Chinweaza W, Kalilani-Phiri. Contraceptive Knowledge, Beliefs and Attitudes in Rural Malawi: Misinformation, Misbelieves and Misperceptions. *Malawi Med J* 2010;22(2):38-41.
64. Avidime SL, Aku-Akai, Mohamed AZ, Adaji S, Shittu O, Ejembi C. Fertility Intentions, Contraceptive Awareness and Contraceptive Use Among Women in Three Communities in Northern Nigeria. *Afr J Reprod Health* 2010;14(3):65-70.
65. Kahansim ML, Hadeejia IS, Sambo MN. A comparative study of factors influencing decisions on desired family size among married men and women in Bokkos, a rural Local Government Area in Plateau State. *Afr J Reprod Health* 2013;17(1):149-57.
66. Diababa Y. Factors Influencing Women's Intention to Limit Child Bearing in Oromia Ethiopia. *Ethiopian J Health Dev* 2008;22(3):28-33.
67. Adiri F, Ibrahim HI, Ajayi V, Sulayman HU, Yajeh MM, Ejembi C. Fertility Behaviour of Men and Women in Three Communities in Kaduna State, Nigeria. *Afr J Reprod Health* 2011;14(3):97-105.
68. Oye-Adeniran BA, Adewole IF, Augustine V, Oladokun UA, Gbadegesin A, Ekanem EE, et al. Community-Based Study of Contraceptive Behaviour in Nigeria. *Afr J Reprod Health* 2006;10(2):90-104.
69. Nwankwo BO, Ogueri E. Influence of Husband's Decision on the Use of Modern Contraceptives Among Rural and Urban Married Women in Imo State Nigeria. *Int J Trop Med* 2006;1(4):140-4.
70. Khan S, Bradley S, Fishel J, Mishra V. Unmet Need and the Demand for Family Planning in Uganda: Further Analysis of the Uganda Demographic and Health Surveys, 1995-2006. *Macro International M D* 2008.
71. Adanu RMK, Seffah JD, Hill AG, Darko R, Duda RB, Anarfi JK. Contraceptive Use by Women in Accra,

- Ghana: Results from the 2003 Accra Women's Health Survey. *Afr J Reprod Health* 2009;13(1):123-33.
72. Mturi A, Joshua K. Falling Fertility and Increase in Use of Contraception in Zimbabwe. *Afr J Reprod Health* 2011;15(2):31.
73. Shah N, Aftab NN, Qadri MH. Awareness and Pattern of Utilizing Family Planning Services Among Women Attending Urban Health Care Centre Azizabad Sukkur. *PaK J Med Sci*. 2008;24(4):550-5.
74. Shahin HA, Shahin HG. Reasons for not Using Family Planning Methods in Eastern Turkey. *Eur J Contracept reprod Health Care* 2003;8:11-6.
75. Dabral S, Malik SL. Demographic Study of Gujjars of Delhi: IV. KAP of Family Planning. *J Hum Ecol* 2004;16(4):231-7.
76. Matthew Z, Brookes M, Stones R, Hossain M. Autonomy and Maternal health Seeking Among Slum Population of Mumbai. *Focus on Gender: Collected Papers on Gender Using DHS Data*. Calverton, M.D.: Macro International Inc; 2005.
77. Amaha H, Fikre E. Influence of Women's Autonomy on Couple's Contraception Use in Jimma Town, Ethiopia. *Ethiopian J Health Dev* 2006;20(3):145-51.
78. Stephenson R, Baschieri A, Clements S, Hennink M, Madise N. Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa. *Am J Publ Health* 2007;97(7):1-7.
79. Shaikh B, Haran D, Hatcher J. Women's Social Position and Health Seeking Behaviours: Is the Health System Accessible and Responsive in Pakistan? *Health Care Women Int* 2008;29(945):1059.
80. Ndaruhuye D, Broekhuis A, Hooimeijer P. Demand and Unmet Need for Means of Family Limitation in Rwanda. *Int Pers Sex Reprod Health* 2009;35(3):122-30.
81. Huber D, Saeedi N, Samadi AK. Achieving Success with family planning in rural Afghanistan. *Bulletin of The World Health Organization* 2010;88:227-31.
82. Adeleye OA, Okonkwo CA. Ideal Child Gender Preference in Men's Worldview and Their Knowledge of Related Maternal Mortality Indices in Ekiadolor, Southern Nigeria. *Asian Journal of Medical Sciences* 2010;2(3):146-51.
83. Owonikoko KM, Okunlola MA, Adeleke AO, Akinboade AF. Fertility regulation among women of reproductive age in Ibadan, South-West Nigeria: Contraception, abortion or both. *Niger Postgrad Med J* 2012;19(1):25-9.

**Table 1: Respondents' history of last pregnancy**

Variable	Rural (%)	Urban (%)	$\chi^2$	p
<b>Last pregnancy desired</b>				
Yes	256 (85.3)	260 (86.7)	0.22	0.638
No	44 (14.6)	40 (13.3)		
Total	300 (100)	300 (100)		
<b>Carried pregnancy to term</b>				
Yes	276 (92.0)	290 (96.7)	6.11	0.013*
No	24 (8.0)	10 (3.3)		
Total	300 (100)	300 (100)		
<b>Reason for not carrying pregnancy to term</b>				
	n = 24	n = 10		
Had miscarriage	5 (20.8)	2 (20.0)	1.99	0.370
Had TOP for Medical reasons	4 (16.7)	0 (0.0)		
Personal decision to terminate	15 (62.5)	8 (80.0)		
Total	24 (100)	10 (100)		
<b>Person who performed TOP</b>				
	n = 15	n = 8		
Nurse/Midwife	4 (26.7)	2 (25.0)	4.26	0.248†
Doctor	7 (46.7)	5 (62.5)	0.34	
Patent medicine dealer	4 (26.7)	0 (0.0)	4.03	
Myself	0 (0.0)	1 (12.5)	1.00	
Total	15 (100)	8 (100)		

†Fisher's exact p, \*Significant

**Table 2: Desire for more children and couples' use of family planning methods**

<b>Variable (n=300)</b>	<b>Rural (%)</b>	<b>Urban (%)</b>	<b><math>\chi^2</math></b>	<b>p</b>
<b>Desire more children</b>				
Yes	167 (55.7)	219 (73.0)	19.64	<0.001*
No	133 (44.3)	81 (27.0)		
<b>Currently using FP method</b>				
Yes	154 (51.3)	147 (49.0)	0.33	0.568
No	146 (48.7)	153 (51.0)		
Total	300 (100)	300 (100)		
<b>Spouse currently using FP</b>				
Yes	36 (12.0)	69 (23.0)	12.57	<0.001*
No	264 (88.0)	231 (77.0)		
Total	300 (100)	300 (100)		
<b>Currently using modern FP</b>				
Yes	145 (48.3)	122 (40.7)	3.24	0.059
No	155 (51.7)	178 (59.3)		
Total	300 (100)	300 (100)		
<b>Spouse approved of using the FP</b>				
	<b>n=145</b>	<b>n=122</b>		
Yes	98 (67.6)	106 (86.9)	12.64	<0.001*
No	47 (32.4)	16 (13.1)		
Total	145 (100)	122 (100)		
<b>Spouse currently using modern FP</b>				
Yes	21 (7.0)	53 (17.7)	15.78	<0.001*
No	279 (93.0)	247 (82.3)		
Total	300 (100)	300 (100)		
<b>Modern FP used by spouse</b>				
Condom	21 (100)	53 (100)		
Total	21 (100)	53 (100)		
<b>Who took decision on use of FP</b>				
Myself	39 (25.7)	30 (23.1)	1.94	0.380
Spouse	6 (3.9)	10 (7.7)		
Joint decision	107 (70.3)	90 (69.2)		
Total	152 (100)	130 (100)		

\*Significant

**Table 3: Socio-demographic variables affecting use of modern family planning methods**

Variable	Use of modern FP (%)					
	Rural (n = 300)			Urban (n = 300)		
	Yes	No	Total	Yes	No	Total
<b>Age (years)</b>						
16 – 20	6 (37.5)	10 (62.5)	16	4 (40.0)	6 (60)	10
21 – 25	11 (32.4)	23 (67.6)	34	20 (51.3)	19 (48.7)	39
26 – 30	42 (44.7)	52 (55.3)	94	59 (57.8)	43 (42.2)	102
31 – 35	59 (71.1)	24 (28.9)	83	46 (63.0)	27 (37)	73
36 – 40	33 (50)	33 (50)	66	31 (59.6)	21 (40.4)	52
41 – 45	5 (71.4)	2 (28.6)	7	9 (37.5)	15 (62.5)	24
	$\chi^2 = 21.9$ df= 5 p=0.001†*			$\chi^2 = 6.60$ df= 5 p=0.256†		
<b>Marital status</b>						
Single	4 (33.3)	8 (66.7)	12	2 (50.0)	2 (50.0)	4
Married	112 (52.8)	100 (47.2)	212	150 (58.1)	108 (41.9)	258
Co-habiting	18 (42.9)	24 (57.1)	42	15 (57.7)	11 (42.3)	26
Separated	12 (66.7)	6 (33.3)	18	0 (0)	6 (100)	6
Widowed	10 (62.5)	6 (37.5)	16	2 (3.3)	4 (66.7)	6
	$\chi^2 = 5.40$ df= 4 p=0.249			$\chi^2 = 9.46$ df= 4 p=0.035†		
<b>Religion</b>						
Christian	97 (57.4)	72 (42.6)	169	96 (57.5)	71 (42.5)	167
Islam	56 (44.4)	70 (55.6)	126	72 (55.8)	57 (44.2)	129
Others	3 (60.0)	2 (40.0)	5	1 (25.0)	3 (75.0)	4
	$\chi^2 = 4.98$ df= 2 p=0.083			$\chi^2 = 1.70$ df= 2 p=0.464†		
<b>Number of children</b>						
1	11 (25.6)	32 (74.4)	43	14 (33.3)	28 (66.7)	42
2	44 (52.4)	40 (47.6)	84	66 (57.4)	49 (42.6)	115
3	33 (55.0)	27 (45.0)	60	55 (72.4)	21 (27.6)	76
4	37 (56.1)	29 (43.9)	66	31 (57.4)	23 (42.6)	54
≥ 5	31 (66.0)	16 (34.0)	47	3 (23.1)	10 (76.9)	13
	$\chi^2 = 16.35$ df= 4 p=0.003*			$\chi^2 = 22.90$ df= 4 p<0.001*		

†Fisher's exact p, \*Significant

**Table 4: Socio-economic variables affecting use of modern family planning methods**

Variable	Use of modern FP (%)					
	Rural (n = 300)			Urban (n = 300)		
	Yes	No	Total	Yes	No	Total
<b>Education</b>						
No formal	11 (45.8)	13 (54.2)	24	4 (30.8)	9 (69.2)	13
Primary	31 (38.8)	49 (61.3)	80	27 (58.7)	19 (41.3)	46
Secondary	82 (56.6)	63 (43.4)	145	103 (58.9)	72 (41.1)	175
Post secondary	32 (62.7)	19 (37.3)	51	35 (53)	31 (47)	66
	$\chi^2 = 9.56$	<b>df= 5</b>	<b>p=0.023*</b>	$\chi^2 = 4.30$	<b>df= 6</b>	<b>p=0.231</b>
<b>Occupation</b>						
Unemployed	23 (35.4)	42 (64.6)	65	42 (55.3)	34 (44.7)	76
Unskilled	16 (69.6)	7 (30.4)	23	10 (52.6)	9 (47.4)	19
Semi-skilled	56 (51.4)	53 (48.6)	109	52 (54.2)	44 (45.8)	96
Manual skilled	36 (65.5)	19 (34.5)	55	37 (57.8)	27 (42.2)	64
Non-manual skilled	16 (48.5)	17 (51.5)	33	25 (71.4)	10 (28.6)	35
Intermediate	9 (90.0)	6 (40.0)	15	3 (33.3)	6 (66.7)	9
Professional	0	0	0	0 (0)	1 (100)	1
	$\chi^2 = 14.59$	<b>df= 5</b>	<b>p=0.012*</b>	$\chi^2 = 6.85$	<b>df= 6</b>	<b>p=0.323†</b>
<b>Spouse's education</b>						
No formal	3(18.8)	13 (81.3)	16	1(25.0)	3 (75.0)	4
Primary	28(60.9)	18 (39.1)	46	10 (43.5)	13 (56.5)	23
Secondary	70(51.5)	66 (48.5)	136	98 (60.5)	64 (39.5)	162
Post secondary	55 (53.9)	47 (46.1)	102	60 (54.1)	51 (45.9)	111
	$\chi^2 = 8.70$	<b>df=3</b>	<b>p= 0.034*</b>	$\chi^2 = 4.52$	<b>df=3</b>	<b>p= 0.213†</b>
<b>Spouse's occupation</b>						
Unemployed	1(33.3)	2 (66.7)	3	3 (42.9)	4 (57.1)	7
Unskilled	8 (47.1)	9(52.9)	17	7 (50.0)	7 (50.0)	14
Semi-skilled	68 (59.1)	47 (40.9)	115	77(63.6)	44(36.4)	121
Manual skilled	32 (41.6)	45 (58.4)	77	35(50.0)	35 (50.0)	70
Non-manual skilled	18 (50.0)	18 (50.0)	36	29 (69)	13 (31.0)	42
Intermediate	17 (44.7)	21 (55.3)	38	14 (51.9)	13 (48.1)	27
Professional	12 (85.7)	2 (14.3)	14	4 (21.1)	15 (78.9)	19
	$\chi^2 = 13.53$	<b>df=6</b>	<b>p= 0.026*</b>	$\chi^2 = 17.11$	<b>df=6</b>	<b>p= 0.008†*</b>

Fisher's exact p, \*Significant

**Table 5: Predictors of use of modern FP by couples in rural and urban areas**

Variable	OR	95% CI		$\beta$	SE	Z
		Lower	Upper			
<b>Rural</b>						
Constant	-	-	-	-2.8577	0.9424	-3.0324
Age (year)	0.9877	0.9372	1.0410	-0.0124	0.0268	-0.4612
Religion (Islam/Christian)	0.5674*	0.3329	0.9671	-0.5666	0.2720	-2.0830
Occupation (Unskilled/Unemployed)	5.0257*	1.6285	15.5102	1.6146	0.5750	2.8081
Occupation (Semi-skill/ Unemployed)	2.4970*	1.2142	5.1353	0.9151	0.3679	2.4875
Occupation (Manual skill/ Unemployed)	4.6901*	2.0400	10.7827	1.5455	0.4247	3.6385
Spouse education (Primary/None)	8.2210*	1.8612	36.3119	2.1067	0.7579	2.7797
Spouse education (Secondary/None)	4.4717*	1.1204	17.8466	1.4978	0.7062	2.1210
Spouse education (Post-secondary/None)	5.2412*	1.2208	22.5017	1.6566	0.7434	2.2283
Number of children	1.4275*	1.1604	1.7561	0.3560	0.1057	3.3677
<b>Urban</b>						
Constant	-	-	-	-0.6931	0.3273	-2.1176
Number of Children (2/1)	2.6939*	1.2848	5.6484	0.9910	0.3778	2.6233
Number of Children (3/1)	5.2381*	2.3184	11.8347	1.6560	0.4159	3.9820
Number of Children (4/1)	2.6957*	1.1659	6.2327	0.9916	0.4276	2.3188
Number of Children ( $\geq 5/1$ )	0.6000	0.1420	2.5347	-0.5108	0.7352	-0.6948

\*Significant