



Commercial Drivers' Participation in the Use of Family Planning Services in Ibadan, Southwest Nigeria

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Authors' contributions

This work was carried out in collaboration between all authors. Authors KOO and TDO conceptualized and designed the study; author TDO collected the data and ran the preliminary statistical analysis. Author OOA conducted further statistical analysis and author TDO, prepared the first draft of the manuscript. All authors read and approved the final manuscript.

Original Research Article

Received 19th January 2014
Accepted 15th March 2014
Published 28th April 2014

ABSTRACT

Aims: To determine the participation of male commercial drivers in the choice and use of family planning methods and possible implications for reproductive health policy formulation.

Study Design: A cross-sectional study was conducted.

Place and Duration of Study: The study was conducted in Ibadan, Southwest Nigeria.

Methodology: A cross-sectional study of 402 adult drivers was done. Participants were selected by balloting from the drivers register and all consenting drivers were interviewed by trained research assistants.

Results: Mean age of respondents was 44.5±9.9 years. Slightly more than half (53.0%) of participants were currently using a family planning method. The condom (58.2%) was the most popular family planning method followed by injection (32.9%) and withdrawal (22.1%). Only 43 (10.7%) and 36 (9.0%) of study's participants have ever visited a family planning clinic for information or ever accompanied their spouses to a family planning clinic respectively. The commonest sources of information about family planning were

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the mass media (67.2%), health workers (21.1%) and friends (5.2%). Age ($P<0.001$) and knowledge ($P=0.001$) of family planning were found to be significantly associated with previous and current use of family planning. Respondents aged 40 years and above were about two times more likely to have good knowledge of family planning compared with younger respondents ($OR=1.89$; $95\% CI=1.17-3.05$). Similarly, respondents with good knowledge of family planning were about two times more likely to use a family planning method compared with those with poor knowledge ($OR=2.35$; $95\% CI=2.257.20$).

Conclusion: Commercial drivers' participation in the choice and use of family planning was poor. The policy implication of these findings is the need for programmes targeted at men and designed to further improve their knowledge and attitude about family planning. This will motivate the men and by extension their wives in order to achieve better planned families.

Keywords: Family planning; commercial drivers; male involvement; policy formulation.

ABBREVIATION

NDHS-Nigeria Demographic and Health Survey.

1. INTRODUCTION

Annually, the world's population increases by 90 million with 90% of the increase occurring in developing countries [1,2]. Sub-Saharan Africa has one of the highest population growth rates in the world as fertility rate remains high in the region [1]. Nigeria, the seventh most populous country in the world is the most populated in Sub-Saharan Africa. Total fertility rate still exceeds five children per woman and current use of modern contraceptive is still very low [2]. A rapid population growth is a burden on the resources of many developing countries while unregulated fertility is a key impediment to economic development and political stability [3]. Therefore, many countries have developed policies regulating population growth as part of their overall developmental plan towards improving the quality of life of their people [4].

Almost 99% of maternal deaths and 90% of neonatal deaths occur in developing countries [5]. Infant and maternal mortality rates in Nigeria are one of the highest in the world [6]. Family planning has been reported to play a major role in reducing maternal and newborn morbidity and mortality [7]. This is because it protects women from unplanned and unwanted pregnancies, thereby relieving the burden of high risk pregnancies and unsafe abortions while giving women the time needed to take care of their children and themselves [8]. It has been documented that if women could avoid high-risk pregnancies, the number of maternal deaths could fall by one-quarter [9]. In addition, family planning has the advantage of preventing cancers, sexually transmitted infections (STIs) and HIV [10].

Although a twin obligation, reproduction is often seen as a woman's responsibility in many developing countries [11]. For decades, women have been the main target of most family planning interventions and activities as well as resources for fertility regulation while the active participation of men have not been promoted and their roles have been largely ignored [12]. However, it is well documented that men's general knowledge and attitudes concerning contraceptive and family planning issues greatly influence women's preferences and opinions [13]. In the African context, men are also posited as decision makers and

perceived as the 'gate keepers' and custodians of cultural and traditional practices; hence, there is a strong male influence on many household decisions including those involving reproduction [2]. Thus, getting men—as well as women—involved in reproductive matters could lead to an increase in the use of family planning methods and consequently improve their continuous use [14,15]. Various studies have shown that family planning adoption is likely to be more effective for women when men are more actively involved [16,17].

In spite of all these, males' participation in the use of family planning services by their spouses is under-researched in Nigeria; though, few researches have been done on the reproductive motivation and role of men in family planning. Therefore, conducting studies on this subject is highly desirable as findings might have programmatic implications for healthcare providers, programme managers and policy makers. These will help in designing appropriate strategies required to improve the use of family planning services. Also, they will contribute towards achieving Millennium Development Goals 4 and 6: Reduction of child mortality and improvement of maternal health.

Hence, this study aimed to determine the participation of male commercial drivers in the choice and use of family planning methods in Ibadan, Southwest Nigeria and possible implications for reproductive health policy formulation.

2. METHODOLOGY

This was a cross-sectional study conducted in Ibadan North East Local Government Area in April 2012. The Local Government Area (LGA) is one of the 33 LGAs in Oyo State, South-western Nigeria. Ibadan North East Local Government covers an area of 12.5sq.km and has an estimated population of 340,972 with a male:female ratio of approximately 1:1 [18]. The study population comprised intra-state male commercial bus drivers in the study area. There were about 800 drivers plying 17 intra-city routes with 15 to 100 drivers per route.

A minimum sample size of 402 was estimated using 60.9% as proportion of men who were current users of modern contraceptives [19], 95% confidence interval, 90% power, 5% precision and 10% non-response rate. Of the 17 available motor parks, 10 were selected by balloting. Participants were then selected in each of the 10 motor parks through simple random sampling using the drivers register as sampling frame. All consenting drivers were interviewed by trained research assistants using a structured questionnaire which was face-validated by pre-testing. Respondents were interviewed in a designated place provided by the leadership of the drivers' union for the purpose of guaranteeing privacy and confidentiality. At least, two repeat visits were made to reach participants, who were not available for interview during the first visit. Information was collected on socio-demographic characteristics of study participants, their knowledge, attitude, practices and preferences on family planning methods. Other data collected include their participation in decision making and choice of a family method used by spouse.

2.1 Data Analysis

Data analysis was done with SPSS version 15. Knowledge scores ranged from 1-4, attitude scores from 1–26 and participation score from 1–18. Nine questions were selected from the sections on practice of family planning and decision-making in family planning to calculate the participation score. These variables' scores were computed and used to categorise each respondent. A knowledge score of <2 was classified as poor and ≥ 2 as good. An attitude

score of <13 was classified as unsupportive and ≥ 13 as supportive of family planning. A participation score of <9 was classified as poor and ≥ 9 as good participation. Chi-square test was used to explore association between dependent and independent variables and significant findings were regressed to adjust for socio-demographic variables in a multiple logistic regression at p-level of 5%.

3. RESULTS AND DISCUSSION

3.1 Result

3.1.1 Socio-demographic and reproductive characteristics of respondents

A total of 402 commercial bus drivers were interviewed. Their mean age was 44.5 ± 9.9 years; respondents aged 40-49 years and ≥ 50 years constituted 33.6% and 35.6% respectively Table 1. Three hundred and seventy seven (93.8%) were married and 17 (4.2%) were single. Three hundred and six (81.2%) were in a monogamous marriage while 71 (18.8%) were in a polygamous marriage. A little above half, 213 (53%), were Muslims and 189 (47%) had only primary school education. Almost all (91%) were of Yoruba ethnicity, 6.7% Ibo and 2.2 % other Nigerian ethnicities.

3.1.2 Reproductive health characteristics of respondents

Most of the respondents, 382 (95%), had ever had a child. The median number of living children was 4.0 (range: 0-12.0) with 248 (64.9%) having 1-4 children. Three hundred and twenty six (85.3%) had 1-4 male children and 299 (78.3%) had 1-4 female children. Two hundred and five (53.7%) desired to have another child with 97 (47.3%) indifferent about the gender of their next child.

3.1.3 Knowledge of family planning methods

All the study participants were aware of family planning and knew at least one method of family planning. Table 2. shows the most commonly reported methods of family planning: condom (100%), injection (82.6%), pills (55.5%), withdrawal method (27.6%) and periodic abstinence (26.1%). Three hundred and seventy two (92.5%) of the respondents did not know that vasectomy is a permanent method of family planning and almost all respondents (96.3%) knew that a condom should only be used once for sexual intercourse. Table 2 also shows that the most commonly known uses of family planning among respondents were birth spacing (57.2%) and birth limitation (57.2%). The mean knowledge score was 6.3 ± 0.85 with 202 (50.2%) of the respondents having good knowledge of family planning components.

In Fig.1. the most common side effects of family planning methods reported by respondents included abnormal menstruation (40.8%), unwanted weight gain (30.6%) and vomiting (10.2%). Other side effects mentioned included infertility (6.2%), sex craving (5.2%), bloating (3.2%), nausea (0.7%) and multiple pregnancies (0.5%).

3.1.4 Sources of family planning information

In Fig. 2. the most commonly cited sources of family planning messages were mass media (67.2%), health workers (21.1%) and friends (5.2%). In addition, other sources of information

and communication about family planning were shared through their wife (2.7%), family members (2%), school (0.7%) and traditional healers (0.2%).

Table 1. Socio-economic characteristics of respondents (N=402)

Characteristics	n	%
Age group (in years)		
20–29	27	6.7
30–39	97	24.1
40–49	135	33.6
50 and above	143	35.6
Marital status		
Married	377	93.8
Single	17	4.2
Divorced/ Separated	2	0.5
Widower	4	1.0
Cohabiting	2	0.5
Type of marriage N=377		
Monogamous	306	81.2
Polygamous	71	18.8
Number of wives, if polygamous N=71		
2	54	76.1
3	11	15.5
4	4	5.6
≥5	2	2.8
Duration of marriage N= 377		
1–9 years	79	21.0
10–19 years	139	36.8
20–29 years	112	29.7
30 years and above	47	12.5
Living with wife/partner N= 379		
Yes	371	97.9
No	8	2.1
Religion		
Christian	188	46.8
Muslim	213	53.0
Traditional	1	0.2
Educational attainment		
No formal education	45	11.2
Completed primary education	189	47.0
Completed secondary education	149	37.1
Post-secondary education	17	4.2
Others–Quranic	2	0.5
Ethnicity		
Yoruba	366	91.0
Ibo	27	6.7
*Others	9	2.3

**Others include Edo and Niger/Delta*

3.1.5 Attitude towards family planning

Few respondents reported that having many children is not important for a man to prove his masculinity (12.7%) or for a woman to prove her fertility (20.4%). About 86% agreed that family planning improves the standard of living of the family and 89.6% disagreed that a family having all girls should keep on having children till they have a boy. Three hundred and three (75.4%) respondents believed that having many children is harmful to the health of the mother and 72.1% opined that women who use contraceptives will become promiscuous. Almost all respondents (98%) held that wives should seek their husbands' permission before using contraceptives and 83.6% believed that a husband should allow his wife to choose the contraceptive method that she thinks is best for her Table 3. Furthermore, majority, 374 (93.0%), of the respondents had a supportive attitude towards the use of family planning.

Table 2. Knowledge of family planning methods (N= 402)

Knowledge of family planning methods	f	%
Specific methods known		
Condom	402	100
Injection	332	82.6
Pills	223	55.5
Withdrawal	111	27.6
Periodic abstinence	105	26.1
Female sterilization	39	9.7
Intrauterine device	39	9.7
Vasectomy	29	7.2
Norplant	28	7
Traditional method	19	4.7
Diaphragm	2	0.5
Lactational amenorrhea	1	0.2
Knowledge of family planning uses		
Birth spacing	230	57.2
Birth control/limitation	230	57.2
Prevention of pregnancy	158	39.3
Planning your family life	146	36.3

3.1.6 Family planning practices among respondents

Table 4. revealed that 248 (61.7%) of the drivers have used a family planning method at least once with their wives or partners. About 213(53.0%) of respondents were currently using a family planning method with their wives or partners. The condom was the most popular of the currently used family planning methods (58.2%), followed by injection (32.9%), withdrawal (22.1%), periodic abstinence (21.6%) and pills (4.2%). Of those who are not currently using any family planning method, only about 37% have future intentions of using it.

Fig. 3. shows respondents' reasons for choosing the current family planning method. These reasons included fears of side effects of drugs (48.4%), perceived efficacy and safety (25.8%), absence of side effect from the current method (11.7%) and medical advice (8.5%). The median duration of family planning use among respondents was two years. Almost half of the respondents (49.3%) had been using a family planning method for about five years preceding the survey and 3 (1.4%) had been using a method within 20 years.

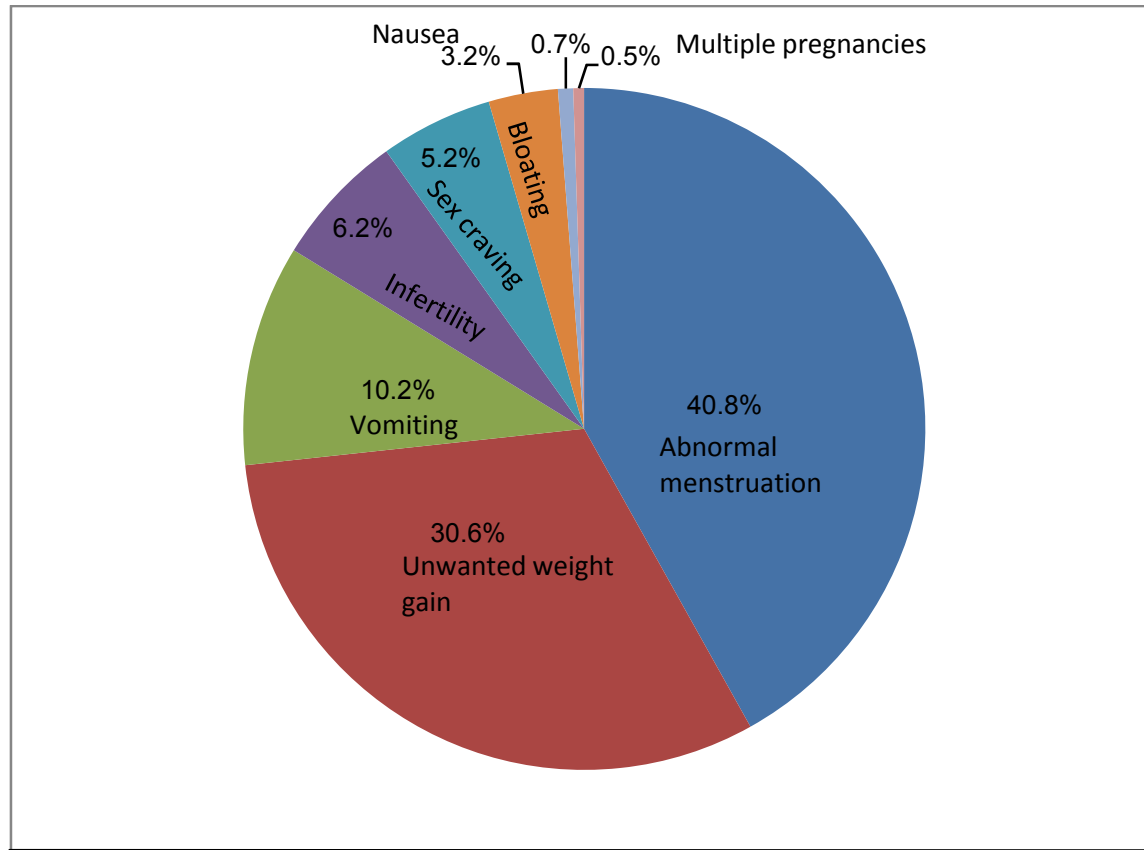


Fig. 1. Reported side effects of family planning methods

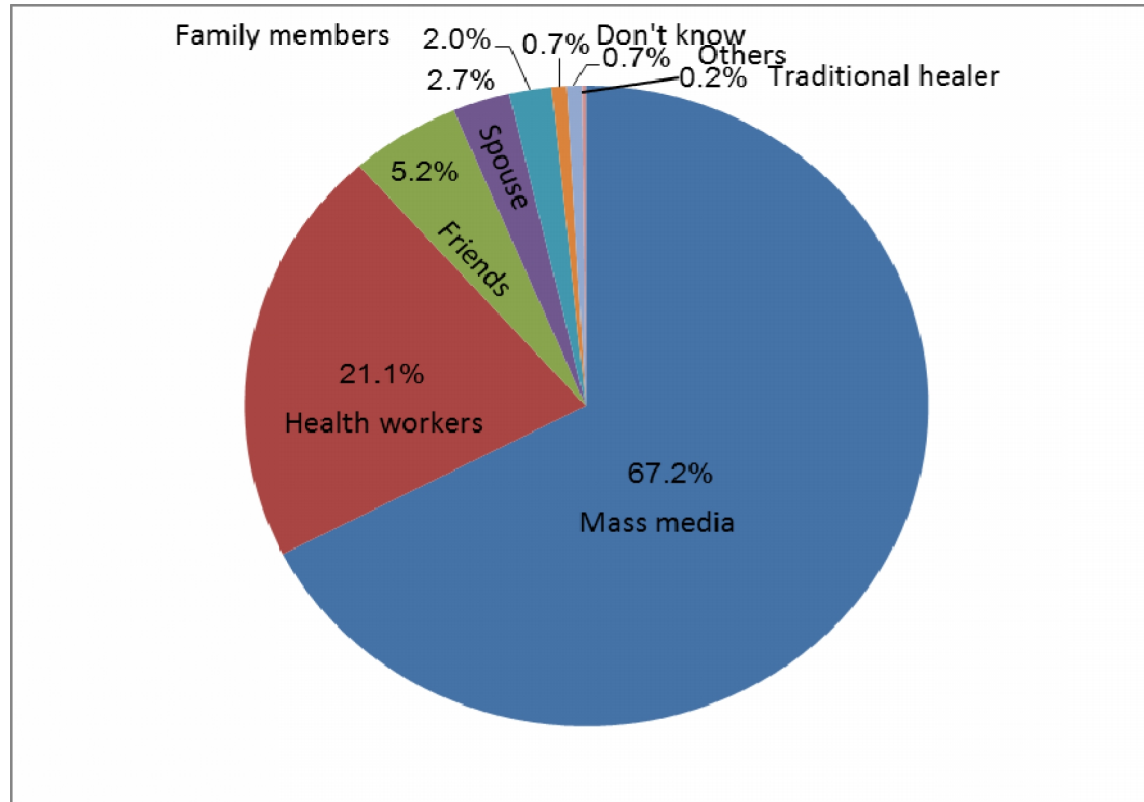


Fig. 2. Sources of information about family planning

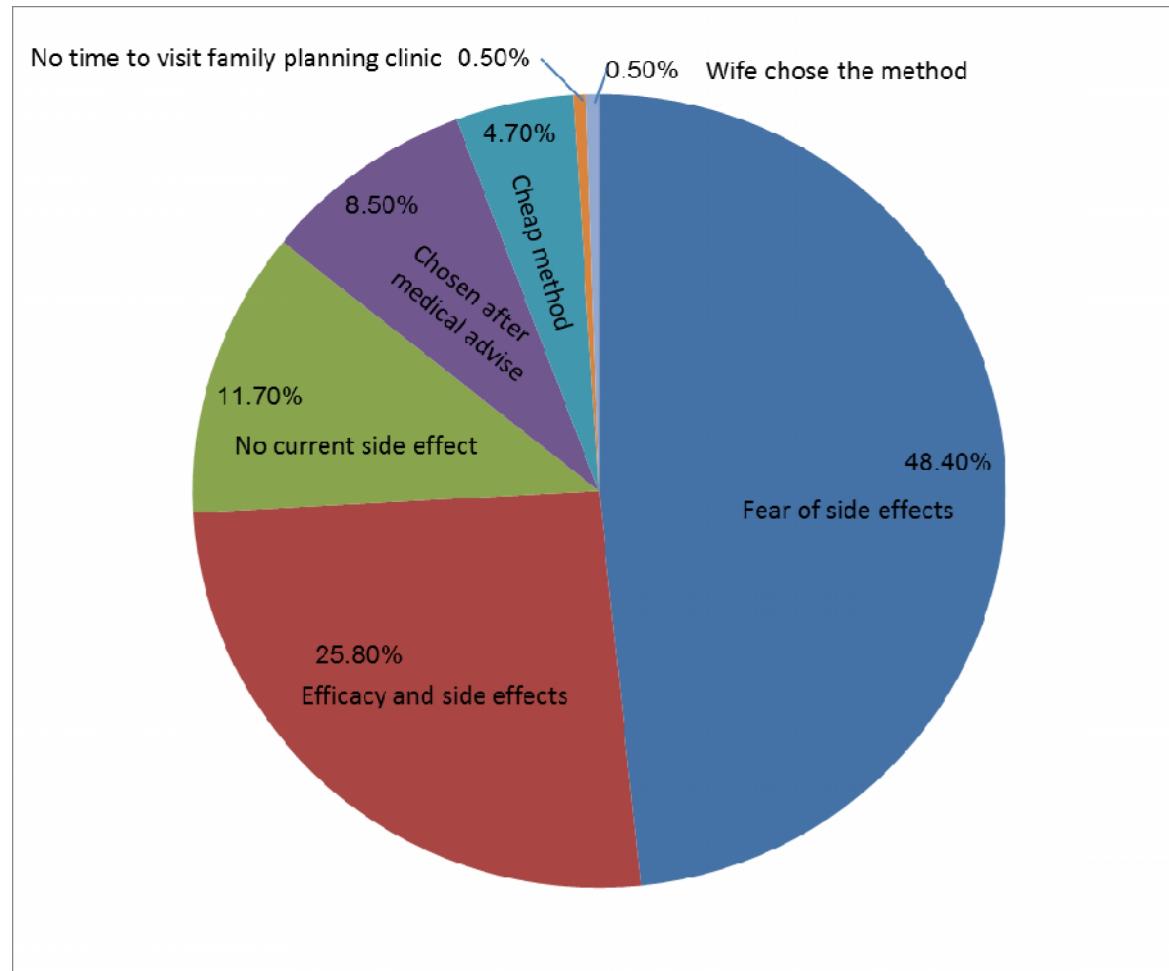


Fig. 3. Reasons for choosing current family planning methods

Table 3. Attitude towards family planning (N= 402)

	n	%
Having many children is important for a man to prove his masculinity		
Agreed	51	12.7
Having many children is important for a woman to prove her fertility		
Agreed	82	20.4
Family planning improves the family's standard of living		
Agreed	345	85.8
Family that have all girls should keep on having children till they have a boy		
Agreed	42	10.4
Having many children is harmful to the health of the mother		
Agreed	303	75.4
Family planning is a man's business and a woman should not worry about it		
Agreed	23	5.7
Family planning is a woman's business and a man should not worry about it		
Agreed	75	18.7
Women who use contraceptives will become promiscuous		
Agreed	290	72.1
Children are gifts from God, they should just be accepted as they come		
Agreed	227	56.5
A couple should control the timing of their children's birth		
Agreed	350	87.1
Family planning matters should be discussed with other persons		
Agreed	270	67.2
Husbands should allow their wives to use contraceptives that they think is best for her		
Agreed	336	83.6
Women should seek husbands' permission before using contraceptives		
Agreed	394	98.0
Overall attitude		
Supportive	374	93.0
Not supportive	28	7.0

The reasons for discontinuing family planning use among respondents and their spouses included fertility related reasons: nine (25.7%) reported reduced libido, nine (25.7%) menopause/hysterectomy, 10(28.6%) still wanted to have more children, one (2.9%) reported wife's opposition to use, one (2.9%) stated fear of side effects, one (2.9%) indicated inconvenience, 4(11.4%) gave other reasons for discontinuing the use of family planning such as discomfort when having sex.

Table 4. Practice of family planning among respondents

	n	%
Ever used a family planning method (N=402)		
Yes	248	61.7
No	151	37.6
Don't know	3	0.7
Specific methods ever used–multiple response (N=248)		
Condom	172	69.4
Injection	95	38.3
Pills	27	10.9
Withdrawal	70	28.2
Periodic abstinence	70	28.2
Female sterilization	1	0.4
Intrauterine device	5	2.0
Norplant	2	0.8
Traditional method	4	1.6
Current user (N=402)		
Yes	213	53.0
No	185	46.0
Don't know	4	1.0
Specific methods currently used–multiple response (N=213)		
Condom	124	58.2
Injection	70	32.9
Pills	9	4.2
Withdrawal	47	22.1
Periodic abstinence	46	21.6
Female sterilization	1	0.5
Intrauterine device	2	0.9
Norplant	1	0.5
Traditional method	2	0.9
Duration of use of current family planning method in years (N=213)		
1-5	105	49.3
6-10	73	34.3
11-15	20	9.4
16-20	9	4.2
20-25	3	1.4
26-30	3	1.4

Among the never users, the reasons given for never using a family planning method included wanting to have more children (14.6%), respondents' opposition to its use (34.4%), fear of side effects of a method (15.2%), reporting other reasons for never using (14.0%) and 2 (1.3%) did not know why they were not using a method see Table 5.

3.1.7 Decision process in the choice and use of family planning

Table 6. shows that 331(82.3%) approved the use of family planning for child spacing, 161(41.8%) had discussed the number of children they wanted to have with their spouse/partner and 224(63.4%) had discussed whether or not to use family planning with

their spouse/partner. Also, 213(87.3%) respondents stated initiating the discussion about family planning with their partners, 201(50.0%) indicated that the husband alone should make the decision on when to stop childbearing and 197(92.5%) reported discussing the current method of family planning been used with their wife/partner before adopting the method. More than half (54.0%) specified encouraging the use of their partner's current method, and 266(66.2%) said that they can use a male method such as condom if their partner has a health barrier that would prevent her from using the available female methods.

Table 5. Reasons for not using or discontinuing the use of a family planning method among commercial drivers

	n	%
Reasons for discontinuing the use (N= 35)		
Fertility Related Reasons		
Reduced libido	9	25.7
Menopause/Hysterectomy	9	25.7
Desired to have more children	10	28.6
Opposition to use		
Wife opposed	1	2.9
Method and Service Related Reasons		
Fear of side effects	1	2.9
Inconvenient method	1	2.9
Other (specify)	4	11.4
Reasons for not using family planning among never users (N=151)		
Fertility Related Reasons		
Reduced libido	9	6.0
Menopause/Hysterectomy	2	1.3
Desired to have more children	22	14.6
Opposition to use		
Respondent opposed	52	34.4
Religious prohibition	9	6.0
Rumours	1	0.7
Method and Service Related Reasons		
Health concern	4	2.6
Fear of side effects	23	15.2
Inconvenient method	1	0.7
knows no source where to obtain method	5	3.3
Others (specify)	21	14.0
Don't Know/ unsure	2	1.3

3.1.8 Factors associated with use family planning among respondents

Table 7. shows the result of bivariate associations between "ever use" of family planning and socio-demographic variables as well as attitude and knowledge of family planning. Age groups 30-39 and 40-49 had higher proportions of respondents who had ever used a family planning method compared with other age groups ($p < 0.001$). Also, participants who had good knowledge of family planning had lower proportion of those who had ever used a family planning method.

Table 8. revealed that marital status; age and knowledge of family planning were significantly associated with current use of family planning among respondents. More married women currently use family planning compared to singles (54.9%vs.24.0%). However, good knowledge of family planning does not seem to translate to better current use of family planning.

3.1.9 Factors predictive of good knowledge and use of family planning

In Table 9, logistic regression model shows that older respondents (40 years and older) are about two times more likely to have good knowledge of family planning compared with younger respondents ($P=0.01$). Table 9 also revealed that respondents with good knowledge of family planning were about two times more likely to have ever used a family planning method compared with those with poor knowledge. Similarly, those who believe family planning is a joint responsibility between spouses are about 11 times more likely to have used a family planning method compared to those who believe the decision is made by God ($P=0.036$).

Table 6. Decision process in the choice and use of family planning methods

	n	%
Approved the use of family planning for child spacing	331	82.3
Ever discussed the number of children you would want to have with spouse/partner (N=385)	161	41.8
Ever discussed whether or not to use a family planning method(N=385)	244	63.4
If never discussed, future intention to talk about it (N=141)	27	19.1
Initiator of the discussion about family planning use (N=244)		
Husband	213	87.3
Wife	31	12.7
Decision-maker on family size (N=402)		
Husband alone	201	50.0
Wife alone	5	1.2
Jointly	189	47.1
God	7	1.7
Participation		
Good	222	55.1
Poor	180	44.9

3.2 Discussion

The age distribution of respondents may be due to the fact that in Nigeria, driving is largely an unskilled work undertaken by mature people with years of driving experience. Majority completed only primary education with merely 17(4.2%) having had post-secondary education; this may be attributed to the low educational requirement for an unskilled work such as driving. Low literacy level, as found among this study's participants, has been associated with poor use of family planning methods [20].

Table 7. Bivariate associations between socio-demographic variables, attitude, knowledge and ever use of a family planning method

Variable	Ever use of family planning		Total	Chi square	P value
	Yes	No			
Level of education					
No formal education	27(57.4%)	20(42.6%)	47	7.345	0.062
Completed primary education	107(56.6%)	82(43.4%)	189		
Completed secondary education	100(67.1%)	49(32.9%)	149		
Post-secondary education	14(82.4%)	3(17.6%)	17		
Marital status					
Married	236(62.6%)	141(37.4%)	377	2.115	0.146
Single	12(48.0%)	13(52.0%)	25		
Type of marriage (N=236)					
Monogamous	194(63.4%)	112(36.6%)	306	0.443	0.506
Polygamous	42(59.2%)	29(40.8%)	71		
Religion					
Catholic	12(54.5%)	10(45.5%)	22	0.667	0.716
Christian	105(63.3%)	61(36.7%)	166		
Muslim	131(61.2%)	83(38.8%)	214		
Age					
20- 29	14(51.9%)	13(48.1%)	27	27.377	<0.001
30- 39	68(70.1%)	29(29.9%)	97		
40-49	100(74.1%)	35(25.9%)	135		
50+	66(46.2%)	77(53.8%)	143		
Attitude to family planning					
Supportive	232(62.0%)	142(38.0%)	374	0.263	0.608
Not supportive	16(57.1%)	12(42.9%)	28		
Knowledge of family planning					
Good	94(46.5%)	108(53.5%)	202	10.870	0.001
Poor	132(66.0%)	68(34.0%)	200		

The respondents' number of children and age distribution may be due to the fact that majority of the commercial drivers were married, in their middle adulthood and are expected to have had children by that age.

Despite majority of the respondents having between 1 and 4 living male and female children, more than half still desired to have more children with about a third wanting either a male or female child. This further corroborates previous studies reporting that men desire more children than their spouses in both the Population Report [21] and 2008 NDHS [2]. This desire for more children can likely be explained by the low level of education among the men and also the majority of them being Muslims as low literacy level and Islamic religion have been associated with poor use of family planning methods [20]. Also, African men may desire more children because of the current and future benefits particularly the anticipated old age and social support derived from having many children [1].

Table 8. Bivariate associations between socio-demographic variables, attitude, knowledge and current use of a family planning method

Variable	Current use of family planning		Total	Chi square	P value
	Yes	No			
Level of education					
No formal education	26(55.3%)	21(44.7%)	47	3.136	0.371
Completed primary education	92(48.7%)	97(51.3%)	189		
Completed secondary education	84(56.4%)	65(43.6%)	149		
Post-secondary education	11(64.7%)	6(35.3%)	17		
Marital status					
Married	207(54.9%)	170(45.1%)	377	8.991	0.003
Single	6(24.0%)	19(76.0%)	25		
Type of marriage (N=207)					
Monogamous	171(55.9%)	135(44.1%)	306	0.624	0.430
Polygamous	36(50.7%)	35(49.3%)	71		
Religion					
Catholic	9(40.9%)	13(59.1%)	22	1.416	0.493
Christian	88(53.0%)	78(47.0%)	166		
Muslim	116(54.2%)	98(45.8%)	214		
Age					
20-29	12(44.4%)	15(55.6%)	27	28.789	<0.001
30-39	60(61.9%)	37(38.1%)	97		
40-49	89(65.9%)	46(34.1)	135		
50+	52(36.4%)	91(63.6%)	143		
Attitude to family planning					
Supportive	199(53.2%)	175(46.8%)	374	0.108	0.743
Not supportive	14(50.0%)	14(50.0%)	28		
Knowledge of family planning					
Good	83(40.0%)	119(60.0%)	202	6.595	0.010
Poor	113(56.5%)	87(43.5%)	200		

Knowledge of family planning methods is very important for the use of family planning [22]. It has been documented that the knowledge of men about family planning methods greatly influences women's preferences and opinions about family planning and also the continuous use of the methods [20]. All the respondents have heard about family planning methods and knew at least one method of family planning [23]; reports from the 2008 NDHS likewise reported that the knowledge of family planning methods among men was high [2]. Good knowledge about family planning is also important in influencing the choice and use of family planning methods and a high prevalence of knowledge about family planning methods have been reported among men in Ethiopia [23], Nigeria [24], Thailand [25] and Iran [26].

Table 9. Logistic regression model for predicting good knowledge and use of family planning among respondents

Characteristics	Odds ratio	95% Confidence Interval	P-value
Ethnicity			
Yoruba	1	0.582–2.685	0.567
Others	1.250		
Education status			
No formal education	0.803	0.506–1.276	0.354
At least primary school education	1		
Marital status			
Never married	0.287	0.060–1.382	0.119
Marital experience or cohabiting	1		
Age groups			
<40 years	0.530	0.328–0.858	0.010
40 years and above	1		
A. Ever use of family planning, Knowledge of family planning			
Good knowledge	2.35		
Poor knowledge	1.00	2.25-7.2	0.002
Decision making in the choice of family planning			
Joint decision making	11.015	1.17-103.3	0.036
God	1.00		
B. Current use of family planning			
Knowledge of family planning			
Good knowledge	1.08	0.271-3.106	0.890
Poor knowledge	1.00		
Decision making in the choice of family planning			
Joint decision making	0.000	0.000	0.997
God	1.00		

Among the modern male family planning methods, condom was the most widely known method of family planning among the respondents and this may be due to the dual use of condom for preventing sexually transmitted infections and pregnancy. The Population Report [21] and the 2008 NDHS [2] also reported that men are more likely than women to have heard of at least one contraceptive method, most often the condom. Similar studies in Nigeria have also reported that condom is the most widely known method [19, 27]. However, Fuchs and colleagues [28] reported that oral contraceptive is the most popular method of birth control among women in Europe followed by the condom.

Majority had never heard of vasectomy and did not know if vasectomy was a permanent method of family planning. This is consistent with the findings of the 2008 NDHS [2] in which majority of the male respondents also did not know about vasectomy. Similarly, Akpamu et al. [29] revealed from their study done in South-eastern Nigeria that although a good number of men were aware of family planning and male contraceptive methods, they had poor knowledge and low acceptance of vasectomy. This can be explained to be due to primary focus of family planning programmes on women and the poor promotion of male methods especially vasectomy. Even those who have heard of vasectomy had misconceptions about

the method as they associated it with castration. This could be due to inadequate knowledge which needs improvement through interpersonal and group education as well as awareness-creation sessions. Countries such as Turkey and India have managed to increase the uptake of permanent family planning methods from 18% to 35% using various interventional approaches including sensitization of the community towards the use of the methods [30].

Almost half of the respondents had poor knowledge of family planning methods; findings from a study done in Gaza by Donati et al. [31] revealed that men had little information about family planning methods and did not take actions to improve their knowledge. The implication of having poor knowledge of family planning methods translates to misconceptions about and non-use of family planning methods leading consequently to higher fertility and increased burden on the resources available in the country.

The husband's support of family planning has been found to be a good predictor of future practice and continued use of family planning methods [1]. Although men have been perceived not to approve or support the use of family planning methods according to the Demographic and Health Surveys [2], this is contrary to what the findings of this study reveal. Majority of the respondents in this study agreed that couples should control the timing of their children's birth and that husbands should allow their wives to use contraceptives that they think is best for them, just like Ezeh in a study done in Ghana [32] had reported. Thus, appropriate interventions should be targeted at men to transform these positive attitudes into use of family planning usage [33,34].

Majority of the commercial drivers in this study reported approving the use of family planning methods by their spouses. Majority disagreed with the notion of having many children to prove a man's masculinity and a woman's fertility. This corroborates with findings of a study conducted in India which revealed that majority of the men and women reported that their ideal number of children was two [35]. Also, majority disagreed that family planning was a man's or woman's business alone and agreed that family planning should be discussed with other persons apart from their partners. This furthermore indicates the positive attitude of men towards the use of family planning. Discussion of family planning with partner and others and this positive attitude can help increase the use of family planning methods when adequate information is provided [33].

Majority of the respondents also stated that family planning improves the family's standard of living and having many children is harmful to the health of the mother. This finding further validates previous research works [36,37] which revealed that respondents indicated that family planning had enabled them to have more leisure time and to spend more time with their children and wives.

In consonance with the findings of Olawepo and colleague [36], a large proportion of the respondents opined that women who use contraceptives will become promiscuous and that children are gifts from God and should be accepted as they come. This may be due to the belief that if women use contraception, they will be able to engage in extra-marital affairs without the fear of getting pregnant and this is the major reason why some men do not want their wives to use family planning.

Almost all the respondents agreed that women should seek their husbands' permission before using contraceptives; this can be explained by the fact that most societies in Nigeria are patrilineal with a strong male dominance in many household decisions including those involving reproduction [1]. Similarly various studies have documented that female clients

discontinued their methods because of their husbands' objection or unfavourable attitude towards family planning [38,39]. Hence family planning programmes should promote family planning methods, sensitise and inform various segments of the male population and additionally enhance women's decision-making capacity as related to family planning use. There is considerable research evidence that men influence effective use of contraceptives and even satisfaction with the chosen methods [40].

Communication between spouses and among family/household members regarding family planning and contraceptive use is considered crucial to the adoption of contraception [41], and is found to be positively correlated with fertility behaviour. It can encourage family planning use, promote reproductive health decisions and lead to healthier practices [41]. However failure to communicate reproductive intentions limits couples' effective and sustained use of family planning [20].

Majority of the respondents reported approving the use of family planning methods for child spacing but most of them had never discussed the number of children they would want to have with their partners and majority also did not intend to discuss it with their partners. This may likely be due to cultural belief that they should not count their eggs before they are hatched or that the number of children they would have in life is divinely determined and is a sign of divine acceptance [42]. This may likely lead to the woman continuing child bearing or not using a family planning method even when the desired number of children has been achieved since she does not know the desired number of children her husband wants. Therefore, emphasis should be laid on the importance of communication between husbands and wives about family planning in reproductive health campaigns as this may increase participation of men in family planning. Researchers agreed that the more the husbands and wives discuss family planning with each other, the higher the level of contraceptive use [43].

This study reported that education had no significant impact on ever-use or current use of a family planning method. This is in contrast with findings from Ethiopia and Nigeria [20,23] where contraceptive use was reported to have improved with increasing level of education. Formal education might not have been a predictor of ever-use or current use of family planning methods in this study because the respondents have about the same level of education. Irrespective of their level of education the commercial drivers were able to make rational decisions about the use of family planning methods. Therefore, the findings of this study suggests that if men are exposed to accurate information about family planning methods irrespective of their level of education, there will be increase in knowledge, attitude and use of family planning.

Age was found to be significant with ever-use or current use of a family planning method. The decline at 50 years and above age group implies that family planning methods are not commonly used by older people probably due to lack of desire to do so as some of them may no longer be sexually active. This supports the findings from Oyediran et al. [44] in which age was a key factor in determining contraceptive knowledge and use among men in Nigeria. Therefore, men especially those within the reproductive age group, should be targeted with accurate information about family planning methods. They should also be given access to family planning services which will enable them make informed decision on the use of family planning methods. This may be done through health promotion campaigns and through the use of the mass media.

The policy implication of these findings is the need for programmes targeted at men and designed to further improve their knowledge and attitude about family planning. This will go a

long way to motivate the men and by extension their wives in order to achieve better planned families [45].

As with all cross-sectional surveys, this study is not free from response and recall biases. Perceived desirability of responses rather than actual knowledge or practices could as well introduce response biases. Responses to questions related to practices in the past (such as ever use of contraceptive method or responses by men about the contraceptive practice of their wives) were subject to recall bias.

4. CONCLUSION

This study revealed that commercial drivers participated poorly in the choice and use of family planning. Commercial drivers' use of family planning methods is lower than might be expected given their levels of knowledge and approval of family planning. A considerable number of the respondents reported initiating the discussion on whether to use or not to use family planning methods with their partners. The desire to have more children, personal beliefs and fear of side effects were some of the reasons reported for the low utilization of family planning methods.

Therefore, accurate knowledge and information should be targeted at men especially by using communication channels that naturally attract male audiences e.g. newspaper, sporting events and seminars at motor parks to increase their knowledge about family planning methods and consequently positive attitudes and practice of family planning.

CONSENT

All the study participants were informed about the purpose of study, their right to refuse to participate and withdraw at any point in the study. Also confidentiality was assured and written informed consent was secured prior to the interview.

ETHICAL APPROVAL

Ethical approval was obtained from the Ethical Review Committee of the Oyo State Ministry of Health before the commencement of the study. The researcher also ensured that confidentiality of information disclosed by respondents was strictly maintained as names were not written on questionnaires.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Duze MC, Mohammed IZ. Male Knowledge, Attitude, and Family Planning Practices in Northern Nigeria. *Afr J Reprod Health*. 2007;10(3):53–65.
2. National Population Commission (NPC) [Nigeria] and ICF Macro. Nigeria Demographic and Health Survey 2008 [Internet]. 2009. Available from: <http://nigeria.unfpa.org/pdf/nigeriadhs2008.pdf>.

3. Birdsall N, Kelley AC, Sinding S. Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World: Demographic Change, Economic Growth, and Poverty in the Developing World. Oxford University Press; 2001.
4. Sen G, Germain A, Chen LC. Population policies reconsidered [Internet]. Harvard Center for Population and Development Studies; Department of Population and International Health, Harvard School of Public Health; 1994 [cited 2014 Jan 18]. Available: http://www.demog.berkeley.edu/~lyang/Prof-Wilmoth-Related/Demog-260-Fall2012-PDF-Files/Germain.Nowrojee-SettingNewAgendaSexualReproductiveHealthRights-in-Ed-Sen_Germain.Chen-1994-PopulationPoliciesReconcidered-Chp3.pdf
5. Duley L. Maternal mortality associated with hypertensive disorders of pregnancy in Africa, Asia, Latin America and the Caribbean. BJOG Int J Obstet Gynaecol. 1992;99(7):547–53.
6. Ujah IAO, Aisien OA, Mutahir JT, Vanderjagt DJ, Glew RH, Uguru VE. Factors Contributing to Maternal Mortality in North-Central Nigeria: A Seventeen-Year Review. Afr J Reprod Health. 2005;9(3):27.
7. WHO. Repositioning Family Planning [Internet]. 2009 [cited 2013 Nov 11]. Available: <http://www.afro.who.int/en/nigeria/nigeria-publications/1908-repositioning-family-planning.html>.
8. Winikoff B, Sullivan M. Assessing the role of family planning in reducing maternal mortality. Stud Fam Plann. 1987;18(3):128–43.
9. UNFPA. Reducing Risks by Offering Contraceptive Services [Internet]. [cited 2013 Nov 11]. Available: <http://www.unfpa.org/public/home/mothers/pid/4382>.
10. Hatcher RA. The essentials of contraceptive technology [Internet]. Johns Hopkins INFO Project; 1997 [cited 2013 Nov 11]. Available: <http://books.google.com/books?hl=en&lr=&id=ER5vN9nNtcC&oi=fnd&pg=PR4&dq=The+Essentials+of+Contraceptive+Technology.+Johns+Hopkins+School+of+Public+Health,+Population+Information+Program&ots=hw218ujLCm&sig=1GVUYqiQSk1rvEMaz2ulo9prV50>.
11. Mbizvo MT, Bassett MT. Reproductive health and AIDS prevention in sub-Saharan Africa: The case for increased male participation. Health Policy Plan. 1996;11(1):84–92.
12. Frye Helmer J. Men's involvement in family planning. Reprod Health Matters. 1996;4(7):146–54.
13. Ndenzako FN. Male contraceptive prevalence and factors associated with contraceptive use among men in Ngora, Tanzania. 2001 [cited 2013 Nov 12]; Available: <https://www.duo.uio.no//handle/10852/30089>.
14. Ringheim K. When the client is male: Client-provider interaction from a gender perspective. Int Fam Plan Perspect. 2002;28(3):170–5.
15. Shattuck D, Kerner B, Gilles K, Hartmann M, Ng'ombe T, Guest G. Encouraging contraceptive uptake by motivating men to communicate about family planning: The Malawi male motivator project. Am J Public Health. 2011;101(6):1089.
16. Ezeh AC. Contraceptive practice in Ghana: does partners attitude matter? 1992 [cited 2013 Nov 12]. Available from: <http://www.popline.org/node/326107>.
17. Jayalakshmi MS, Ambwani K, Prabhakar PK, Swain P. A Study of Male Involvement in Family Planning. 2002 [cited 2013 Nov 12]; Available: <http://medind.nic.in/hab/t02/i3/habt02i3p113.pdf>.
18. National Population Commission. Nigeria National Population Census; 2006.
19. Orji EO, Ojofeitimi EO, Olanrewaju BA. The role of men in family planning decision-making in rural and urban Nigeria. Eur J Contracept Reprod Healthc. 2007;12(1):70–5.

20. Olugbenga-Bello AI, Oboro VO, Araoye MO, Musa IO. Contraceptive Practices among Intercity Drivers in an Urban Settlement in North Central, Nigeria. *Int J Trop Med.* 2009;4(2):55–8.
21. Population Reports. Information and knowledge for optimal Health (INFO) Project, Series M 32.2; 2004.
22. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: The unfinished agenda. *The Lancet.* 2006;368(9549):1810–27.
23. Tuloro T, Deressa W, Ali A, Davey G. The role of men in contraceptive use and fertility preference in Hossana Town, southern Ethiopia. *Ethiop J Health Dev [Internet].* 2009 [cited 2013 Dec 13];20(3). Available: <http://www.ajol.info/index.php/ejhd/article/view/46826/33220>.
24. Lawoyin TO, Osinowo H, Babatunde M, Bajomo TG, Betiku AO, Busari KT, et al. Family planning in rural Nigeria: a study among men. *Afr J Med Med Sci.* 2002;31(2):159–62.
25. Gustina E, Wongkhomthong S, Soonthorndhadr A, Chamroonsawasdi K. Male Perception and Family Planning Practice: A Case Study in Khaochakan District, Sakaeo Province, Thailand. *J Public Health.* 2004;2(1):70.
26. Tavakoli R, Rashidi-Jahan H. Knowledge of and attitudes towards family planning by male teachers in the Islamic Republic of Iran. *East Mediterr Health J.* 2003;9(5/6):1019.
27. Adewuyi A, Ogunjuyigbe P. The role of men in family planning: An examination of men's knowledge and attitude to contraceptive use among the Yorubas. 2003 [cited 2013 Dec 14]; Available: <http://tspace.library.utoronto.ca/handle/1807/1255>.
28. Fuchs N, Prinz H, Koch U. Attitudes to current oral contraceptive use and future developments: The women's perspective. *Eur J Contracept Reprod Health Care.* 1996;1(3):275–84.
29. Akpamu U, Nwoke EO, Osifo UC, Igbinovia ENS, Adisa AW. Knowledge and Acceptance of Vasectomy as a Male Method of Contraception amongst Literate Married Men in Ekpoma, Nigeria. *Afr J Biomed Res.* 2011;13(2):153–6.
30. Ozvaris SB, Dogan BG, Akin A. Male involvement in family planning in Turkey. *World health forum [Internet].* 1998 [cited 2014 Jan 17]. p. 76. Available: <http://www.ncbi.nlm.nih.gov/pubmed/9610246>.
31. Donati S, Hamam R, Medda E. Family planning KAP survey in Gaza. *Soc Sci Med.* 2000;50(6):841–9.
32. Ezeh AC. The influence of spouses over each other's contraceptive attitudes in Ghana. *Stud Fam Plann.* 1993:163–74.
33. Oni GA, McCarthy J. Family Planning Knowledge, Attitudes and Practices of Males in Ilorin, Nigeria. *Int Fam Plan Perspect.* 1991;17(2):50.
34. Bankole A, Singh S. Couples' Fertility and Contraceptive Decision-Making in Developing Countries: Hearing the Man's Voice. *Int Fam Plan Perspect.* 1998;24(1):15.
35. Priya N, Pranita A, Lisa C, Anurag M, Ravi V. Attitudes and roles in fertility and family planning decision making among men and women from Uttar Pradesh, India: A focus on the urban poor. *Indian J Prev Soc Med.* 2011;32(1):10–3.
36. Olawepo RA, Okedare EA. Men's Attitudes Towards Family Planning in a Traditional Urban Centre: An Example from Ilorin, Nigeria. *J Soc Sci.* 2006;13(2):83–90.
37. Nasir JA, Tahir MH, Zaidi AA. Contraceptive attitude and behaviour among university men: a study from Punjab, Pakistan. *J Ayub Med Coll Abbottabad.* 2010;22(1):125–8.
38. Robey B, Drennan M. Male participation in reproductive health. *Network.* 1998;18(3):11.

39. Mistik S, Nacar M, Mazicio\u0131uglu M, Cetinkaya F. Married men's opinions and involvement regarding family planning in rural areas. *Contraception*. 2003;67(2):133–7.
40. Berhane Y, Mekonnen E, Zerihun L, Asefa G. Perception of fertility regulation in a remote community, South Ethiopia. *Ethiop J Health Dev*. 1999;13(3):217–22.
41. Chai JC. China: Transition to a market Economy. OUP Cat [Internet]. 1998 [cited 2014 Jan 17]; Available: <http://ideas.repec.org/b/oxp/obooks/9780198294306.html>.
42. Caldwell J, Caldwell P. Cultural forces tending to sustain high fertility in Tropical Africa. World Bank Popul Health Nutr Dep [Internet]. 1985 [cited 2014 Jan 14]; Available: <http://www.popline.org/node/417087>.
43. Lasee A, Becker S. Husband-Wife Communication About Family Planning and Contraceptive Use in Kenya. *Int Fam Plan Perspect*. 1997;23(1):15.
44. Oyediran KA, Ishola GP, Feyisetan BJ. Factors affecting ever-married men's contraceptive knowledge and use in Nigeria. *J Biosoc Sci*. 2002;34(04):497–510.
45. Isiugo-Abanihe UC. Reproductive Motivation and Family-Size Preferences among Nigerian Men. *Stud Fam Plann*. 1994;25(3):149.

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