

Factors Associated with Male Involvement in Family Planning in West Pokot County, Kenya

Dennis Butto^{1,*}, Samuel Mburu²

¹Department of Medical Services, Kirinyaga University College, Kenya

²School of Health Sciences, Kirinyaga University College, Kenya

Copyright © 2015 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract The Contraceptive Prevalence Rate for West Pokot County is estimated to be at a low of 23% compared to the national prevalence which stands at 43%. This analytic cross sectional study was aimed at establishing the male factors associated with family planning in West Pokot County, Kenya. A total of 266 married men were involved and household was the unit of analysis. The findings of this study demonstrated that 48% of the respondents were not involved at all in family planning and only 6% of men were using a family planning method. The age of respondents, educational level, number of children, and type of marriage, knowledge and ease of access to family planning services were all significantly associated with male involvement. Having no education made a man 89% less likely to be highly involved in family planning (OD 0.117; 95% CI: 0.03-0.454). The study concludes that the level of male involvement in family planning in the county is still low despite interventions both by the government and other nongovernmental organizations. Therefore, more efforts should be made to improve education standards especially for men and to reorient family planning services to make them more accessible to men.

Keywords Family Planning, Male Involvement, Unmet Need, Contraceptive Prevalence Rate

1. Introduction

Family planning is getting a child by choice and not by mere chance. It involves a conscious decision on size of the family and the spacing between the children. Every day, 1,600 women and more than 10,000 new-borns die from preventable complications during pregnancy and childbirth. Almost 99% of these maternal and 90% of neonatal deaths occur in the developing countries. As the first pillar of safe motherhood and an essential component of primary health care, family planning plays a major role in reducing maternal and new-born morbidity and mortality. Family planning

enhances efforts to improve family health. However, traditional beliefs, religious barriers and lack of male involvement have weakened family planning interventions [1].

In the 1990s, many women's health programs began to acknowledge that family planning must be viewed in the broader context of reproductive health. The program of action adopted by the International Conference on Population and Development (ICPD) held in Cairo 1994 noted that special efforts ought to be made to emphasize men's shared responsibility and promote their active involvement in responsible parenthood, sexual and reproductive behavior, including family planning; pre-natal, maternal and child health; prevention of Sexually Transmitted Diseases (STDs); and prevention of unwanted and high-risk pregnancies [2]. The Beijing world women conference in 1995 also re-enforced this message when it recognized the importance of "shared responsibility between men and women in all issues related to reproductive health".

Family planning programs should always be a concern for both the man and the woman. Historically though, most of the family planning programs have been a woman only affair. The programs targeted only women with very little or no attention to the role men play in respect to the overall family planning decisions [3].

Men in the developing world, Kenya included, are often the primary decision-makers about family size and use of family planning [4]. A considerable discordance between spouses on questions of family planning and desired family size has also been identified. In some developing countries, levels of communication on these topics are low. Inter-spousal communication is related to contraceptive decision-making and positively affects contraceptive uptake and continued use, whereas failure to communicate reproductive intentions limits couples' effective and sustained contraceptive use [5].

Male involvement is not only restricted to the uptake of male family planning methods but also includes the number of men who encourage and support their partners and their peers to use family planning. It also involves the influencing

of policy environment to be more conducive to development of male related programs. Therefore, male involvement should be understood as all the organizational activities whose main aim is to increase the prevalence of contraceptive for either gender [6].

Failure to involve men in the family planning programs in a patriarchal society like Kenya has serious consequences even if women are motivated to practice contraception because of opposition from the spouse. This opposition accounted for 23% of the unmet family planning needs during the Kenya demographic and health survey [7]. This study was therefore aimed at establishing the demographic, social and health system factors associated with male involvement in family planning in West Pokot County.

2. Materials and Methods

2.1. Study Design

This was a cross sectional analytic study conducted during the month of July 2014. It used the quantitative approach to generate quantifiable data that could be generalized to the entire study population.

A structured interview questionnaire was used to collect data from the respondents. The structured questionnaire was designed to evaluate the population's demographics, social, and institutional factors in relation to male involvement in family planning. Trained study enumerators were engaged to collect data at the household level under the supervision of the principal investigator.

The location and the sub- location for the study were selected by random sampling. The three locations of Kapenguria Division were listed on pieces of paper, folded and placed in a container and Mnangei location was randomly picked. The same procedure was done for the four sub locations in Mnangei Location and Keringet sub location, which has six villages, was picked for the study. A total of 266 men were involved in the study. Probability Proportionate to sample was used to select the 266 respondents from six villages (clusters).

A house was the basic sampling unit in each village. Households were selected by standing in the middle of the village and spinning a pencil. The direction where the pencil pointed was taken and every household included in the study. In each selected household, one married man whose wife was aged 15 to 49 years and who has been a resident of the sub-location for a period not less than one year was interviewed after obtaining an informed consent. Only one male was interviewed per household. In case where there was more than one eligible man in the house, the one considered as the household head was interviewed. If there was only one eligible member of the household, but who at the time of the visit was away to a nearby place, say garden, the enumerator left a message and interviewed him later. If the only eligible person refused to consent to the study, he was excluded and the next household considered. And where

the boundary of the village was reached without obtaining the required numbers of respondents, the enumerator turned to the direction of his right hand and continued with the same procedure until the required number was obtained.

2.2. Study Population

The study population included the married men living in Keringet sub location of West Pokot County.

2.3. Inclusion Criteria

All married men whose wives were still within the age bracket of 15-49 years (female reproductive age) during the period of study.

2.4. Exclusion Criteria

Any man who fitted into the above criteria but not physically present during the study period.

2.5. Selection and Training of Enumerators

Six male research enumerators were recruited from within the community. The Investigator conducted a two day training to orientate the enumerators on data collection and to standardize the whole process.

2.6. Pre-testing of Research Instruments

The research instruments were pre-tested once on 15 participants in a similar population before the actual data collection. The pre-test checked on the answerability, sequence, and the appropriateness of questions. It also timed the duration of each interview session. The experience from the pre-test informed the researcher on the necessary adjustments required in the tool.

2.7. Ethical Considerations

Ethical approval was obtained from research and ethics committee of the Great Lakes University of Kisumu upon approval of the research proposal. The major ethical issues which were adhered to during the process of study include; voluntary participation, obtaining informed consent from every participant before enrolment, ensuring privacy and confidentiality of the respondents. Institutional ethical, scientific honesty and competency were also considered. Consent to conduct the research was also obtained from the local provincial administration.

2.8. Data Analysis

Data was analyzed using Statistical Package for Social Studies (SPSS) version 17 and Microsoft Excel. The analyzed data was presented in tables, graphs and charts. Correlation and Chi-square tests were utilized to assess the relationships between selected variables. Regression

analyses were also performed to show the strength of association between selected variables and male involvement in family planning either.

3. Results

3.1. Level of Male Involvement in Family Planning

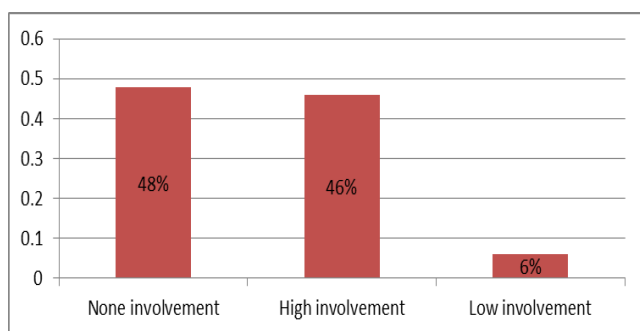


Figure 1. Level of Male involvement in family planning

The results of male involvement are summarized in Figure 1. In this study, high involvement was defined as 'Current use of FP by respondent', 'Discussion with wife on FP' and 'Current use of FP by wife'. Low Involvement was defined as 'just supporting the use of FP' and 'would encourage other men to use FP'. Overall, 47.74% of men in this study were not involved in whichever way in family planning while only 46.24% of the men were highly involved. Only 33% of the respondents reported that their wives were using a contraceptive method at the time of interview.

3.2. Reasons for not Using Family Planning by the Respondents

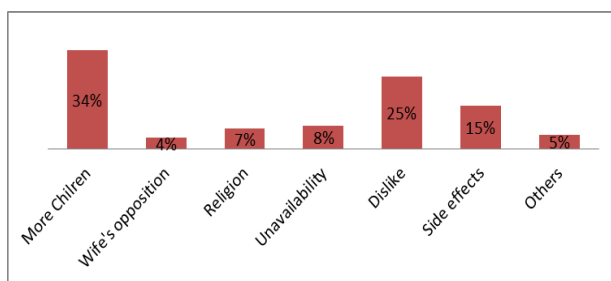


Figure 2. Distribution of respondents by reason for not involving family planning

The reasons of respondents for not involving family planning are summarized in Figure 2. When asked why they were not involved in family planning, majority of the respondents, (33.8%) cited their desire to have more children, 25.2% said they did not like the family planning methods and another 13.5% cited the side effects.

3.3. Characteristics of Demographic Factors

Table 1. Distribution of respondents by demographic factors

Demographic Factors n=266	Frequency	% Percentage
Age group		
15-19	1	0.4
20-24	18	6.8
25-29	72	27.1
30-34	65	24.4
35-39	52	19.5
40-44	30	11.3
45-49	18	6.8
50-54	8	3.0
55-59	2	0.8
Source of income for the respondent		
Farming	92	34.6
Business	107	40.2
Salaried	45	10.9
None	14	5.3
Others	18	3.0
Respondents educational level		
None	32	12
Primary incomplete	53	19.9
Primary complete	63	25.2
Secondary	78	29.3
Tertiary	36	13.5

According to table 1 above, majority of the respondents, 27.1% were of the age group 25-29 followed by 30-34 at 24.4% and then 35-39 at 19.5%. The respondents' ages ranged from 19 to 57 years. Concerning the number of children, 39.1% of the respondents had between 1-3 children, 36.1% had between 4-6 children, while about 8% had 10 children and above. With regards to the main source of income, majority of the respondents, 40.2% were businessmen, 34.6% farmers, 16.9% had salaried job while 5.3% had reported that they did not have any source of income. When asked about their level of education, 31.9% of the respondents either had no formal education, or did not complete primary education, 29.3% had secondary education while only 13.5% were leaned up to tertiary level.

3.4. Characteristics of Social Factors

Table 2. Distribution of Respondents by Social Factors

Social Factors	Frequency n=266	% Percentage
Group membership		
YES	80	30.1%
NO	186	69.9%
Religion of the respondent		
Catholic	120	45.1%
Anglican	53	19.9%
Muslim	18	6.8%
PCEA	24	9.0%
None	29	10.9%
Others	22	8.3%
Type of Marriage		
Married monogamous	213	80.1%
Married polygamous	53	19.9%

The respondents' social factors are summarized in Table 2 above. With regards to social group membership, 69.9% of the respondents were not members of any social group while 30.1% belonged to a social group. Another social factor that was interrogated was religion and it was found that 45.1% of the respondents were Catholics, 19.9% Anglican, 6.8% Muslim, 9% were members of PCEA while 8.3% belonged to other religions. Over 10% of the respondents were not affiliated to any religion. When asked about the type of marriage relationships, 80.1% of the respondents were in a monogamous marriage while 19.9% were polygamous.

3.5. Characteristics of Institution Factors

The institutional factors characteristics of the respondents are summarized in Table 3. Majority of the respondents, 81.2%, knew where to get family planning services. Female health workers formed the majority of staff at the family planning service points followed by male health workers at

75.1% and 18.2% respectively. When asked about the type of health facilities from where they get family planning services, majority of the respondents (82.3%) cited government health facility, 10 % said they buy from the local chemist and 6.8% from the private health facilities and a further 0.9% from community based distributors. Concerning the time taken to reach the service point, majority of the respondents (45.5%) take 30min-1 hour, 33.6% take less than 30 minutes, and 19.1% take 1-3hrs while 1.80 take over 3hrs. When asked about the ease of availability of family planning services in the community, majority of the respondents, 63.9% thought that family planning services for men were not easily available while 36.1% believed that the services were easily available in the community.

Table 3. Distribution of Respondents by Institution Factors

Health Systems Factors	Frequency	% Percentage
Type of facility		
Government owned health facility	181	82.3%
Private facility	15	6.8%
Buy from chemist	32	10%
From CBOs	2	0.9%
Time taken to the facility		
Less than 30mins	74	33.6%
30mins-1 hrs	100	45.5%
1hr-3hrs	42	19.1%
Over 3hrs	4	1.8%
Ease of FP availability for men		
Yes	95	36.1%
No	168	63.9%
Providers of FP services		
Female health workers	171	76%
Male health workers	41	18.2%
Others	13	5.8%

3.6. Relationship between Demographic Factors and Male Involvement in Family Planning

Table 4. Demographic factors and level of involvement

Demographic Factors	Level of Involvement			X ²	df	p-value
	High	Low	None			
Age group						
15-19	0%	0%	100.0%			
20-24	55.6%	5.6%	38.9%			
25-29	51.4%	5.6%	43.1%	38.106	16	0.001
30-34	52.3%	7.7%	40.0%			
35-39	51.9%	1.9%	46.2%			
40-44	26.7%	3.3%	70.0%			
45-49	27.8%	0%	72.2%			
50-54	25.0%	37.5%	37.5%			
55-59	0%	50.0%	50.0%			
Number of children						
1-3	59.6%	6.7%	33.7%	42.088	10	0.000
4-6	50.0%	4.2%	45.8%			
7-9	30.2%	2.3%	67.4%			
10-12	0%	13.3%	86.7%			
13-15	0%	16.7%	83.3%			
16-18	0%	50.0%	50.0%			
Source of income for the respondent						
Farming	40.2%	4.3%	55.4%			
Business	45.8%	6.5%	47.7%	15.037	8	0.058
Salaried	60.0%	4.4%	35.6%			
None	28.6%	21.4%	50.0%			
Others	75.0%	0%	25.0%			
Respondents educational level						
None	19.7%	8.2%	72.1%	32.549	8	0.000 0.117 (0.030-0.454)
Primary incomplete	43.7%	4.2%	52.1%			
Primary complete	51.9%	9.3%	38.9%			
Secondary	62.9%	4.8%	32.3%			
Tertiary	72.2%	0%	27.8%			

Table 4 shows that respondents' age group and the number of children, which were significantly associated with level of involvement. In both cases, the level of male involvement in family planning decreased with increasing age and number of children. Education level of the respondent was also significantly associated with the level of involvement. Having no education made a man 89% less likely to be highly involved in family planning (OD 0.117; 95% CI: 0.03-0.454).

3.7. Association between Social Factors and Male Involvement in Family Planning

Table 5. Social factors and level of involvement

Social Factors	Level of Involvement			X ²	df	p-value
	High	Low	None			
Group membership						
YES	52.5%	6.3%	41.3%	1.991	2	0.370
NO	43.5%	5.9%	50.5%			
Religion of the respondent						
Catholic	50.8%	3.3%	45.8%	27.081	10	0.003
Anglican	43.4%	11.3%	45.3%			
Muslim	38.9%	22.2%	38.9%			
PCEA	54.2%	4.2%	41.7%			
None	20.7%	0%	79.3%			
Others	59.1%	4.5%	36.4%			
Type of Marriage						
Married monogamous	52.1%	5.6%	42.3%	14.980	2	0.001(OD:3.803 CI:1.873-7.719)
Married polygamous	22.6%	7.5%	69.8%			

Table 5 above shows that among the social factors, religion of the respondent (p=0.003) and type of marriage (p=0.001) were significantly associated with level of male involvement in family planning. Respondents who were not members of any religion were relatively more involved in family planning. However group membership (p=0.370) was not significantly associated with level of male involvement. With regards to the type of marriage union, being in a monogamous marriage made a man 3.8 times more likely to be highly involved in family planning (OD: 3.803[1.873-7.719]).

3.9. Association between Health System Factors and Level of Involvement

Table 6. Relationship between Health system factors and Involvement

Health systems factors	Level of Involvement			X ²	df	p-value (Odds Ratio)
	High	Low	None			
Type of facility						
Government health facility	54.1%	7.2%	38.7%	4.972	6	0.547
Private facility	46.7%	0%	53.3%			
Buy from chemist	63.6%	9.1%	27.3%			
From CBOs	100.0%	0%	0%			
Time taken to the facility						
Less than 30mins	55.4%	2.7%	41.9%	6.325	6	0.388
30mins-1 hr	53.0%	10.0%	37.0%			
1hr-3hrs	59.5%	4.8%	35.7%			
Over 3hrs	50.0%	25.0%	25.0%			
Ease of FP availability for men						
Yes	57.9%	8.4%	33.7%	10.991	2	0.004 (2.325: 1.359-3.978)
No	40.5%	4.8%	54.8%			
Providers of FP services						
Female health workers	53.3%	7.7%	39.1%	14.558	8	0.068
Male health workers	68.3%	4.9%	26.8%			
Others	23.1%	0%	76.9%			

Health systems factors and involvement levels are summarized in Table 6. The Table 6 indicates that among the health system factors, only ease of family planning services availability for men was found to be significantly associated with level of involvement of the men in family planning ($p=0.004$). The type of facility from where the respondent could get family planning services, ($p=0.547$), time taken to reach the facility (0.388) and the providers of family planning services ($p=0.068$) were not significantly associated with level of involvement of men in family planning. Men who reported that family planning services were easily available in the community were 2.325 times more likely to be highly involved in family planning (OD 2.325, 95% CI: 1.359-3.978).

4. Discussion

4.1. Demographic Factors Associated with Male Involvement in Family Planning

In this study, the majority of the respondents were in the age group of 25-29 years and the ages ranged from 19 to 57 years as indicated in Table 1. This age group is lower than those found in a study in Ghana by DeRose et al.[8], where the majority of the respondents fell in the age group of 35-39 years. This could be due to the Pokot culture that encourages men to marry early in life. Analysis demonstrated a significant relationship between the age of respondents and the level of involvement in family planning in west pokot, ($p=0.001$). This finding however contradicted Green and J. Chens [9] on male involvement in reproductive health in Indonesia which did not find any association between age of the respondents and involvement in family planning and other reproductive health services.

With respect to the number of children, over 20% of the respondent had between seven and fourteen children. In the Pokot community, the more children one has, the highly he is placed in the community. In this study, there was a significant relationship between the number of children per respondent and the level of involvement in family planning, ($p=0.000$). The number of men who were highly involved in family planning decreased with the increasing number of children such that the more children a man has, the more likely he will not be highly involved in family planning. These findings were in contrast with Agadjanian [10] study on gender, communication, and contraception in Urban Mozambique which found out those men with many children would be highly involved in family planning. Men as the decision makers in most marital and family matters may consider using family planning after they have already achieved their ideal number and sex composition of children.

Concerning the main source of income, majority of the respondents were either doing small businesses or subsistence farming as shown in Table 1. There was however no significant association between the source of income and male involvement in family planning in this region. This could be due to the fact that most family planning services

are provided free of charge at the government facility. These findings were in contrast with the findings of a study in Mpigi District, Uganda[11], on male participation in family planning which found out that male who had regular salaried jobs were highly involved in family planning, and that stable source of income increased access and bargaining power for services including healthcare.

The level of education among the respondents was low with over 30% having no any form of formal education. The low education level in the county could be due to the nomadic culture where men move from one place to another looking for pasture for their livestock leading disruption of learning or dropping out of school all together. In this study, there was a great association between a man's level of education and his involvement in family planning, $p=0.000$. A man with no education was 89 times less likely to be highly involved in family planning. This may be because education is likely to improve a man's knowledge on the importance of family planning, hence the positive association. These findings corresponded to a similar study in Ghana [12] which revealed that the level of men's education influences a couple's overall fertility preferences. A husband who is learned to a level beyond primary education influences his wife to limit childbearing. A man's preference for smaller family can lead women to desire fewer children which mean less responsibility and more spare time for both women and the man to be involved in social activities. A smaller family will allow the family members to raise their status through attaining higher education or by joining the labor force.

4.2. Social factors Associated with Male Involvement in Family Planning

This study explored membership to a social group, religion and types of marriage as the main social factors that could be associated with male involvement in family planning.

In this study, over 70% of the respondents were not members of any formal social groups. Membership to a social group in this study was not significantly associated with male involvement in family planning. This was not in line with a study by Montgomery [13] that found out that everybody belongs to formal or informal social networks that influence their behavior to some degree. Social networks include the extended family, friends, neighbors, political groups, church group, youth groups, and other formal and informal associations. Another study [14], also found out that for many men, informal communication is a primary source of family planning information.

Religion is another form of social networks that can influence a person's health seeking behavior. The majority of the respondents in this study were mainly Christians with Catholics dominating at 45%. There was a significant association between religion and involvement in family, $p=0.003$. Interestingly, respondents who did not subscribe to any religion were more likely to be involved in family planning than their counterparts were subscribed to different

religion. However, further analysis did not show any association between different denominations and male involvement in family planning.

The type of marriage in this study was defined as either monogamous or polygamous. Majority of the respondents were in a monogamous marriage but still about 20% were in a polygamous relationship. There was a significant association and relationship between the type of marriage and the level of male involvement in family planning ($p=0.001$). Further multivariate analysis showed that monogamous marriage made a man 3 times more likely to be highly involved in family planning (OD 3.803CI:1.873-7.719). Children in the Pokot community and in most African set up are viewed as a source of wealth and prestige, and the more children one has, the higher his place in the community. To achieve this, men will marry more than one wife so that they can sire many children hence the less involvement in family planning in the polygamous relationships.

4.3. Institutional Factors Associated with Male Involvement in Family Planning

Institutional factors have been found to influence men involvement in family planning. In the study, the institutional factors that were explored included; type of facility from where the family planning services can be obtained, the duration of time taken to reach the facility, the ease of availability of family planning for men and the providers of family planning services.

Concerning the type of facility from where the respondents got their services, majority of the respondents (82.3%) get their family planning services at a government health facility 6.8% get from the private health facility as indicated in figure. This may be due to fact that the study are being in a rural set up, there are very few private facilities. As shown in Table 6, the type of facility from where the family planning services were obtained did not have any significant association with the level of male involvement in this study ($p=0.547$).

With regards to the time taken to reach the service point, majority of the respondents, 45.5% reported that they take 30 min-1 hour. This could have been due to the fact that the West Pokot district hospital, the main government facility that servers most of the respondent is about five kilometers from the study area. There was no relationship between the time taken to reach the facility and the level of male involvement in family planning in this study $p=0.388$.

Majority of the men i.e. 63% interviewed reported that family planning services for men were not easily available to the community. There was a significant relationship between ease of availability of family planning services and the level of male involvement in family planning in this study, $p=0.004$. Men who found family planning services to be easily available in the community were 2.325 times more likely to be highly involved in family planning (OD 2.325, 95% CI: 1.359-3.978) as shown in Table 6. These findings

were similar to Greene *et al.* [10] that the range of family planning methods available to men is limited, and this as a result inhibits men's capacity to involve in fertility regulation. A study by Heinemann *et al.* [15] concluded that men would use a hormonal male contraceptive, delivered by injection and/or implant; this would be less intrusive method, likely that men will show more interest in using family planning. Unfortunately, the production of such a method for men does not seem to be possible in the near future.

Access to family planning services and the overall involvement in family planning services by men can also be influenced by the type of health workers offering the services. Female health workers formed the majority of staff at the family planning service points constituting over 75%. The type of service providers was not associated with male involvement in family planning ($p=0.068$). Nzoka [16] in his study on men involvement and its implications on policy and program development in reproductive health concluded that the reality is that family planning services available for men are few and, besides, the facilities providing family planning services are also not enough, even the few available are not male user-friendly and are female dominated affecting male involvement.

5. Conclusions and Recommendations

5.1. Conclusions

The study concludes that the level of male involvement in family planning in the county is still low despite interventions both by the government and other nongovernmental organizations in trying to increase the prevalence of family planning. The demographic factors that were found to be significantly associated by male involvement in family planning in this study were age, number of children, and the educational level of the respondent. The social factors those were significantly associated with male involvement in family planning in this study included membership to a social group and religion of the respondent, while the religion of the respondent was not significantly associated with family planning. Knowledge factors in the study were significantly associated with the level of male involvement. Knowledge of a facility offering family planning services, general knowledge about family planning and knowledge of specific family planning methods available to both men and women all had significant association. On the other hand, only ease of availability of family planning services for men was significantly associated with male involvement. The type of health workers offering the services, distance to and type of health facility did not have any significant association with involvement in family planning in west Pokot County.

5.2. Recommendations

This study recommends that concerted efforts should be put in community sensitization and awareness campaigns

aimed at increasing male involvement in family planning in this community. The various contraceptive options available for either and the benefits of planning families should be highlighted to the community at all cost. Stakeholders including community leaders, social workers, government and non-governmental agencies must come together to improve the prevalence of contraceptive uptake in this region.

Male involvement in family planning was found to increase with increasing level of education, hence the need for the community to invest in education of the boy child.

Formal and informal social grouping e.g. religions that provide information and promote male involvement in family planning should be encouraged.

Healthy public policies and reorientation of health services to make family planning services accessible and male friendly should be advocated for.

Finally, research should be done to come up with more contraceptive options for men e.g. hormonal contraceptive methods.

Acknowledgements

I am deeply humbled by both financial and moral support I received from my dear wife, Jemima Wamboi, without which this work would not have been possible. I wish to thank Dr. Careena Otieno and Leila Gateri both of Great Lakes of Kisumu for their technical inputs. Special thanks to my colleagues at Kirinyaga University College for their patience and encouragement during the course of this study.

REFERENCES

- [1] WHO. Addressing the challenges of women's health in Africa. The commission on women's health in Africa report. WHO Africa Office. 2012.
- [2] J. Levy. Reaching the Goals of Cairo. Male Involvement in Family Planning, online available from <http://www.gi.unc.edu/research/carolina.papers/healthpapers.htm>. 2008.
- [3] RHM. Men and Reproductive Health Overview. RHM archives, online available from <http://www.rho.org/html/menrh-links.html>. 2009.
- [4] C. Nzioka. Research on men and its implications on policy and program development in reproductive health. In: Programming for Male Involvement in Reproductive Health. WHO regional advisors in reproductive health report, WHO/PAHO, Washington DC, September 5---7, 2001.
- [5] K. A. Oyediran, G. P. Ishola, & B. J. Feyisetan. "Factor Affecting Ever-Married Men's Contraceptive Knowledge and Use in Nigeria", *Journal of Biosocial Science*, Vol. 34, pp.497-510, Cambridge University Press, United Kingdom. 2002.
- [6] P. C. Green & J. Chens. HBC Male Involvement in Reproductive Health. CPD UNFPA. Paper 27, online available from http://www.cpd.org.bd/pub_attach/unfpa27.pdf. 2003.
- [7] KNBS & ICF Macro. Kenya Demographic and Health Survey, 2008-09. Calverton, Maryland: Kenya National Bureau of Statistics and ICF Macro. 2010.
- [8] L. F. DeRose, Ezech A. C. "Men's Influence on the Onset and Progress of Fertility Decline in Ghana, 1988-1998", *Population Studies*, Vol.59, No.2, July, pp.197-210. 2005.
- [9] P. C. Green & J. Chens. HBC Male Involvement in Reproductive Health. CPD UNFPA Report. Paper 27, online available from http://www.cpd.org.bd/pub_attach/unfpa27.pdf. 2003.
- [10] V. Agadjanian. "Men's Talk about Women's Matters: Gender, Communication, and Contraception in Urban Mozambique", *Gender and Society*, Vol.16, No.2, April, pp.194-215. 2002.
- [11] A. Kaida, W. Kipp, P. Hessel, J. Konde-Lule. "Male Participation in Family Planning: Results from A Qualitative Study in Mpigi District, Uganda", *Journal of Biosocial Science*, vol.37, pp.269-286, Cambridge University Press, United Kingdom. 2005.
- [12] L.F. DeRose, Ezech, A.C. "Men's Influence on the Onset and Progress of Fertility Decline in Ghana, 1988-1998", *Population Studies Journal*, Vol.59, No.2, July, pp.197-210. 2005.
- [13] M. R. Montgomery and W. Chung. Social network and the diffusion of fertility control: The Korean case. Values and fertility change conference, Sion, Switzerland, Feb 16-19, 44p. (Unpublished). 2000.
- [14] N. Rutenberg & S. C. Watkins. The buzz outside and clinics: Conversations and contraception in Nyanza Province, Kenya. *Studies in Family Planning* 28 (4): 290-307. 2002.
- [15] Heinemann. Male Participation in family; A Review of Programme Approaches in the Africa Region. Male participation conference, Banjul the Gambia. 2005.
- [16] C. Nzioka. Research on men and its implications on policy and program development in reproductive health. In: Programming for Male Involvement in Reproductive Health. Report of the Meeting of WHO Regional Advisors in Reproductive Health, WHO/PAHO, Washington DC, September 5---7, 2001. Geneva, Switzerland: World Health Organization; 2002:143----152. 2002.