Services Related Barriers for Male Involvement in Utilization of Family Planning in Chato District Tanzania

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Abstract: *Tanzania has one of the highest Total Fertility Rate in Africa of 4.8 and a 32% level of Family planning utilization. The Ministry of Health Community Development Gender and Elderly of Tanzania through Family planning Research Agenda has established that, low involvement of men in Family planning services is one of the barriers towards contraceptive uptake in many African societies due to male dominance in decision making including Family planning issues. The study was conducted to document current family planning (FP) utilization and identify possible underlying barriers affecting male involvement in utilization of Family planning in Chato District, Geita Tanzania. A cross-sectional study using both quantitative and qualitative techniques was conducted. Semi-structured questionnaires were administered to 496 participants in 4 wards of Chato District. Focused Group Discussions and Key Informant interviews were conducted from each of these areas. Descriptive statistics was done to determine frequencies of FP methods used. Using odds ratios, bivariable analysis was done to assess the effect of individual factors on FP use. Inferential logistic regression was then run to assess for the effect of potential confounding variables. The proportion of men or their partner using Family planning was found to be 17.5%, which suggest that, there is low male involvement in utilization of family planning in Chato District due to many barriers. Logistic regression results suggested that it was 2 times more likely for participants that reported residing near Family planning service delivery points to use FP [(OR=1.949, 95%CI=1.069-3.555, p=0.030)] than those that reported residing distant from FP services delivery points and 2 times more likely for participants who had FP side effects not to use FP [1.888, 95%CI =1.067-3.341, p=0.029], than those who never had side effects after use of FP methods. Overall*

17.5% men currently utilized Family Planning. Access to FP service delivery points and side effects were more likely to be associated with FP use. The study underscored the need for Family Planning programs to adopt approaches that improve access to Family Planning methods and improved skilled provision of Family Planning methods to reduce side effects, in order to promote FP use in line with National objectives for scale up of Family planning utilization to 60%.

Key words: Family planning, Service-related barriers, Male involvement

Introduction

Family Planning is defined by the U.N. Department of Social Affairs Population Division (2004) as "educational, comprehensive medical or social activities which enable individuals, including minors, to determine freely the number and spacing of their children and to select the means by which this may be achieved" Family planning enables individuals to attain their desired number of children and spacing of their children, through use of contraceptive methods (WHO, 2018). Low utilization of Family planning is a global problem for developed and non-developed countries (WHO, 2015).

Globally Family planning use varies widely, both in terms of total use and the types of methods used. In 2015, a total of 57.4% of married or in-union women of reproductive age worldwide were using some form of contraception. However, contraceptive use was much lower in the least developed countries (40%) and was particularly low in Africa (28.5%). Among the other major geographic areas, contraceptive use was much higher, ranging from 61.8%, in Asia to 66.7% in Latin America and the Caribbean.

Tanzania introduced FP services since 1959, but the National contraceptive prevalence has remained at 32%, which is very low compared to the National target of 60% (Williamson *et al.*, 2009; TDHS, 2015-2016), whereas in Chato District Council FP utilization is 16.4% (DHIS, 2016) with high TFR of 4.8. High fertility is associated with maternal and child morbidity and mortality, as mothers are frequently exposed to risks of child bearing and its complications, including heavy bleeding after delivery, gestational high blood pressure and diabetes, preenclapsia and the risks of abortions which could result to death (Audet, 2008). Tsui *et a*l., 2010, in their studies on Family Planning concluded that, using family planning services could help to reduce the number of exposure of mothers to risks of child bearing and its complications. Another studies on Family Planing by Yeakey *et al*. 2009 and Tanzania Demographic Health Surveys (TDHS), 2018, also have explained the association between high fertility rate and low use of contraceptives, high infant mortality rates, under five mortality rates and maternal mortality rates which is the case in Tanzania and that efforts for

promoting FP use should be strengthen from policy level to individual level taking on board the role of men in Family planning services. Effective utilization of FP services can help address such emerging public reproductive health concerns and overall improve maternal and child health outcomes in general (WHO, 2015). Men desire but at the same time do not use any FP methods due to many barriers and among other barriers. Service delivery related problems such as limited FP methods for men, side effects as a result of FP use, un-awareness of FP services, and few FP clinics remain barriers to contraceptive use (WHO, 2015). Enabling men to play a more active role in reproductive decisions has significant benefits to the family planning methods acceptance, continuation of use, client satisfactions and efficacy (Lundgren *et al*. 2012). There is a need to recognize men instead of women alone in studies on fertility (Agadjanian, 2008).

MHCDEC has put in place favorable policies that promote utilization of FP services in general yet FP utilization is still reported as a challenge. This study assessed the current utilization among men and factors that influence male involvement in utilization of FP in Chato district which could be at health care service level; so as to design better strategies to improve FP service delivery.

Methodology

The process-context approach was developed after going through various researches concerning barriers affecting FP programs to achieve desired results. Male involvement in utilization of FP services is reported to be influenced by a complex interaction of many factors at service delivery levels. The conceptual framework in this study is based on the assumption that, there are a set of service provision barriers for male involvement in utilization of family planning.

The service provision barriers involved are poor accessibility of services, side effects after FP use, inadequate availability of FP commodities, FP clinics not known, few available FP clinics and limited choice of available male oriented FP methods. These barriers are likely to be more important for the poor and other vulnerable groups, where the costs of access, lack of information and cultural barriers impede them from benefiting from public services. Policy also influence freedom of choice of an FP method.

The study was conducted in Chato district, Geita region in western Tanzania. The reason for selecting Chato district was that, it is has the highest rate of maternal deaths in Geita region. Chato District Council is a new Council with unknown prevalence of Family planning utilization among men. Also there were no information on studies on male involvement in Family Planning in the lake zone including Chato. Study

design used in this study was a cross sectional that used both quantitative and qualitative research methods. Multistage sampling technique was used to randomly select the wards, villages and hamlets of the study area. The sampling unit was men aged 19 years and above who live in a particular household in Chato District. Systematic sampling enabled the selection of 496 men, which was used as a sample size for the study. Also, four Focus Group Discussions were conducted and 12 Key Informants were interviewed. The combination of techniques that gathers both quantitative and qualitative information was important to yield the most comprehensive results.

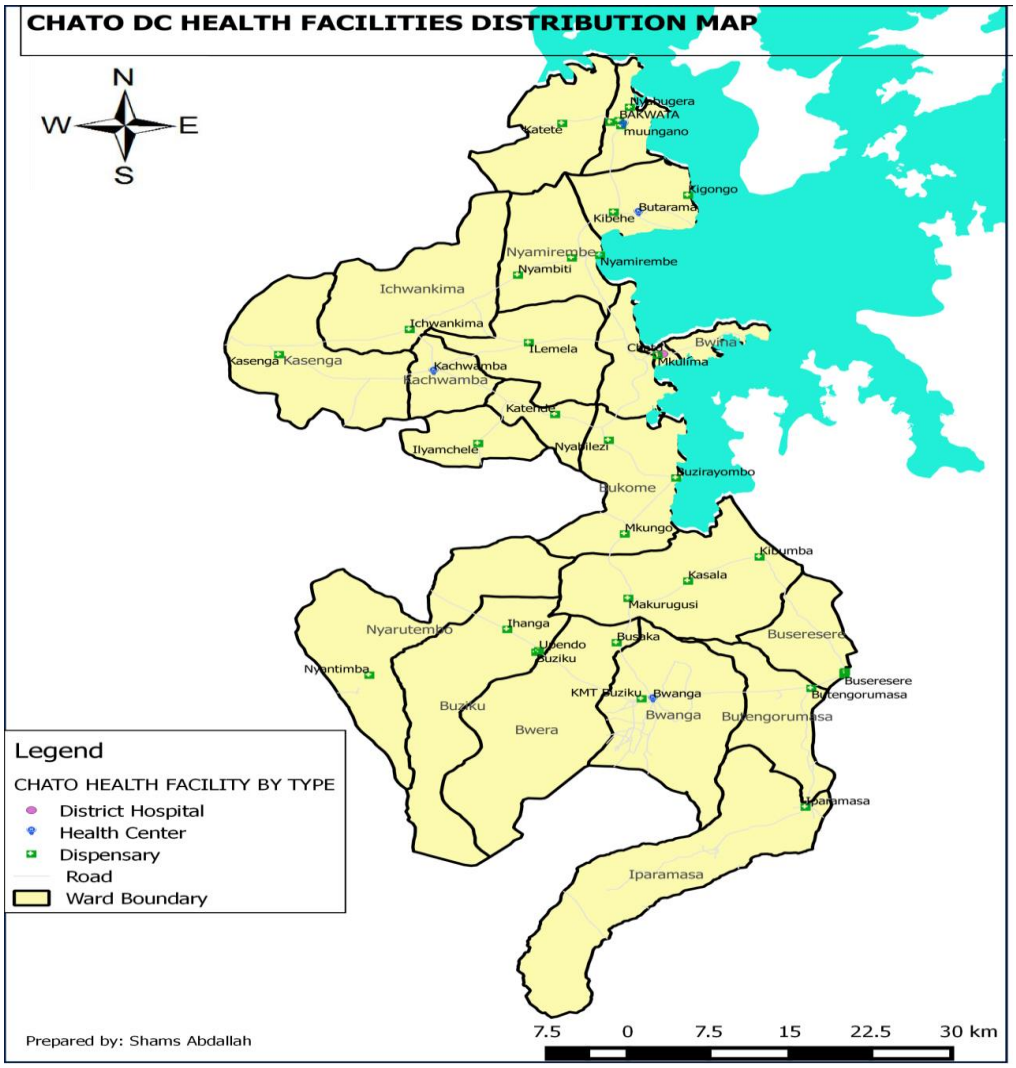

Figure 1: The Map of Chato DC showing Distribution of Family Planning Services within Health Facilities (CHATO, 2018)

Data were analyzed differently according to the objectives using SPSS statistical package. Quantitative data analysis on the **c**urrent FP use among men, was reported for all methods as a percentage (%) where the numerator was the number utilizing FP and the denominator was the total number of respondents. For the barriers that were associated with utilization or non-utilization of FP. Initially, bivariable analysis was performed between FP utilization (dependent variable) and each of the potential barriers associated with FP utilization (independent variables). These included distance to FP clinics, side effects after FP use, inadequate availability of FP commodities, FP clinics not known, few available FP clinics and limited choice of available male oriented FP methods. Their odds ratios (OR) at 95% confidence intervals (CI) and p-values were obtained. The findings at this stage helped us to identify important associations.

Then multivariable analysis was performed using Binomial Non-linear Logistic regression model. Factors that were significantly associated with FP utilization at bivariable analysis ($p < 0.05$, those with p-values < or = 0.1) and those not significant but with previous evidence from literature review indicating possible association with FP use were considered in the logistic regression model. Their respective odds ratios (OR) associated with these potential factors were reported as a measure of strength, together with their respective 95% confidence intervals. The investigation of the factors influencing male involvement in Family Planning Utilization were two. The first one was Demographic factors which includes age, marital status, education level, occupation and Religion . The second one was service related factors which includes Distance to FP centre, Side effects after FP use, Availability of FP commodities and Availability of FP clinics.

For qualitative data, Narrative analysis with the Thematic version was employed to analyse data emanating from Focus Group Discussions (FGD) and key informants (KI). The collected information was analysed and coded by themes and sub-themes. There were two themes; individual barriers and service related barriers and 20 sub-themes. For each FGD outcome of discussion and KI interview proceedings were summarized and used to supplement obtained quantitative information and verbatim quotations were used to illustrate responses on relevant issues.

Results

Current use of FP methods by Men

Results in Table 1 shows that, the proportion of men utilizing family planning services was found to be 17.5%, which mean male involvement in FP use is very low.

Table 1: Frequency Distribution of Family Planning Utilization

		Frequency	Percent	Valid Percent
Used FP	Yes	80	16.1	17.5
	No	378	76.2	82.5
	Total	458	92.3	100.0
Missing	System	38	7.7	
Total		**496**	**100.0**	

Socio-demographic characteristics of study participants

The findings on the Socio-demographic characteristics in relation to Family planning utilization in Chato district are summarized in Table 2.

Table 2: Distribution of Socio-Demographic Characteristics of Respondents

Characteristics		Frequency	Percent	Valid Percent
Age group	19 and below	4	0.8	0.8
	20- 29	142	28.6	28.6
	30- 39	180	36.3	36.3
	40- 49	119	24	24
	50+	51	10.3	10.3
	Total	**496**	**100**	**100**
Marital Status	Not married	11	2.2	2.2
	Married	445	89.7	89.7
	Widowed	11	2.2	2.2
	Separated	18	3.6	3.6
	Cohabiting	11	2.2	2.2
	Total	**496**	**100**	**100**
Do you have any child	Yes	475	95.8	95.8
	No	21	4.2	4.2
	Total	**496**	**100**	**100**
Number of children	One	80	16.1	16.1
	Two	104	21	21.6
	Three	27	5.4	5.6
	Four	104	21	21.6
	More than four	167	33.7	34.6
	Total	482	97.2	100
	Missing System	14	2.8	2.8
	Total	**496**	**100**	
Number of wives	One	412	83.1	86.2
	Two	50	10.1	10.5
	Three	6	1.2	1.3
	Four	1	0.2	0.2
	Other	9	1.8	1.9

Characteristics		Frequency	Percent	Valid Percent
	Total	478	96.4	100
	Missing system	18	3.6	3.6
	Total	**496**	**100**	
Occupation	Peasant	318	64.1	64.1
	Casual	25	5	5
	Employed	21	4.2	4.2
	Petty Business	93	18.8	18.8
	More than one occupation	39	7.9	7.9
	Total	**496**	**100**	**100**
Level of education	No formal education	59	11.9	11.9
	Adult education	12	2.4	2.4
	Primary Education	277	55.8	55.8
	Secondary Education	121	24.4	24.4
	College	26	5.2	5.2
	Others	1	0.2	0.2
	Total	**496**	**100**	**100**
Religion	Christian	397	80	80
	Muslim	60	12.1	12.1
	No religion	38	7.7	7.7
	Others	1	0.2	0.2
	Total	**496**	**100**	**100**

The mean age of the participants was 35.98 (+/- 10.018) years, age range was 19-70, and 36.3% of the respondents were in the age bracket of 30-39 years. Most of the participants were married (89.7% n=445). Men who had children were 95.8% (n=475) and 83.3% (n=402) were reported to have two or more children. More than half of men who responded were Peasants (64.1% n=318) while very few men had no formal education (11.9% n=59). The rest were educated from primary level (55.5%), secondary level (24.4%) and college education (5.4%).l. The findings of the present study show that most men belong to the Christian religion (80% n=397).

Health care system factors and utilization of Family planning

Analysis of the service provision related barriers yielded the following results as shown in Table 3.

Table 3: Utilization of Family Planning Methods by Service-Related Barriers

Characteristic		Did use FP during sex		Total	Significance
Family planning methods known	Pills	1	5	6	Chi-square =0.350, P-value =0.950
		16.70%	83.30%	100.00%	
		1.30%	1.50%	1.50%	
	Injection	1	3	4	
		25.00%	75.00%	100.00%	
		1.30%	0.90%	1.00%	
	Implants	1	1	2	
		50.00%	50.00%	100.00%	
		1.30%	0.30%	0.50%	
	More than one	77	319	396	
		19.40%	80.60%	100.00%	
		96.30%	97.30%	97.30%	
	Total	80	328	408	
		19.40%	80.60%	100.00%	
Knowing any FP clinic		100.00%	100.00%	100.00%	Chi-square =7.031 P-value= 0.008
	Yes	77	321	398	
		19.30%	80.70%	100.00%	
		96.30%	85.40%	87.30%	
	No	3	55	58	
		5.20%	94.80%	100.00%	
		3.80%	14.60%	12.70%	
	Total	80	376	456	
		17.50%	82.50%	100.00%	
		100.00%	100.00%	100.00%	
Distance from family planning clinic	Below 2km	62	217	279	Chi-square =6.655 P-value= 0.036
		22.20%	77.80%	100.00%	
		78.50%	64.80%	67.40%	
	2-5 km	11	93	104	
		10.60%	89.40%	100.00%	
		13.90%	27.80%	25.10%	
	6 km or more	7	25	32	
		19.40%	80.60%	100.00%	
		8.80%	7.50%	7.70%	
	Total	80	335	415	
		19.30%	80.70%	100.00%	
		100.00%	100.00%	100.00%	
Ever visited FP clinic in the past six months	Yes	54	88	142	Chi-square =61.441 P-value= 0.001
		33.00%	62.00%	100.00%	
		68.40%	23.40%	31.20%	
	No	26	288	314	
		8.30%	91.70%	100.00%	
		32.50%	76.60%	68.90%	
		80	376	456	
		17.50%	82.50%	100.00%	
		100.00%	100.00%	100.00%	
	Yes	35	58	93	Chi-square =12.419
		37.60%	62.40%	100.00%	

Table 3: Utilization of Family Planning Methods by Service-Related Barriers

Characteristic		Did use FP during sex		Total	Significance
Side effect after FP use		50.00%	29.30%	34.70%	P-value= 0.002
	No	35	140	175	
		20.00%	80.00%	100.00%	
		50.00%	61.10%	57.80%	
	Total	70	198	268	
Miss FP methods when you visited family planning service provider	Yes	4	10	14	Chi-square =0.362 P-value= 0.547
		28.60%	71.40%	100.00%	
		5.60%	4.00%	4.30%	
	No	67	241	308	
		21.80%	78.20%	100.00%	
		94.40%	96.00%	95.70%	
	Total	71	251	322	
		22.00%	78.00%	100.00%	
		100.00%	100.00%	100.00%	

Key: Statistically significant difference means (p<0.05)

Table 2 shows that , Family planning use is more likely associated with knowledge of men for any family planning clinic, distance from FP service delivery points, ever visited family planning clinic and side effects after FP use.

The findings were similar to those of FGD:

"Some of us men we do not know where we can get Family Planning services and we don't know much about most of the available family planning methods, but we always get condoms from retail shops, we urge the Government to bring for us condoms ecause when we have them in our houses, it is convenient for us". ***Males, Chato FGD***

"FP services does not reach us in villages, it's difficult to go to FP clinic frequently due to distance" ***Female respondent FGD****.*

The issue of side effects was also associated with scarcity of skilled human resource for health as commented by this respondent;

"I have used Family Planning for the past five years and I was told which problems to expect and those problems of FP people talk about are just rumors and tend to discourage others, and I think they usually come if you have additional sickness, as for me I have no problem with FP and even if I were to get a problem I would go back and get treatment as I was told". ***Female respondent, Bwina FGD***

> *"There is shortage of trained FP health care providers and the few available often overworked because they also perform a number of other activities and this has affected the quality of FP services provided and contributed to low client satisfaction". "Also, we have few Doctors and equipment to provide*

*long term methods to our clients". **DRCHCo (KI)***

However, results also shows that, missing family planning methods when visited family planning services providers, and knowledge on any family planning method did not affect the utilization of family planning services.

Multivariable analysis

The variables included in the final logistic regression model were Number of Children, spouse, knowledge on FP clinic, Distance to FP clinic, side effects after FP use.

The results of the model used are shown in Table 4. The logistic regression model that best predicts use of FP from the various predictors considered has p-value <0.001.

The model used was: Logit P (predictors of FP use) = α + β1 number of children + β2 influence of FP side effects + β3 Knowledge on FP clinic + β4 Distance to FP clinic

Table 4: Odds ratios and p-values obtained from the best model

Table 4: Logistic Regression Predicting Likelihood of Utilization of Family Planning Methods by Men				
Characteristic	**P-value**	**Exp(B)=OR**	**95% C.I.for EXP(B)**	
			Lower	**Upper**
Number of Children	.423	1.091	.882	1.350
Knowing FP clinic	.388	.422	.060	2.994
Distance FP clinic	.030	1.949	1.069	3.555
Side effects	.029	1.888	1.067	3.341

Statistically significant factor P value <0.05

The logistic regression model after adjusting for other factors, results indicated statistically significant predictor factors to FP utilization to be; distance to FP clinic and side effects after FP use. It was 2 times more likely that participants that reported closer to FP clinics will use FP [95% CI 1.069-3.555: P<0.05] than those who were far from FP clinic. It was also 2 times more likely that participants who had side effects after FP use will not use FP methods [95% CI 1.067- 3.341: P<0.05]. From Focused Group Discussions, four (4) factors influencing men's involvement to Family planning Utilization was identified which includes; distance to Family planning clinics discouraging men to utilize FP, perceived side effects of female contraceptive methods, limited availability of Family planning Service

Delivery Points, and perceptions that Family planning Utilization was a woman's business.

Discussion

Current use of FP methods by Men

Few men (17.5%) were currently using some form of either modern or traditional FP methods. This current contraceptive prevalence of any FP method is quite low (poor) than the National prevalence target of 60% (TDHS, 2016). Low male utilization of FP has also been observed in a study done in Northwest Ethiopia where the proportion of men using or directly participating in the use of family planning services was only 8.4% (Kassa *et al*., 2014). Similar observation have also been documented in the Democratic Republic of Congo where 17% of male were found to use family planning (Kerry *et al*., 2015).

In Tanzania varying results on male utilization of FP services from place to place has been recorded, from studies done in Moshi rural district which was at 47% (Chuwa, 2001), and in Kisarawe district at 52,9% (Kassimu, 2008). The observed differences could be due to substantial variation of family planning usage across the country could be due social economic factors and difference in reference populations and difference in sample size (Mtae, 2015). Therefore, male involvement in family planning service should be intensified as research has demonstrated that it can greatly contribute to maternal death reduction (TDHIS, 2016). Family planning could prevent up to one in every three maternal deaths as it allows women to avoid high risk pregnancies and abortions (TDHIS, 2016).

Barriers to FP use

Distance to FP clinic

The results also showed that residing in close proximity to FP service delivery points is significantly associated with utilization of family planning than those who are far . We found in this study that men who lived beyond walking distance of health facilities with family planning clinics (more than 2 kilometers) were significantly less likely to use modern contraceptives compared to those who lived within 2 kilometers of health facilities. This is because Chato is still a rural District with majority of occupants being peasants with low economic income as seen from the demographic results. This results are similar to a study on Family planning among men done in Kisarawe which also found that, distance to Family planning services beyond 2 kilometer influenced Family planning utilization nearly 2 times than those residing within 2 kilometer due to poor social economic status which makes men leaving far from Family planning services providers unable to pay fare or due to poor infrastructure (Kassimu, 2008). This result is also supported by Kaeda

et al. (2005) in Uganda who also reported distance from family planning services providers as a significant barrier to utilization of family planning services. Distance is negatively associated with utilization of family planning services as those leaving far away from the clinics tend not to use FP methods due to poor accessibility (Agadjanian, 2015).

During interviews it was also revealed that, men are discouraged to use Family planning due to distance as they have so many family issues to take care hence family planning become less important. Men emphasized on the importance of FP services to reach them in villages where they live and suggested that, the Government should provide more FP clinic to make access to FP easy for all.

Side effects after FP use

Furthermore, results show that, side effects after utilization of Family planning influence significantly utilization of Family planning. Side effects had significant effects on use of family planning methods, meaning that for those respondents who experienced side effects were more likely to report non-utilization of family planning methods.

This observation is also reported by Ochako et al. (2015) in Kenya where fear of side effects was found to be a barrier to utilization of family planning methods, there is need for research focusing not only on behavioural outcomes but also on health outcomes (morbidity). Clients are more likely to quite utilization of Family planning to avoid problems or stay away from complications associated with the use of FP methods (Sir Lewis, 2001; Alvergne et al., 2017).

During interviews side effects were mentioned as factors influencing Family planning utilization. Side effects mentioned by respondents included; heavy bleeding after FP utilization, becoming fat, changing colour of the skin, stomach aches, and headaches while utilizing FP. It was revealed that, there is misinformation association among respondents between Family planning use and infertility, abnormalities of unborn babies specifically hydrocephalus was mentioned, cervical cancers and changing of hair colour. Although side effects was mentioned as a factor influencing FP utilization, but some of the respondents from FGD acknowledged the importance of provision of Family planning by skilled health workers to control side effects as every individual is given Family planning methods according to need and health status, not only that but also receives proper counselling on the proper use of the methods to avoid or counteract side effects.

Conclusions and Recommendations

In this study, the proportion of men or their partner utilizing family planning services was found to be very low, thus, advocates integration of men into existing family planning services for improvement of Family Planning use and sustainability.

Other factors that were more likely to be associated with FP use were distance to FP service delivery points and side effects after FP use. This means reproductive health barriers cannot be addressed in the absence of accessible health services and medical knowledge and skills across all Service Delivery Point. The recommendations are proposed to Government, Health managers, Policy makers and FP service providers and other direct program implementers for improving use of FP services. Family Planning use among men is still low. Service delivery related factors such as access to wide range of FP methods, and side effects were associated with FP use.

Effective delivery of FP services availability and access of supplies through outlets or outreach services need to be strengthened. There is need for ongoing monitoring of FP methods and their side effects to help assessment of effectiveness of FP methods. This will help to know if what people complain about FP methods side effects is true or not and what are the best alternatives.

Governmental Policies on family planning services should incorporate the responsibility and role of males in the uptake of family planning services. Policies and strategies which mention men, offer strong opportunities for male involvement at implementation level (service level).

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