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Influence of Knowledge, Attitudes and Access of Contraceptive Methods on Unmet Need for Family Planning Among Women of Reproductive Age in Rubavu District, Rwanda.

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ABSTRACT

While achievements have been gained with modern contraceptive use rising from 10% in 2005 to 47.5% in 2015 with a resultant fall in fertility from 6.1 children per woman to 4.2 children in Rwanda, there remain some challenges. The current study identified the influence of knowledge, attitude, and accessibility of contraceptive methods on unmet need for family planning among women of reproductive age in Rubavu District, Rwanda. A cross-sectional study was carried among 270 women (15–49 years) attending public health facilities in western province, Rubavu District. Semi-structured questionnaires were used to measure knowledge, attitudes and access of contraceptive methods. The outcome variable was unmet need for family planning (unmet need for spacing and limiting births).Bivariate analysis was done for the independent variable with the dependent variable then multiple logistic regressions was computed. To identify the independent effects of independent variables to unmet need for contraception, the Odds Ratio (OR) with 95% confidence interval was computed and statistical significance was defined when p-value was less than 0.05. The overall prevalence of unmet was 46.6% (Unmet need for spacing 27.78% and unmet need for limiting 18.9%). After adjusting for other variables, contraceptive methods improve standard of life (OR = 0.445, 95 % CI =0.222-0.092 , P =0.023 , Family Planning (F P) methods cause weakness (OR = 2.879, 95 % CI =1.428-5.805, P =0.003; joint decision to use FP (OR =0.472 , 95 % CI =0.286-0.778 , P =0.003), decision to use FP taken by husband (OR =2.703 , 95 % CI =1.320-5.536 , P =0.007 , were significantly associated with unmet for spacing . While FP methods cause headache (OR = 2.240, 95 % CI =1.068-4.696, P =0.033 joint decision to use FP (OR =0.561, 95 % CI =0.367-0.858, P =0.008), decision to use FP taken by husband (OR =2.283, 95 % CI =1.078-4.856, P =0.032 for unmet need for limiting). The attitudes that FP methods cause weakness, FP methods cause headache and decision to use FP taken by husband increase unmet need for family planning.

Keywords: Knowledge, Attitude, Access, Contraception, Unmet Need for Family Planning, Women of Reproductive Age.

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INTRODUCTION

Global efforts to meet the Millennium Development Goals (MDGs) have focused on increasing access and use of modern contraceptive methods as a cross-cutting strategy for the achievement of all eight MDGs [(1)]. Among women in developing countries, a total of 222 million are estimated to have an unmet need for contraception [(2)]. To meet unmet need for family planning, the availability of high quality family planning services must be coupled with efforts to inform potential users about family planning and empower them to seek it[(3)] . Despite great progress over the last several decades, big proportion of women worldwide want to prevent pregnancy, but they and their partners are not using contraception [(4)]. Reasons for unmet need are many: Services and supplies are not yet available everywhere or choices are limited. Fear of social disapproval or partner's opposition pose formidable barriers. Worries of side effects and health concerns hold some people back; others lack knowledge about contraceptive options and their use (WHO)**.**Social and Behavior Change Communication (SBCC) campaigns can inform people about the Family Planning services available in their communities [(6)], combat myths and misconceptions that inhibit use, and increase knowledge about contraceptives, including their safety, effectiveness, and side effects [(7)]. While achievements have been gained with modern contraceptive use rising from 10% in 2005 to 47.5% in 2015 with a resultant fall in fertility from 6.1 children per woman to 4.2 children, there remain some challenges [(3)] . Rubavu district has one of the highest unmet need for contraception in Rwanda with 36%. Available data of 2010 RDHS showed that total fertility rate (TFR) was 5.3 children per woman in 2010 (compared to 4.6 children at national average) and contraceptive prevalence rate was 29.2% (16.8% lower than the national average). Infant mortality was 54 per 1000 live births (27 per 1000 live births higher than the national average) and under-five mortality was 96 per 1000 live births (20 per 1000 live births higher than the national average [(8)]. These adverse maternal and child health outcomes associated with high TFR could be significantly reduced by meeting the family planning (FP) needs of women in developing countries [(9).] Therefore the study will fill an important gap in what is known about Rwanda's reproductive health particularly in Rubavu district, where very little is known about the influence of knowledge, attitude and accessibility of contraceptive on unmet need for family planning.

MATERIALS AND METHOD

Study design

A cross sectional study was used with a quantitative approach of primary data from women of reproductive age.

Study site

The study was conducted in Rubavu District which is located in western province, Rwanda. It has one hospital district and 11 health centers that cover the catchment area of 404,278 inhabitants,

including men representing 208,938 of the population and women representing 195,340 with women of reproductive age. Rubavu is the mostly populated district in the region (Western Province) with 403,662 inhabitants and high population density in Rwanda (1041/km^2) out of Kigali city. The population growth rate of 3.3 with the family planning prevailing rate of 36%. (4)

Study measurements

The main independent variables for this study are Knowledge and attitude and accessibility of contraception of women. Pregnant intended in fecund women, lactational amenorrhea, life of celibacy are extraneous variables of the study controlled using restriction method where they have been eliminated in order to have people of the same characteristics (fecund women). The dependent variable of the study is unmet need for contraception defined as women of reproductive age who were not currently using a method of family planning but wanted to postpone childbirth for more than two years (space) or wanted to stop (limit) childbirth entirely.

Sample size and sampling

The required minimum sample size of 270 women who visited Health Centers of Rubavu district for routine immunization of their children was determined. Probability sampling method was used to determine the number of women from health center by which study participants will be allocated proportionally to each health center based on number of women of reproductive age in health center. A systematic sampling technique was used to select participants. Among women who attended routine immunization service after examining excluding and including criteria, the list of them was taken advantage. Choosing of a study unit (woman), the starting point was randomly identified then every kth item from the list has been selected (where 'k' refers to the sampling interval. In this case, *k*= population size/sample size).

Data Management and analysis

Data were collected by local trained data collectors using pre-tested semi-structured questionnaires. Questionnaires were translated in the local language Kinyarwanda. Data were coded and SPSS 21 was used for data entry, editing and checking. Data were reentered by other than the person who entered the data for verification. Data analysis was done according to the study objectives. A descriptive analysis was carried out for each of the variables. Then bivariate analysis was done for the independent variables with the dependent variable to select candidate variables for the multivariable analyses. To assess the presence and degree of association between the dependent and independent variables, Chi square and Fischer exact were used and statistical significance was defined when p-value was less than 0.05.To identify factors associated with unmet need for contraception, Odds Ratio (OR) with 95% confidence interval in multiple logistic regressions was computed for variables which showed significant association with the dependent variable to identify their independent effects to unmet need for contraception.

Ethical approval

The ethical approval was given by National Health Research Committee and Institutional Review Board (IRB) of College of Medicine and Health Sciences at the University of Rwanda. The participants were informed that the ethical consent will be respected. All respondents were fully briefed about the study and its purposes. The research started interviews when written consent was given.

RESULTS AND DISCUSSION

Unmet need for spacing and limiting by knowledge on contraceptive methods

Table 1 explains the association between existing knowledge on contraceptive methods and unmet need for spacing and limiting. Among participants 74.8% of them know more than three methods while 25.2% know less than three methods. Among those who know less or equal three methods 23(33.8%) have unmet need for spacing (P=0.198) and 15(22%) have unmet need for limiting (P=0.440). Among those who know more than three methods 52(25.7%) have unmet need for spacing (P=0.198) and 35(17.3%) have unmet need for limiting (P=0.258).The source of information about contraceptive methods was assessed in this study**.** Those who have information from radio are 33.3% while 66.7% get information from other channels. Among those who get information from radio 27(30.0%) have unmet need for spacing (P=0.564) and 16(17.7%) have unmet need for limiting (P=0.742). Among respondents 13(4.8%) have information from television and 157(95.2%) do not. Among them 3(23.0%) have unmet need for spacing (P=0.698 and 4(30.7%) have unmet need for limiting (P=0.262). Friends have been involved in the study as source of information. Among participants 46 (17.0%) they got information form their friends and 224(83.0%) do not. Of them 11(23.9%) have unmet need for spacing (P=0.521) and 8(17.3%) have unmet for limiting (P=0.776).Who reported that they have information from health centers were 144(53.3%) while 126 (46.7%) do not. Among those who got information from health centers, 37(25.6%) have unmet need for spacing (P=0.414) and 29(20.1%) have unmet need for limiting (P=0.575). Among respondents, 65(24.1%) have information from books while 205(75.7%) do not. Of them 15(23.0%) have unmet need for spacing (P=0.332) and 8(12.3%) have unmet need for limiting (P=0.120). Community health workers (CHW) were involved as source of information. Among them 159(58.9%) got information from CHW while 111(41.1%) do not. Among those who got information from CHW, 39(24.5%) have unmet need for spacing (P=0.154) and 24(15.0%) have unmet need for limiting (P=0.057) .Among those who get information from community meeting were 8(3. %) while 262(97.0%) did not. Among those who get information from community meeting 3(37.5%) have unmet need for spacing (P=0.689) while 2(25.0%) have unmet need for limiting (P=1.000). Respondents were asked if they know where they can get contraceptive methods. Health centers/posts were reported .All respondents reported getting

contraceptive methods in health centers (constant). Among respondents 238 (88.1%) said that they can get contraceptive methods from community health workers while 32(11.9%) cannot. Among those who reported getting contraception form community health workers 65(27.3%) have unmet need for spacing (P=0.640) while 46(19.3%) have unmet need for limiting (P=0.615). Those who reported they can get contraception from pharmacy were 49(18.1%) while 221(81.9%) did not report pharmacy. Among those reported pharmacy as source of contraceptive methods 10(20.0%)) have unmet need for spacing (P=0.203) while 7(14.2%) have unmet need for limiting (P=0.363).Among respondents, 53(19.6%) reported that they can get contraceptives from district hospital while 217(80.4%) did not report district hospital. Among those who reported district hospital 18(33.9%) have unmet need for spacing (P=0.262) and 8(15.0%) have unmet need for limiting (P=0.431).

Unmet need for spacing and limiting by attitude toward contraceptive methods

Table 2 explains the association between attitude toward contraceptive methods and unmet need for spacing limiting. Among respondents, 211(78.1%) agree that contraceptive methods control birth while 59(21.9%) do not agree. Among those who agree 62(29.8%) have unmet need for spacing and those who do not agree 12(20.3%) have unmet need for spacing (P=0.149).Unmet need for limiting counted for 44(20.8%) among those who agree and 7(11.8%) among those who disagree (P=0.119).When asked whether contraceptive methods use improves standard of life, 215(79.6%) approved it. While 55(20.4%) disapproved. Unmet need for spacing counted for 50(23.2%) and 25(45.4%) among those who disapproved (P=0.001).Unmet need for limiting counted for 65(30.2%) approved and 15(27.2%) among those who disapproved that contraceptive methods improve standard of life. Among respondents 204(75.6%) agree that contraceptive methods reduce morbidity and mortality of mothers and children while 66 (24.4%) disagree. Among those who agree, 52(25.5%) have unmet need for spacing and unmet need for spacing counted for 23(34.8%) among those who disagree (P=0.140). Among respondents, who agree 34(16.6%) have unmet need for limiting and among those who disagree 17(25.7%) have unmet need for limiting (P=0.101). Among respondents 73(27.0%) reported that contraceptive methods can cause cancer with 25(34.2%) of unmet need for spacing while 197(73.0%) said that contraceptive methods cannot cause cancer with 50 (25.2%) of unmet need for spacing (P=0.149). Among them unmet need for limiting counted for 15(20.5%) among those who reported that contraceptives can cause cancer and 36(18.2%) among those who said that it cannot cause cancer (P=0.672. Among participants 102(37.8%) reported that contraceptive methods can enhance marital unfaithfulness with 31 (30.3%) of unmet need for spacing while 168(62.2%) said that contraceptive methods cannot enhance marital unfaithfulness with 44 (26.1%) of unmet need for spacing (P=0.455). Among them unmet need for limiting counted for 24(23.5%) among those who reported that contraceptives can

enhance marital unfaithfulness and 27(16.0%) among those who said that they cannot enhance marital unfaithfulness (P=0.129). Among participants 100(37.0%) reported that contraceptive methods can decrease sexual pleasure with 39(39.0%) of unmet need for spacing while 170(63.0%) said that contraceptive methods cannot decrease sexual pleasure with 44 (25.8%) of unmet need for spacing (P=0.365). Among them unmet need for limiting counted for 22(22.0%) among those who reported that contraceptives can decrease sexual pleasure and 29(17.0%) among those who said that they cannot decrease sexual pleasure (P=0.316). Next born can have congenital malformation was reported by 58(21.5%) with 20 (34.4%) of unmet need for spacing while 212(78.5%) did not report it with 55(25.9%) of unmet need for spacing (P=0.198). Contraceptive methods can cause backache was reported by 69(25.6%) with 25 (36.2%) of unmet need for spacing while 201(74.4%) did not report it with 50(24.8%) of unmet need for spacing (P=0.069).Unmet need for limiting counted for 18(26.0%) among those who reported that contraceptives can cause backache and 33(16.4%) among those who said that they cannot cause it (P=0.077). Contraceptive methods can cause headache was reported by 102(37.8%) with 44 (43.1%) of unmet need for spacing while 168 (62.2%) did not report it with 31(18.4%) of unmet need for spacing (P<0.001).Unmet need for limiting counted for 33(32.3%) among those who reported that contraceptives can cause headache and 18(10.7%) among those who said that they cannot cause it (P<0.001). When asked that contraceptive methods cause hypertension, 72(26.7 %) said yes with 26(36.1%) of unmet need for spacing while 198(73.3%) said no with 49(24.7%) of unmet need for spacing P=0.065. Unmet need for limiting counted for 17(23.6%) among those who reported that contraceptives can hypertension and 34(17.1%) among those who said that they cannot cause it (P=0.232). Contraceptive methods can cause weakness was reported by 115(42.6%) with 54(46.9%) of unmet need for spacing while 155(57.4%) did not report it with 21(13.5%) of unmet need for spacing (P<0.001). Unmet need for limiting counted for 32(27.8%) among those who reported that contraceptives can cause weakness and 19(12.2%) among those who said that they cannot cause it (P<0.001). Among participants, 89(33.0%) reported that contraceptive methods can cause weight gain with 31(34.8%) of unmet need for spacing while 181(67.0%) did not report it with 44 (24.3%) unmet need for spacing (P=0.070). Unmet need for limiting counted for 22(24.7%) among those who reported that contraceptives can cause weakness and 29(16.0%) among those who said that they cannot cause it (P<0.086). When asked that contraceptive methods can cause loss of menstruation, 81(30.0%) said yes with 29(35.8%) while 189(70.0%) said no with 46(24.3%) of unmet need for spacing (P<0.054). Unmet need for limiting counted for 21(25.9%) among those who reported that contraceptives can cause loss of menstruation and 30(15.8%) among those who said that they cannot cause it (P<0.053).Contraceptive methods might lead to permanent sterility was reported by

63(23.3%) with 23(36.5%) of unmet need for spacing while 207 (76.7%) did not report it with 52(25.1%) of unmet need for spacing (P=0.077).

Unmet need for spacing and limiting by availability and access of contraceptive methods

Table 3 shows the association between availability and access of contraceptive methods and unmet need for spacing and limiting. Respondents were asked whether they know health center in the nearby that provides FP. Of 270 who participated in the study, 269(99.6%) reported that they know the health center in the nearby that provides FP and among them 75(27.8%) have unmet need for spacing (P=0.100) and 51(18.9%) have unmet need for limiting (P=0.100). When asked how close is the nearest health center, 195(72.2%) reported using less than 1 hour while 75(27.8%) use more than one hour to reach the nearest health center. Among those who use less than one hour, 48(24.6%) have unmet need for spacing and 27(36%) among those who use more than one hour (P=0.061). Unmet need for limiting count for 39 (20.0%) and 12(16.0%) for those who use more than one hour (P=0.452).When asked if they are aware of availability of FP methods, 224(83.0%) reported that they are aware and 46(17%) said that they are not aware. Among those who reported they are aware, 57(25.4%) have unmet need for spacing, who said that they are not aware 18(39.1%) (P=0.059). Unmet need for limiting counted for 43(19.1%) for those who are aware and 8(17.3) for those who are not aware (P=0.776). Respondents were asked if they have been refused of FP before, of 270; 24(8.9%) said that they have been refused while 246(91.1%) reported that they have not been refused. Among those who reported being refused, 5(20.8%) have unmet need for spacing (P=0.426) wile 2(8.3%) have unmet need for limiting (P=1.666).The convenience of service hours was assessed in this study. Among respondents, 231(85.6%) said that the opening hour are convenient and 39(14.4%) reported that opening hours are not convenient. Among those who said that opening hours are not convenient, 63(27.2%) have unmet need for spacing (P=0.652) and 47(20.3%) have unmet need for limiting (P=0.136).When asked if they have attended any antenatal consultation (ANC) during pregnancy period, 232(85.9%) reported that they did while 38(14.1%) reported that they did not. Unmet need for spacing counted for 60(25.8%) among those who have attended for ANC and 15(39.4%) among those who have not attended. Unmet need for limiting counted for 45(19.3%) among those who have attended for ANC and 6 (15.7%) among those who have not attended. Respondents were asked who take decision to use FP. Among respondents 132(48.9%) reported joint decision among wife and husband and 138(51.1%) reported that the decision is taken by husband. Unmet need for spacing counted for 11(8.3%) among those who reported joint decision and 64(46.3%) (P<0.001). Among those who reported that the decision is taken by husband and unmet need for limiting counted for 10(7.5%) among those who reported joint decision, for those who reported that it is husband who take decision 41(29.7%) have unmet need for limiting (P<0.001).

Multiple logistic regression of variables that have influence on unmet need for spacing and limiting birth among women of reproductive age in Rubavu District, Rwanda

Variables which show significant association with the dependent variable were recruited to estimate the likelihood of unmet need for spacing and limiting birth (Table 4). According to this study, women who support that contraceptives methods improve standard of life have a 55.5% reduction in the odd of having unmet need for spacing relative to those who do not support it(OR=0.445;CI=0.222–0.892;P=0.023). Contraceptive methods cause headache is not statistically significant with unmet need for spacing (P =0.592). Women who reported that contraceptive methods can cause weakness were more than two times more likely to have unmet need for spacing compared to those who did not report it (OR=2.879; CI=1.428–5.805; P=0.003). Women who reported joint decision with their husband to use contraceptive methods had a 52.8% reduction in the odd of having unmet need for spacing relative to those the decision is taken by husband (OR=0.472; CI=0.286–0.778; P=0.003). Women who reported that the decision of using family planning is taken by husband were more than two times more likely to have unmet need for spacing relative to those who reported joint decision. According to the results of this study, women who reported that contraceptive method cause headache were more than two times more likely to have unmet need for spacing relative to those who did not report it (OR=2.240; CI=1.068–4.696; P=0.033). Contraceptive method cause weakness was not statistically significant with unmet need for limiting (P=0.904).Women who reported joint decision to use contraception with their husband have a 43.9% reduction in the odd of having unmet need for limiting relative to those who reported that the decision is taken by husband. (OR=0.561; CI=0.367–0.858; P=0.008). Women who reported that the decision of using contraception is taken by husband were more than two times more likely to have unmet need for spacing relative to those who reported joint decision (OR=2.283; CI=1.074–4.856; P=0.032).

Table 1: Unmet need for spacing and limiting by knowledge on contraceptive methods.

Variables	Women (n)	Percent	Unmet need for spacing		P-value	Unmet need for limiting		P-value
			Yes	No		Yes	No	
Number of methods Known:								
Know ≤ two methods	68	25.2	23	45	0.198	15	53	0.440
Know > 3 methods	202	74.8	52	150		35	65	0.258
Source of information^:								
Radio					0.742			0.564
Yes	90	33.3	27	63		16	74	
No	180	66.7	48	132		35	147	
Television					0.698			0.262
Yes	13	4.8	3	10		4	9	
No	257	95.2	72	185		47	210	
Neighbor					0.521			0.776
Yes	46	17.0	11	35		8	38	
No	224	83.0	64	160		43	181	
Health center					0.414			0.575
Yes	144	53.3	37	107		29	115	
No	126	46.7	38	88		22	104	
Books					0.332			0.120
Yes	65	24.1	5	50		8	57	
No	205	75.9	60	145		43	62	
Community Health Workers					0.154			0.057
Yes	159	58.9	39	120		24	135	
No	111	41.1	36	75		27	84	
Community meeting					0.689			1.000
Yes	8	3.0	3	5		2	6	
No	262	97.0	72	190		49	213	
Know where to get methods^:								
Health center/Post (constant)								
Community Health Workers					0.640			0.615
Yes	238	88.1	65	173		46	92	
Non	32	11.9	10	22		5	27	
Pharmacy					0.203			0.363
Yes	49	18.1	10	39		7	42	
No	221	81.9	65	156		44	177	
District Hospital					0.262			0.431
Yes	53	19.6	18	35		8	45	
No	217	80.4	57	160		43	174	

Table 2: Unmet need for spacing and limiting by attitude toward contraceptive methods

Variables	Women (n)	Percent	Unmet need for spacing		P-value	Unmet need for limiting		P-value
			Yes	No		Yes	No	
Contraceptive methods control birth (n=270)					0.149			0.119
Agree	211	78.1	63	148		44	167	
Disagree	59	21.9	12	47		7	52	
Contraceptive methods use improves standard of life(n=270)					0.001			0.075
Agree	215	79.6	50	165		36	179	
Disagree	55	20.4	25	30		15	40	
Contraceptive methods reduce morbidity and mortality of mothers and children (n=270)					0.140			0.101
Agree	204	75.6	52	152		34	170	
Disagree	66	24.4	23	43		17	49	
Contraceptive methods can cause cancer (n=270)					0.149			0.672
Agree	73	27.0	25	48		15	58	
Disagree	197	73.0	50	147		36	161	
Contraceptive methods enhance marital unfaithfulness (n=270)					0.455			0.129
Agree	102	37.8	31	71		24	78	
Disagree	168	62.2	44	124		27	141	
Contraceptive methods can decrease sexual pleasure (n=270)					0.365			0.316
Agree	100	37.0	39	61		22	78	
Disagree	170	63.0	44	126		29	141	
Next born can have congenital malformation (n=270)					0.198	N/A	N/A	
Agree	58	21.5	20	38				
Disagree	212	78.5	55	157				
Contraceptive methods can cause backache (n= 270)					0.069			0.077
Agree	69	25.6	25	44		18	51	
Disagree	201	74.4	50	151		33	68	
Contraceptive methods cause headache (n=270)					< 0.001			< 0.001
Agree	102	37.8	44	58		33	69	
Disagree	168	62.2	31	37		18	150	
Contraceptive methods can cause hypertension (n=270)					0.065			0.232
Agree	72	26.7	26	46		17	55	
Disagree	19	73.3	49	149		34	64	
Contraceptive methods can cause weakness (n=270)					<0.001			0.001
Agree	115	42.6	54	61		32	83	
Disagree	155	57.4	21	134		19	136	

Contraceptive methods cause weight gain (n= 270)					0.054		0.086
Agree	89	33.0	31	58		22	67
Disagree	181	67.0	44	137		29	152
Contraceptive methods can cause loss of menstruation (n=270)					0.054		0.053
Agree	81	30.0	29	52		21	60
Disagree	189	70.0	46	143		30	159
Contraceptive methods might lead to permanent sterility (n=270)					0.077		
Agree	63	23.3	23	40		N/A	N/A
Disagree	207	76.7	52	155			

Table 3: Unmet need for spacing and limiting by availability and accessibility of contraceptive methods

Variables	Women (n)	Percent	Unmet need for spacing		P-value	Unmet need for limiting		P-value
			Yes	No		Yes	No	
Know health center in the nearby that provides FP (n=270)					1.000			1.000
Yes	269	99.6	75	194		51	218	
Non	1	0.4	0	1		0	1	
How close is the nearest health center (n=270)					0.061			0.452
Less than 1 hour	195	72.2	48	147		39	156	
More than one hour	75	27.8	27	48		12	63	
Awareness of availability of FP methods (n=270)					0.059			0.776
yes	224	83.0	57	167		43	181	
No	46	17.0	18	28		8	38	
Refused of FP before (n=270)					0.426			1.666
Yes	24	8.9	5	19		2	22	
No	246	91.1	70	76		49	197	
Reason of being refused of FP (n= 24)					0.485			1.000
No menstruation	7	29.2	1	6		1	6	
Too young	3	12.5	1	2		0	3	
Service not available	5	20.8	0	5		0	5	
Lack of husband' consent	9	37.5	3	6		1	8	
Convenience of service hours (n=270)					0.652			0.136
Yes	231	85.6	63	168		47	184	
Non	39	14.4	12	27		4	35	
The time most convenient(n=39)					1.000			1.000
Early in the morning	13	33.3	4	9		2	11	
Lunch hour	13	33.3	4	9		1	12	
Evening/tonight	2	5.1	0	2		0	2	
Weekend days	11	28.2	4	7		1	10	
Attendance of ANC during pregnancy period (n=270)					0.082			0.598
Yes	232	85.9	60	172		45	187	
No	38	14.1	15	23		6	32	
Who take decision to use FP (n=270)					<0.001			<0.001
Joint decision	132	48.9	11	121		10	122	
Husband	138	51.1	64	74		41	97	

Table 4: **Multiple logistic regression of variables that have influence on unmet need for spacing and limiting birth among women of reproductive age in Rubavu District, Rwanda**

Variables	Unmet need for spacing			Unmet need for limiting		
	AOR	95%CI	P-value	AOR	95%CI	P-value
Contraceptives improve standard of life	0.445	0.222–0.892	0.023	—	—	—
Contraceptives cause headache	1.200	0.613–2.346	0.595	2.240	1.068–4.696	0.033
Contraceptives cause weakness	2.879	1.428–5.805	0.003	1.047	0.494–2.220	0.904
Joint decision to use Contraceptive methods	0.472	0.286–0.778	0.003	0.561	0.367–0.858	0.008
Decision taken by husband	2.703	1.320-5.536	0.007	2.283	1.074–4.856	0.032

This study examined the influence of knowledge, attitudes and accessibility of contraceptive methods on unmet need for family planning among women of reproductive age in Rubavu district, Rwanda. The study shows that with a large and strong family planning program sensitization, socio-cultural barriers so far important may be removed. As our culture is very pro-birth with many proverbs that encourage us to have more children such as: 'Kagire abana' which means 'May you have more children' or 'Nimusubireyo nta mahwa', which means 'keep having children, it can't hurt [10]**.** Overall, fear of side effects of contraceptive methods and the decision of husband to bear children have an impact on unmet need for family planning. This fear of side effect could be defined as negative attitude toward contraceptive methods and probably be because they do not have adequate information that would aid in choosing an appropriate contraceptive method. These findings are supported by evidences form different authors. The results of the study conducted in Kenya, showed that women's and men's discussions about physiological side effects, such as high blood pressure and dizziness, centered on the potential loss of productivity. Men and women indicated that as a result of these side effects, individuals would be unable to continue working or fulfill normal obligations within the household. Participants also discussed changes in libido as a result of these side effects, which would also inhibit sexual activity, causing disruptions in sexual relationships [11]. Pills and injectable contraceptives were most often implicated in participants' reported fears. Participants reported that the pill and injection were associated with infertility, cancerous growths, especially following prolonged use. The two methods were also associated with an increased chance of birth defects, especially when one failed to adhere to the pill regimen, or received an expired injectable [11]. In another study, which assesses contraceptive use in Uganda, showed that most women heard myths and beliefs that could hinder the successful promotion and adoption of the family planning services [12].Results from this study revealed that the decision of husband to bear children has an impact on unmet need for family planning. The results from the study are similar to those from the study conducted by Lwelamira, Mnyamagola and Musaki in 2012 in Tanzania in which women who reported joint decisions with their husbands on issues related to fertility were more likely to be current users of modern contraceptives compared to those who reported that the final decision is taken by the husband alone. (OR = 19.4, $p<0.01$) [13]. The results of the study conducted in Ghana showed that women whose partners approved of modern family planning were 4.33 times more likely to use modern family planning than those whose partners did not approve [14] .Those findings are supported by the results from the study conducted in Kenya from which approval of use methods by the partner was

significantly associated with use of modern FP methods (OR =3.85, 95% C.I 2.093-7.083, P=0.00)[15]. The results of the study carried out in Ethiopia showed that women whose partner was not supportive to contraceptives use were 3.34 (AOR = 3.34, 95 % CI: 1.26–8.90) times more likely to have unmet need for FP compared to those women whose partner was supportive [16]. In Ethiopia married women whose partners did not support the use of FP methods were 2.08 times more likely to have unmet need compared to those whose partners support FP use (AOR=2.08, 95%CI: 1.46-9.408) [17] .The results of the research conducted in Zimbabwe to assess determinants of unmet need for family planning in Zimbabwe showed that unmet need is also determined by myths and misconceptions associated with the use of contraceptives. Men who participated in the study believed that they cannot enjoy sex when their wives are using contraceptives [18]. Participants added that contraceptives make the husband weak and reduces his performance during sexual intercourse. Respondents reported that they fear to give birth to babies with deformities if they use contraceptives. The majority of respondents also believed that prolonged use of contraceptives causes infertility. There is a misconception that after using long-acting methods like Jadelle or IUCD which protect a woman for many years from becoming pregnant, the ovaries will have been blocked and will have run out of eggs when she wants to conceive. All these misconceptions emanate from a lack of appreciation of how the reproductive system functions [18].

CONCLUSION

Based on the information collected on that Sample, negative attitude toward contraceptive methods, influence of husband on the use of contraceptive methods influence significantly unmet need for spacing. There should be a great need to increase reproductive health education and include men in participation in family planning activities designed to improve family planning practices in Rwanda. Campaigns against myths and misbelieves that negatively affect the use of LACM should be intensified

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