

Out of 354 sexually active youth aged 15-24 respondents, the prevalence of use of contraceptives among youth was at 59.3% where 15.8 % of all users were between 15-19 years old and 43.5 % were aged between 20 to 24 years old.

Table 1. Contraceptive related characteristics and contraceptive use

Characteristics	Frequency (N=354)	Percent (%)
Type of contraceptive used		
Condoms	181	51.1
Emergency pills	19	5.4
Contraceptive pills	99	28.0
Injectables	35	9.9
Implants	12	3.4
IUD	6	1.7
Natural family planning	2	0.6
Source of contraceptives information		
Friends/ Relatives	29	8.2
Mass media/Radio	232	65.5
Hospital/ Health worker	35	9.9
School teacher	14	4.0
Community outreach	44	12.4
Reason for preferring a method		
Because it is easy to use	242	68.4
Because it is cheap	9	2.5
Because of its long duration	38	10.7
Privacy purpose	10	2.8
Less side effects	55	15.5
Reasons for using more than one contraceptives		
Because of dual protection role	97	27.4
The method of choice was not available	19	5.4
Opted for long term method	73	20.6
Side effects	165	46.6
Primary purpose of using contraceptives		
Prevention of pregnancy	186	52.5
Prevention of STIs and HIV/AIDS	128	36.2
Enhancing sexual performance	40	11.3
Access of contraceptives		
Public/government health care facility	241	68.1
Drug shop	96	27.1
Community based distributor	14	4.0
Other/Specify	3	0.8

Source: Primary data

Among the contraceptives used, condoms was most preferred method by users with 51.1%, followed by contraceptive pills at 28.8% and injectables at 9.9 %. Regarding the sources of information, mass media was the most common source of information with 65.5%, 12.4 % got

contraceptives information from community outreaches and 9.9 % from hospital and health workers. Concerning the reasons for preference, 68.4% of the respondents have chosen a method because it was easy to use while 15.5% their preference based on a method with less side effects and 10.7% preferred a method because of its long duration. About the reasons for using particular contraceptives included, 52.5 % was to prevent pregnancy, 36.2 % to prevent HIV/AIDS and STIs and 11.3 % to enhance sexual performance. Regarding the source of contraceptives, 68.1% of the respondents have obtained the contraceptives from public health facilities, 27.1 % from drug shops and only 4 % obtained from community based distributors. These findings showed that the main source of providers of contraceptives among young people was public health facilities.

When study participants were asked whether they had heard before of contraceptives, majority (98.3%) of the respondents reported to have heard about contraceptives and condoms were reported as the most known contraceptive method with 46.3%, followed by contraceptive pills at 34.7 % and injectables at 8.5 %. Other than condoms, pills and injectables, implants and IUD were reported to be used at a very small percentages by the respondents.

Table 3: Association between sociodemographic factors and contraceptive use

Variables	Contraceptive use				Chi square	P value
	Yes		No			
	N	%	N	%		
Gender					0.686	0.408
Female	140	39.5	102	28.8		
Male	70	19.8	42	11.9		
Age group					7.328	0.007
15-19	56	15.8	21	5.9		
20-24	154	43.5	123	34.7		
Area of residence					3.617	0.057
Urban	162	45.7	98	27.7		
Rural	48	13.6	46	13.0		
Wealth status					14.242	0.003
Category one	7	2.0	1	0.3		
Category two	30	8.3	35	9.9		
Category three	167	47.2	96	27.1		
Category four	6	1.7	12	3.4		
Marital status					26.029	<0.001
Single	144	40.7	130	36.7		
Married	60	16.9	10	2.8		
Separated	3	0.8	3	0.8		
Divorced	3	0.8	1	0.3		
Religion					6.793	0.009
Christianity	197	55.6	143	40.4		
Islam	13	3.7	1	0.3		
Level of education					14.964	0.002
None	6	1.7	10	2.8		
Primary	42	11.9	45	12.7		
Secondary	121	34.2	77	21.8		
University	41	11.6	12	3.4		
Employment status					9.168	0.002
Employed	22	6.2	3	0.8		
Not employed	188	53.1	141	39.8		
Knowledge about contraceptives					1.708	0.191

Yes	208	58.8	140	39.5		
No	2	0.5	4	1.2		
Being told of contraceptive by a health worker					0.50	0.823
Yes	142	40.1	99	28.0		
No	68	19.2	45	12.7		
Family support					6.793	0.009
Yes	13	3.7	1	0.3		
No	197	55.6	143	40.4		

* Significant at p<0.05 bolded

Source: Primary data

As shown in table 3 above for association of socio-demographic characteristics with the use of contraceptive among youth, age group, wealth status, marital status, religion, education level, employment status and family support were found significant with the contraceptive use. The age of the respondents is significant to the use of contraceptives ($\chi^2=7.328$ p-value 0.007) showing that the percentage of youths who have ever used the contraceptive use is high at age of 20-24 which is 43.5 % and 15.8 % with 15-19 years have been reported using the contraceptives. About the wealth status, the results showed that the association between wealth status and contraceptive use is significant ($\chi^2=14.242$ p-value =0.003) where about 47.2 % of youth were in the category three. The association between marital status and ever use of contraceptives was found to be statistically significant ($\chi^2= 26.029$ p-value <0.001). The results indicate that 40.7 % of those who ever used a contraceptives were single and 16.9 % of those who had ever used a contraceptive were married.

Religion and having used the contraceptives were found to be statistically significant ($\chi^2=6.793$ p-value =0.009) with 55.6 % of all users who were Christians and 3.7 % of Muslim youths had ever used a contraceptive. Regarding education status, the results show that the level of education was likely associated to contraceptive use ($\chi^2=14.964$ p-value=0.002). Those with at least secondary education, 34.2% of them had ever used a contraceptive while 11.6 % of those with university had ever used a contraceptive. Employment status was associated with the use of contraceptives ($\chi^2=9.168$ p-value =0.002) where 53.1% of all users were employed. Having the support from the family was also associated with the use of contraceptives with ($\chi^2=6.793$ p-value= 0.009) where 55.6 % of all the users were not supported by their families.

Multivariate Analysis

Multiple logistic regression analysis was applied to identify the variables that are independently associated with the use of contraceptives among youth. All significant variables in bivariate analysis were taken into the full model to detect the variables which are independently associated with the use of contraceptive in youths.

The results for identified factors that are associated with the use of contraceptives in Kicukiro district are presented in the table below:

Table 4: Multivariable analysis for factors associated with contraceptive use among youth

Variables	AOR	95 % CI		P value
		Lower	Upper	
Age group				
15-19	Reference			
20-24	3.486	1.869	6.502	<0.001
Wealth status				
Category one	Reference			
Category two	7.012	0.721	68.190	0.93
Category three	3843	0.414	35.664	0.236
Category four	14.868	1.246	177.389	0.033
Marital status				
Single	Reference			
Married	0.133	0.061	0.287	<0.001
Separated	1.459	0.220	9.667	0.695
Divorced	0.382	0.035	4.179	0.430
Level of education				
None	Reference			
Primary	0.634	0.183	2.193	0.472
Secondary	0.307	0.093	1.009	0.052
University	0.149	0.039	0.574	0.006
Employment status				
Employed	5.099	1.352	19.227	0.016
Not employed	Reference			

*Significant at p<0.05 bolded; AOR= Adjusted odds ratio; CI = Confidence Interval

Source: primary data

Youth of 20 to 24 years old were 3.5 times more likely to use contraceptive that those with 15-19 years [AOR= 3.486; 95% CI= 1.869- 6.502; P<0.001]. The effect of wealth on the use of contraceptives was statistically significant after controlling for other variables. Those in category IV were 15 times more likely to use a contraceptive compared to those from other wealth categories [AOR= 14.868; 95% CI= 1.246- 177.389; P=0.033]. Being married was 0.133 times less likely to be associated with the use of contraceptives that those who are single [AOR=0.133; 95% CI=0.061-0.287; P= <0.001]. The level of education also was found to be less likely influencing contraceptive use. Young people with university education were 0.149 times less likely to have used a contraceptive compared to those with no education [AOR=0.149; 95% CI=0.039-0.574; P= 0.006]. Being employed was 5.099 times more likely associated with using contraceptive compared to non-employed youths [AOR=5.099; 95% CI=1.352-19.227; P= 0.016].

Discussions

The prevalence of contraceptive use in Kicukiro district among youth is 59.3 % and this study revealed that 43.5 % of all users were aged between 20-24 years and 15.8 % all users were between 15-19 years old. Significant increase is observed compared to the prevalence found in last demographic health survey at national level among reproductive women which was 53%[9]. The contraceptive use in Rwanda context has been improving since the last demographic health survey with now modern contraceptive prevalence rate for the whole population reaching 53%. Rwanda have included family planning program in the national budget with partially funding the program and over the last decade, the government's role in funding and support has increased. In interviews, most of the informants believed that providing family planning services to young and unmarried people is necessary since they make a big proportion of the population and are currently underserved.

"If the young people come for contraceptives, since you cannot stop and prevent them from having sex and protect them from contracting HIV and other STIs or getting pregnant when they are not ready, I see it is their right to get the service" (Health Provider 7).

Comparing with other African countries like Burkina Faso (11.2%), Ethiopia (24.1%) Nigeria (34.2%) the rate of Rwanda rate looks higher (Sennen *et al.*, 2015). On a global scale, this prevalence is lower to global contraceptive prevalence which estimated at 63% [15]. Factors identified as statistically associated with the use of contraceptives among youth include age [AOR= 3.486; 95% CI= 1.869- 6.502; P<0.001], wealth status [AOR= 14.868; 95% CI= 1.246- 177.389; P=0.033], and employment status [AOR=5.099; 95% CI=1.352-19.227; P= 0.016]. Age was associated with the use of contraceptives. Similarly, in a study conducted in Malawi showed that women aged 20-24 years showed a larger increase in contraceptive use than those aged 15 to 19 years [16].

The increase in wealth status in youths was found to increase the likelihood of using contraceptives among youths. Contrary to what would be expected, in a study conducted in Uganda showed that wealth was not associated with contraceptive use among women of 15-34 years [17]. Young people who are employed were found to be more likely associated with using contraceptives than those who are not employed [AOR=5.099; 95% CI=1.352-19.227; P= 0.016]. This is similar to the findings of a study done in Ghana by Nyarko, where employed young people were 2.99 times more likely to use contraceptives than the non-working[6].

The present study found that marital status and education level were negatively associated with the use of contraceptives in youth. Marital status was negatively associated with the use of contraceptives. Those who were married were negatively associated with the use of contraceptives [AOR=0.133; 95% CI=0.061-0.287; P= <0.001] and this is in contrast with a study done by Mandiwaet *al.* (2018), which investigated factors that are associated with contraceptive use among young women in Malawi and showed that married women were 6.24 times using contraceptives than their unmarried counterparts[16].

Education was surprisingly found not be among the positive determinants of contraceptive use and uptake where there was a negative association in contraceptive use in among educated youth than non-educated [AOR=0.149; 95% CI=0.039-0.574; P= 0.006]. The results showed that youth with university education were 0.149 times less likely to use a contraceptive. This is different to what was found in Ghana which showed that having secondary or higher education was 11.53 times using contraceptives than those with no formal education[6]. This study have explored also providers' perceptions on the subject regarding the provision of contraceptives to young people attending family planning services. The findings showed a positive attitude of service providers in support of allowing young people from accessing and using contraceptives as the demand for the service is increasing. On the other hand, some service providers have biases related to age and marital status believing that if the use of contraceptives is started to be experienced too early would lead to fertility delays or sometimes to infertility:

"I think youths who are still under 18 , at school and unmarried don't need to be given contraceptive with whatever they are doing and we should be cautious on dispensing contraceptives to youth who are students because it just leads them into sexual practices while they are not ready yet to get married" (Health provider 6).

Similarly to a study done in Uganda showed that service providers prefer at first the abstinence and counselling about sexual education rather than providing contraceptives when young and unmarried people sought contraceptive services [18].

In addition, some providers had beliefs that if contraceptives are started to be used early, before having children and by unmarried young people would lead to promiscuity and problems related to delayed fertility or infertility which resulted in hesitation or refusal to be given some types of contraceptives. One of the providers said: *"Somehow allowing youth to use contraceptives promote promiscuous behavior. Because they know there are safe, that is why I always prefer to advise them first about abstinence before giving them any method. These adolescents only fear pregnancy and nothing"* (Health provider5).

Among the factors highlighted by that affect the turn up and uptake of contraceptives among young people such as misconceptions and fears, lack of confidentiality and fear to use something with consequences that could affect the reproduction ability were limiting some youths from using modern contraception.

Conclusion

The study findings showed that 59.3 % youth in Kicukiro District use modern contraceptives. A positive and significant increase is observed compared to the prevalence found in last demographic health survey. The findings showed a positive change in providers 'perceptions with regard to provision of contraceptives to young people but still, some few providers showed restrictions in delivering the service to young people to the unmarried and in-school young people, therefore, hence there is a need for improving the availability, accessibility and adequate information regarding contraceptive choices and uptake among young people.

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