

Original Research Article

Socio-demographic and economic factors influencing utilization of youth friendly reproductive health services among youths in selected universities in Nairobi County, Kenya

Felix Mwendwa Mutua^{1*}, Jane Karonjo², Jackline Mosinya Nyaberi³,
Peter Kamau⁴, John Kausya¹, Faith Mugai¹

¹Department of Epidemiology and Biostatistics, ²School of Nursing, Mount Kenya University (MKU), Nairobi, Kenya

³School of Public Health, Jomo Kenyatta University of Agriculture and Technology, Juja, Kenya

⁴Department of Community Health, Kenyatta University, Nairobi, Kenya

Received: 23 January 2020

Revised: 04 March 2020

Accepted: 05 March 2020

*Correspondence:

Mr. Felix Mwendwa Mutua,

E-mail: mutuafe13@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: The reproductive and sexual health of the youth remains a relatively new and sensitive area mainly due to restrictive norms and policies guiding the services and also the access and utilization of youth friendly reproductive health services (YFRHS) among the college youth are dependent on many factors.

Methods: Descriptive cross-sectional design was used to study 421 youths in selected universities in Nairobi County. Systematic sampling technique was used. Data was collected using a researcher-administered structured questionnaire and Key Informant Interview. Quantitative data analysis was conducted using SPSS version 24.0 and involved univariate and bivariate analysis. Chi-square were used to test the significance of the association between the dependent and independent variables ($p < 0.05$). Qualitative data was analyzed by thematic content analysis.

Results: The results indicated that 67.9% of youths utilized counselling services, 42.0% utilized VCT, 24.7% utilized family planning and 12.6% reported having used antenatal or pregnancy services. Utilization for all the reproductive health services increased with age with gender greatly associated with utilization of ANC services ($p = 0.0001$), FP services ($p = 0.001$) and STDs treatment ($p = 0.002$) while age of an individual was associated with VCT services ($p = 0.0001$), FP services ($p = 0.008$) and counselling ($p = 0.007$).

Conclusions: Socio-demographic factors influence utilization of YFRHS and therefore there is a need for the Government through the Ministry of Health and partners in health service provision to increase the number of YFRHS and ensure that the recommendations of Adolescent Health Policy guidelines are implemented fully with good evaluation strategies in place.

Keywords: Sexual and reproductive health, Youths, Youth friendly health services

INTRODUCTION

According to the World Health Organization (WHO), youth between 15 and 24 years and are characterized by unique physical, psychological, social, and emotional changes that put their life at high risk.¹ Poor health

quality impacts negatively on educational access, retention and achievement of young people in the country. Of particular concern is the access of youths to appropriate sexual and reproductive health (SRH) services.² Youth-friendly health services (YFHS) that are offered should be based on an understanding of what young people in a given community want and need, and

must have respect for the realities of young people's diverse backgrounds.³

In Kenya, youth form majority of the Kenyan population; the youthful has range of many problems from social, economic and health challenges therefore their health needs ought to be addressed.⁴ Statistics from Kenya National Bureau of Statistics (KNBS) census report estimate the youth to be about 40% of the population and youth aged 10-24 years make up to 36% of the population.⁵ According to the Ministry of Health (MoH) cited in the Kenya Demographic and Health Survey (KDHS) 2014 report, about 56% of women and 66% of men have some level of knowledge and understanding on sexual and reproductive health with utilization rate of 63%. Ministry of Health in Kenya formally approved the country's first National Reproductive Health Policy (NRHP) was formally approved by the Kenya's Ministry of Health to provide a framework for equitable, efficient and effective delivery of quality reproductive health services to the population especially those considered vulnerable such as the youth.⁶ The aim of the policy was to guide planning, standardization, implementation, and monitoring and evaluation of reproductive health care provided by various stakeholders. It focuses on: safe motherhood, maternal and neonatal health, family planning, and adolescent/youth sexual and reproductive health and gender issues.

The WHO estimated that 70% of premature deaths among adults are largely due to behaviours initiated during adolescences which implies that many of the health-related behaviours and conditions that arise during adolescence have implications for both present and future health development.¹ Some of these behaviours include lack of physical activities, unhealthy diets, drug and substance use, unsafe/risky sexual behaviours, etc. and conditions such as nutrition deficiencies, injuries (intended and unintended) etc. leads to the major causes of morbidity and mortality now and the future.⁷ The existing health care system was general for all groups of people and was wanting in the capacity to respond to the youth.⁸ Although the Kenyan government adopted Adolescent Reproductive Health and Development Policy (ARH and D) in 2003 with a commitment to address adolescent reproductive health issues, there has been limited utilization of the services by the college youths. The concern about adolescent sexual and reproductive health (ASRH) has grown following reports that sexual activity, early pregnancies, drug abuse and sexually transmitted infections (STIs) including HIV infection rates are increasing at unprecedented rates among the youths.⁹

The access to and utilization of YFRHS is a primary concern surrounding the promotion of sexual and reproductive health and rights and there is scanty information concerning any study on utilization of reproductive health services done in Nairobi County focusing on college youth. Many adolescents die

prematurely and unnecessarily through accidents, suicide, violence and pregnancy-related complications and some of the serious conditions of adulthood. In Nairobi county, there are several health facilities offering youth-friendly services and therefore its necessary to assess the utilization of YFRHS among the colleges within the county.

METHODS

This was a descriptive cross-sectional design using both quantitative methods (issuing self-administered questionnaires to the students) and qualitative methods (use of key informant interviews) of data collection from December 2018 to April 2019.

Inclusion criteria

The study included all university youths in selected universities between eighteen to twenty-four years and healthcare providers as key informants.

Exclusion criteria

Unconsented students were excluded. The students who were on suspension and those declined to give a written consent were excluded from the study.

The study utilized systematic random sampling method among 421 students from University of Nairobi (KNH Campus), Aga Khan Teaching and Referral University, United States International University and Daystar University-Nairobi campus in Nairobi County. Interviewer-administered structured questionnaires were used to collect quantitative data while Key Informant Guide was used to collect qualitative. Key informant interview respondents consisted of twelve (12) key informants including eight (8) facility-based health service providers such as health workers and health administrative staff and four (4) community-based persons (Public Health Officers). Quantitative data was analyzed using SPSS version 24.0. Descriptive data was presented using frequencies, percentages, means and standard deviation while inferential statistics used chi-square test to measure association between independent and dependent variables. P-value less than 0.05 were considered statistically significant.

RESULTS

Socio-demographic Characteristics of study respondents

In this study more than half (58.0%) of the youth were aged 23-24 years and 11.2% were 19-20 years. Most of the students were females (53.2%) and 46.8% were males. The study covered youth in first year (20.4%), second year (49.9%), third year (20.0%) and fourth year (9.7%) students. Of the youth studied, 77.4% were Christians, 22.6% were Muslims and 24.2% were married (Table 1).

Table 1: Socio-demographic characteristics of study respondents.

Characteristic		Frequency	%
Age group (in years)	19-20	47	11.2
	21-22	130	30.9
	23-24	244	58.0
University	UON-KNH	141	33.5
	AKUH	66	15.7
	USIU	94	22.3
	Daystar University	120	28.5
Gender	Female	224	53.2
	Male	197	46.8
Year of study	First year	86	20.4
	Second year	210	49.9
	Third year	84	20.0
	Fourth year	41	9.7
Religion affiliation	Christian	326	77.4
	Muslim	95	22.6
Marital status	Single	319	75.8
	Married	102	24.2

Socio-economic characteristics of study respondents

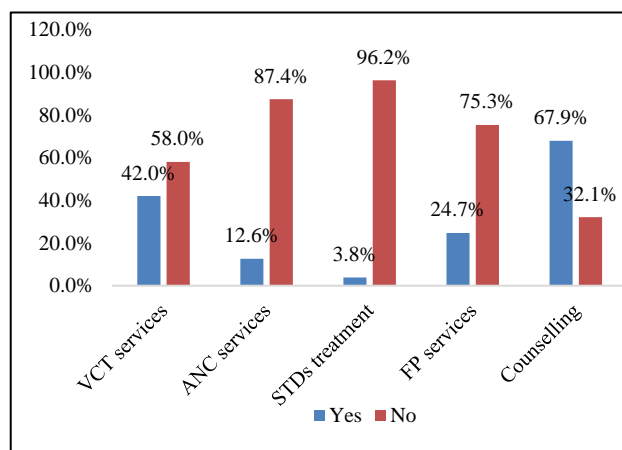
More than half of respondents 213 (50.6%) had a source of income and 177 (42.0%) of guardians were self-employed (Table 2).

Table 2: Socio-economic characteristics of respondents.

Characteristics		Frequency	%
Had source of income	Yes	213	50.6
	No	208	49.4
Guardian employment status	Farmer	19	4.5
	Self employed	177	42.0
	Casual laborer	82	19.5
	Formal employment	143	34.0

Youth friendly reproductive health services utilized

The results indicate that 67.9% of youth utilized counselling services, 42.0% utilized VCT, 24.7% utilized family planning and 12.6% reported having used antenatal or pregnancy services as shown in Figure 1.

**Figure 1: Youth friendly reproductive health services utilized.****Socio-demographic factors that influence YFRHS utilization**

Various socio-demographic variables were subjected to Chi-square analysis test to determine association with utilization of YFRHS. The age had significant association to utilization of VCT ($\chi^2=22.921$, $df=2$, $p=0.001$), FP services ($\chi^2=9.547$; $df=2$; $p=0.008$) and general counselling ($\chi^2=9.821$; $df=2$; $p=0.007$). Gender had significant association to utilization of ANC services ($\chi^2=45.071$; $df=1$; $p=0.0001$), FP services ($\chi^2=65.242$; $df=1$; $p=0.001$) and STDs treatment ($\chi^2=11.069$; $df=1$; $p=0.002$) (Table 3).

Table 3: Socio-demographic factors and utilization of YFRHS.

Characteristics		Utilized		Not-utilized		Statistics
		N	%	N	%	
VCT services						
Gender	Female	85	48.0	139	57.0	$\chi^2=3.297$; df=1; p=0.075
	Male	92	52.0	105	43.0	
Age group (in years)	19-20	6	3.4	41	16.8	$\chi^2=22.921$; df=2; p=0.0001
	21-22	50	28.2	80	32.8	
	23-24	121	68.4	123	50.4	
Religion allow YFRHS	Yes	134	75.7	191	78.3	$\chi^2=0.633$; df=2; p=0.729
	No	5	2.8	8	3.3	
	Not sure	38	21.5	45	18.4	
ANC services						
Gender	Female	51	100.0	173	47.0	$\chi^2=45.071$; df=1; p=0.0001
	Male	0	0.0	197	53.0	
Age group (in years)	19-20	1	1.9	46	12.5	$\chi^2=5.723$; df=2; p=0.057
	21-22	16	30.2	114	31.0	
	23-24	36	67.9	208	56.5	

Continued.

Characteristics	Utilized		Not-utilized		Statistics	
	N	%	N	%		
Religion allow YFRHS	Yes	44	83.0	281	$\chi^2=1.206$; df=2; p=0.547	
	No	1	1.9	12		3.3
	Not sure	8	15.1	75		20.4
FP services						
Gender	Female	91	87.5	133	$\chi^2=65.242$; df=1; p=0.001	
	Male	13	12.5	184		58.0
Age group (in years)	19-20	3	2.9	44	$\chi^2=9.547$; df=2; p=0.008	
	21-22	35	33.7	95		30.0
	23-24	66	63.5	178		56.2
Religion allow YFRHS	Yes	80	76.9	245	$\chi^2=1.471$; df=2; p=0.479	
	No	5	4.8	8		2.5
	Not sure	19	18.3	64		20.2
STDs treatment						
Gender	Female	2	12.5	222	$\chi^2=11.069$; df=1; p=0.002	
	Male	14	87.5	183		45.2
Age group (in years)	19-20	1	6.3	46	$\chi^2=1.986$; df=2; p=0.371	
	21-22	3	18.8	127		31.4
	23-24	12	75.0	232		57.3
Religion allow YFRHS	Yes	8	50.0	317	$\chi^2=7.006$; df=2; p=0.030	
	No	1	6.3	12		3.0
	Not sure	7	43.8	76		18.8
General counselling						
Gender	Female	153	53.5	71	$\chi^2=0.030$; df=1; p=0.862	
	Male	133	46.5	64		47.4
Age group (in years)	19-20	23	8.0	24	$\chi^2=9.821$; df=2; p=0.007	
	21-22	87	30.4	43		31.9
	23-24	176	61.5	68		50.4
Religion allow YFRHS	Yes	203	71.0	122	$\chi^2=10.803$; df=2; p=0.024	
	No	6	2.1	7		5.2
	Not sure	77	26.9	6		4.4

Table 4: Socio-economic factors and utilization of YFRH services.

Characteristics		Utilized		Not-utilized		Statistic
		N	%	N	%	
VCT services						
Had source of income	Yes	115	65.0	98	40.2	$\chi^2=25.257$; df=1; p=0.0001
	No	62	35.0	146	59.8	
Guardian employment status	Non-formal employment	125	70.6	153	62.7	$\chi^2=2.866$; df=1; p=0.090
	Formal employment	52	29.4	91	37.3	
ANC services						
Had a source of income	Yes	46	86.8	167	45.4	$\chi^2=31.785$; df=1; p=0.0001
	No	7	13.2	201	54.6	
Guardian employment status	Non-formal employment	41	77.4	237	64.4	$\chi^2=3.467$; df=1; p=0.063
	Formal employment	12	22.6	131	35.6	
STDs treatment						
Had a source of income	Yes	12	75.0	201	49.6	$\chi^2=3.963$; df=1; p=0.046
	No	4	25.0	204	50.4	
Guardian employment status	Non-formal employment	16	100.0	262	64.7	$\chi^2=8.555$; df=1; p=0.003
	Formal employment	0	0.0	143	35.3	
FP services						
Had a source of income	Yes	81	77.9	132	41.6	$\chi^2=41.154$; df=1; p=0.0001
	No	23	22.1	185	58.4	
Guardian employment status	Non-formal employment	79	76.0	199	62.8	$\chi^2=6.070$; df=1; p=0.014
	Formal employment	25	24.0	118	37.2	

Continued.

Characteristics	Utilized			Not-utilized		Statistic
		N	%	N	%	
General counselling						
Had a source of income	Yes	151	52.8	62	45.9	$\chi^2=1.732$; df=1; p=0.188
	No	135	47.2	73	54.1	
Guardian employment status	Non-formal employment	181	63.3	97	71.9	$\chi^2=3000$; df=1; p=0.083
	Formal employment	105	36.7	38	28.1	

Socio-economic factors and utilization of YFRHS

The youth who had a source of income utilized VCT and ANC and this was significantly associated with YRHS utilization ($p<0.001$). Youths income status and parent's employment status were significantly associated with STDs treatment ($\chi^2=3.963$, $p=0.046$) and ($\chi^2=8.555$, $p=0.003$) respectively. Likewise, Parent's employment status had a role in family planning utilization ($\chi^2=6.070$, $p=0.014$).

DISCUSSION

The study findings showed that gender was greatly associated with utilization of ANC services, FP services and STDs treatment while age of an individual was associated with VCT services, FP services and counselling as reproductive health services offered to the youth. Utilization for all the reproductive health services increased with chronological age. The older youth in age group of 23-24 years utilized all the YFRHS more than those who were younger. This finding is in agreement with a study by Mutai which reported low utilization of RHS among young people due to poor understanding of their changing bodies and insufficient awareness of risks associated with early sexual debut, STI/HIV and pregnancy and shyness.¹⁰ The findings also agree with KDHS which revealed an increased uptake of family planning services among older youth, 20-24 years as compared to 10-19-year olds.⁵ In this study, it was observed that youths with a source of income had higher utilization of all youth reproductive health services. Thus, greatly associated with VCT services, ANC services and FP services, however it was not associated with counselling services. The employment/ or occupation of the youth's parent showed no significant association to most of utilization of YFRHS. The employment status only showed significant association to treatment of Sexually Transmitted Infection and family planning services. This confirms the finding that there is a cost attached to treatment as was mentioned by some youth. This is in agreement with a study by Shikuku who found that in STI management, a lot of time involves laboratory investigations that are charged for irrespective of whether the individual is a school youth or not thus explaining the connection between employment status and this utilization.⁹ This means that without money the youth might not access and utilize the service. This finding is in agreement with a studies which showed that generally health service utilization including RHS was tied to economic aspects of an individual.^{8,11,12} This finding was also brought out when a big percentage of the youth said

that they missed the services due to cost/fee charged on some services. The implication of this finding is that majority of the youth are likely not to seek medical care and treatment for these infections in time and this can lead to serious reproductive health complications such as infertility in future.

CONCLUSION

Older youth between 23-24 years utilized the services more than the younger youth owing to their increased knowledge of these services $p<0.05$ thereby rejecting hypothesis one that stated that there was no relationship between demographic factors and utilization of YFRHS. The study therefore concludes that the younger university youth aged between 19-20 years utilization of YFRHS is low and creating awareness of these services to them is important to enable increase their knowledge and understanding and in turn scale up their utilization. Parent's employment did not play a significant role in the utilization of all YFRHS except for treatment of STIs and FP services. University youths with a source of income had higher utilization of all youth reproductive health services. Thus, greatly associated with VCT services, ANC services and FP services, however it was not associated with counselling services. Therefore, there is a need to reach the younger youth with age appropriate YFRHS message to enlighten and help them make right decisions as some are already sexually active as reported that the adolescent get into sexual debut early and that many have had sex before university education.

ACKNOWLEDGEMENTS

Special gratitude goes to school of public health for guidance and support. Sincere gratitude to all university administration, Nairobi county director of health, students and healthcare workers who took part to make this study successful.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Mount Kenya University- Ethical Review Committee and a permission by National Commission for Science, Technology and Innovation, Kenya

REFERENCES

1. World Health Organization. Regional Office for South-East Asia. (2018). Strategic Guidance on Accelerating Actions for Adolescent Health in

- South-East Asia Region (2018-2022). World Health Organization. Available at: <https://apps.who.int/iris/handle/10665/274312>.
2. Mazur A, Brindis CD, Decker MJ. Assessing youth-friendly sexual and reproductive health services: A systematic review. *BMC Health Serv Res*. 2018;18(1):1-12.
3. Sujindra E, Bupathy A. Adolescent friendly health services: perceptions and practice of medical professionals. *Int J Reprod Contraception, Obstet Gynecol*. 2016;5(9):2968-72.
4. Ministry of Health, Kenya. National Guidelines for Provision of Adolescent and Youth Friendly Services in Kenya. 4. Ministry of Health, Kenya. 2016.
5. Kenya National Bureau of Statistics and ICF Macro. Kenya Demographic and Health Survey 2014-2015. Calverton, Maryland; Kenya Nat Bur Stat. 2014;58(1):1-132.
6. Abate AT, Ayisa AA, W Mariam, Tesfamichael GM. Reproductive health services utilization and its associated factors among secondary school youths in Woreta town, South Gondar, North West Ethiopia: a cross sectional study. *BMC Res Notes*. 2019;12(1):90.
7. Sotolongo J, House LD, Swanson S, Davis SEH. Integrated community strategies for linking youth to adolescent reproductive health services: a case study. *J Adolesc Health*. 2017;60(3):S45-50.
8. Mbugua SM, Karonjo JM. Reproductive health knowledge among college students in Kenya. *BMC Public Health*. 2018;18(1):1-7.
9. Shikuku CK. Delivery of youth friendly services in kenya: towards a targeted approach. *Public Policy Adminis Res*. 2014;4(7):115-9.
10. Mutai KJ. An assessment of factors influencing utilization of youth- friendly reproductive health services in Waldai Ward, Belgut Sub-County- Kenya. *Afr J Reprod Health*. 2016;9(3):253-96.
11. Nmadu AG. Access and utilization of reproductive health services among adolescents in Kaduna North Local Government, Kaduna State, North-West, Nigeria. *North-Eastern Hill Univ J*. 2017;8(3):1-107.
12. James S, Pisa PT, Imrie J, Beery MP, Martin C, Skosana C, et al. Assessment of adolescent and youth friendly services in primary healthcare facilities in two provinces in South Africa. *BMC Health Serv Res*. 2018;18(1):809.

Cite this article as: Mutua FM, Karonjo J, Nyaberi JM, Kamau P, Kausya J, Mugai F. Socio-demographic and economic factors influencing utilization of youth friendly reproductive health services among youths in selected universities in Nairobi County, Kenya. *Int J Community Med Public Health* 2020;7:2437-42.