Kabarak Journal of Research & Innovation
www.kabarak.ac.ke

Factors Associated with Health Seeking Behaviour for Reproductive Tract Infections among Young Street Females in Eldoret, Kenya

Chepchirchir V MARITIM[1], Anthony WANYORO[2], Jackim NYAMARI[3], John MAINGI[4], Lillian ABALLA[5], & Eunice KIMANI[6]

[1, 2,3,4,5]*Kenyatta University*
[6]*Mount Kenya University*

[1]*violetmaritim@gmail.com*, [2]*wanyoro.anthony@ku.ac.ke*, [3]*nyamari.jackim@ku.ac.ke*, [4]*Maingi.muthini@ku.ac.ke*, [5]*lynkia2000@gmail.com and* [6]*kimani.eunice318@gmail.com*

Submitted 23rd January, 2021, Accepted 4th August, 2021 and Published 20th August, 2021

ABSTRACT

Reproductive tract infections (RTIs), among young women is a public health concern, especially in developing countries like Kenya. When a reproductive tract infection occurs, urgent treatment should be done to avoid short- and long-term consequences. However, few studies have evaluated factors associated with RTIs and healthcare seeking behaviors especially, among young street women in low and middle-income countries. This study aimed at determining the factors associated with healthcare seeking behavior for RTI infections among young street females in Eldoret town in Kenya. Descriptive cross-sectional study design was used. The study participants were young street females aged between 10-24 years. The independent variables were age, education, occupation, marital status, and healthcare associated factors such as distance to the facility, and health care perspectives on reproductive health were assessed. Informed consent was obtained from participants while assent was obtained from guardians for minors and persons in charge of street families. A total of 77 young street females were enrolled. Those aged ≤15 years were 10 (13%) while those aged ≥ 20 years were 48 (62.3%). The study established that participants aged between 16 to 19 years were less likely to report having had an RTI compared to those aged between 20 to 24 years (95% CI; 0.216 (0.070-0.671), p=0.006). Majority had heard of RTI (62, 80.5%). Out of the fifty respondents (65%) who reported having ever experienced RTI in their lifetime, 36 (72%) sought treatment for the illness with 46 respondents (94%) seeking treatment after two days post-onset of symptoms. Additionally, the main first points of seeking treatment were pharmacies (21, 43%) and health facilities (25, 51%). The study findings show there's a high burden of RTIs among young street females in Eldoret.

Key words: Health seeking behavior, reproductive tract infections, reproductive health, young street females

Kabarak Journal of Research & Innovation
www.kabarak.ac.ke

I. INTRODUCTION

Reproductive tract infections (RTIs) impact millions of women worldwide. They are a collection of infectious and non-infectious diseases of the reproductive tract and share common symptoms such as vaginal itching and discharge (Rabiu et al., 2010). RTIs may predispose to spontaneous abortion, pelvic inflammatory disease, increased risk of human immunodeficiency virus infections and preterm delivery (Isik et al., 2016 & Kerubo et al., 2016). The risk of RTIs is high among women in the reproductive age group (Geetha, 2014). Several factors such as health education, shame associated with RTIs, life stage, personal health decision making, and accessibility to healthcare resources are associated with the likelihood to seek medical treatment for RTIs and other gynecological issues (Nagarkar et al., 2015).

Concerted efforts should be put in place to enhance the healthcare seeking behavior for RTIs. In the developing countries where the World Health Organization documents that about 200 million RTIs occur as a result of sexually transmitted pathogens, there is a paucity of data regarding reproductive health care seeking behavior among women, especially young street females. Documenting the general healthcare seeking behavior could offer insights into the relationship that young street females have with public health systems for gender-specific diseases could-help in designing effective interventions. This study aimed at identifying the factors associated with healthcare seeking behavior, among young street females in Eldoret, Kenya.

II. MATERIALS AND METHODS

A. Study area

The study was carried out within Eldoret municipality; a rapidly growing cosmopolitan town in the western part of Rift valley, Kenya. An estimation of over fifty percent of the population live under the poverty line, exceeding the national average of 47.2% (Embleton et al., 2018 & Braitstein et al., 2018). The municipality of Eldoret has a population of approximately 130 young street females. A study done in Eldoret to investigate the burden of STIs among young street females found out that the burden of STIs was high at 54% as compared to that of males which was found to be at 9% (Winston et al., 2015).

B. Research design

This was a descriptive cross sectional study design that used both qualitative and quantitative approaches. An assessment of factors associated with health seeking behavior was done in relation to independent variables of the study. Interviewer structured questionnaires were used to collect quantitative data from the 77 respondents while a key informant guide was used to collect qualitative data from the persons in charge on the health seeking behavior of the Young Street Females.

C. Study population

The study population composed of young street females aged between 10-24years, who spent both nights and days in the street and those spending days only. Street children in Eldoret municipality exist in small communities or homes called barracks/bases.

Kabarak Journal of Research & Innovation
www.kabarak.ac.ke

D. Data collection

The study employed snow balling to select eligible participants who were aged 10-24 years, and had spent at least two months in the streets and were ready to consent for study. The study used guides to collect data, which was then entered into a computer using a software SPSS v.21. Descriptive statistics such as percentages, mean and frequencies were used to describe the health seeking behavior of young street females on RTIs. Odds ratio was used to assess the association between the variables (factors associated with the health seeking behavior) of the study. Qualitative data from key informant guides was categorized into themes and the most common narrative was quoted. We obtained ethical approval from Mount Kenya University ethics and review committee and informed consent and assent was obtained from the participants.

III. RESULTS

A. Characteristics of study participants

A total of 77 young street females in Eldoret, Kenya were enrolled in this study. Table 4.1 shows their socio-demographic characteristics. The mean age of the study participants was 20.2±3.52 years. Those below 15 years were ten (13%) while those above twenty years were 48 (62.3%).

Table 1: Socio-demographic characteristics of the study respondents

Characteristic	Number (n=77)	Percentage
Age (years)		
13 – 15	10	13.0
16 – 19	19	24.7
20 – 24	48	62.3
Marital status		
Divorced	2	2.6
Single	34	44.2
Married	41	53.2
Education		
No formal education	5	6.5
Primary school	61	79.2
Secondary school	11	14.3
Residency status		
‘On Street’	7	9.1
‘Off Street’	70	90.9
Duration on the street		
More than 1 year	72	93.5
3 – 12 months	4	5.2
≤ 3 months	1	1.3
Occupation		
Unemployed	73	94.8
Self employed	3	3.9
Formally employed	1	1.3
Locality		
California	15	19.5

Eastleigh	7	9.1
Juma Hajee	4	5.2
Langas	6	7.8
Mangula	20	26.0
Maruti	13	16.9
Soweto	12	15.6

B. Reproductive tract infection health seeking behaviors among young street children

Table 2 shows the Reproductive tract illness attributes and health seeking behaviors of the study participants. Majority had heard of RTI (62, 80.5%). The most frequently mentioned sources of information on the RTI were friends, colleague and family members (47, 64%) and health promotion educators (22, 30%). Out of the fifty respondents (65%) who reported having ever experienced RTI in their lifetime, 36 (72%) sought treatment for the illness with 46 respondents (94%) seeking treatment after two days post-onset of symptoms. Further, 29 (38%) and nine (12%) respondents said they had one and two RTI, respectively, in their lifetime. Those who sought treatment in the early stages (onset of symptoms) and advanced stage of disease, were 10 (20%) and 28 (57%) respectively. Additionally, the main first points of seeking treatment were pharmacies (21, 43%) and health facilities (25, 51%). Thirteen respondents (27%) did not complete the prescribed course of treatment.

Table 2: Reproductive tract illness attributes and health seeking behavior

Characteristic	Number (n=77)	Percentage
Heard of RTIs		
No	15	19.5
Yes	62	80.5
Source of information on RTI		
Newspapers and magazines	-	-
Radio &TV	2	2.7
Health promotion educators	22	29.7
Friends, colleague and family members	47	63.5
Teachers	2	2.7
Self/Self-taught	1	1.4
Ever experienced any reproductive tract illness		
Yes	50	64.9
No	27	35.1
Sought treatment (n=50)		
No	14	28.0
Yes	36	72.0
Time of seeking treatment (days post-onset of symptoms) (n=49)		
More than one day later	46	93.9
The next day	2	4.1
The same day	1	2.0
Disease stage at time of seeking treatment (n=49)		
In serious stage of disease	28	57.1
Incidence of disease and its symptoms	11	22.4

In early stages and onset of symptoms/mild	10	20.4
First point of seeking treatment (n=49)		
Traditional healers	3	6.1
Pharmacy	21	42.9
Hospital/Health facility	25	51.0
Stage of treatment | Course of treatment		
To recover	20	40.8
To relieve the symptoms	16	32.7
Do not complete my course of treatment	13	26.5

C. Sexual practices among young street females

Table 3 below shows results for sexual practices and related characteristics. The findings shows that most respondents (45.5%) had their first sexual encounter at the age below 15 years and 59.7% had one sexual partner. Condom usage seemed low with 61% of the respondents admitting to not having used it during their sexual encounter with their partners. The major reason for not using condom was revealed to be the trust they had on their partners.

Table 3: Sexual practices and related characteristics

Characteristic	Number (n=77)	Percentage
Uses of alcohol/drugs		
No	42	54.5
Yes	35	45.5
Age of sex debut (years)		
≤ 12	25	32.5
13 – 15	35	45.5
16 – 17	11	14.3
≥ 18	6	7.8
Number of sexual partners		
More than two	13	16.9
Two	18	23.4
One	46	59.7
Partner uses a condom		
No	47	61.0
Yes	30	39.0
Frequency of condom use (n=30)		
Almost every time	19	24.7
Every time	11	14.3
Reasons for not using a condom (n=47)		
Partner dislikes the condom	13	27.7
Trust	35	74.5
Unavailability	1	2.1

Kabarak Journal of Research & Innovation
www.kabarak.ac.ke

D. Health facility attributes

Table 4 shows selected attributes related to access to health services. Majority (93.5%) of the study participants were not able to afford health care services. Regarding distance to the healthcare facility, 14.3% of the respondents lived at less than 5 kilometers to the healthcare facility while 11.7% lived at a distance of more than 7 kilometers to the healthcare facility.

Table 4: Financial affordability and Distance to Healthcare Facilities

Characteristic	Number (n=77)	Percentage
Affords health care services		
No	72	93.5
Yes	5	6.5
Distance to the nearest health facility (km)		
< 5	11	14.3
5	11	14.3
6	46	59.7
≥7	9	11.7

E. Factors associated with RTIs among the young street females

Table 5 shows the associations between RTIs and socio-demographic characteristics. Participants aged between 16 to 19 years were less likely to report having had an RTI compared to those aged between 20 to 24 years (95% CI; 0.216 (0.070-0.671), p=0.006). The odds for having had an RTI with a primary school education level were (OR 18.000 CI (1.242-260.918), p=0.036) while the odds for having had an RTI with a secondary school education level was (OR 11.647 CI (2.279-59.517), p=0.001). A significantly higher proportion (80.5%) of married respondents reported having had an RTI in their lifetime (OR 4.610 (95% CI 1.675 - 12.687), p=0.002). Socio-demographic variables such as occupation, residency status and locality were not significantly associated with RTIs.

Table 5: Univariate analysis of socio-demographic factors correlated with RTIs

Variable	Ever had STI		OR (95% CI)	P-value
	Yes [n(%)]	No [n(%)]		
Age (years)				
13 – 15	5(50.0)	5(50.0)	0.297(0.073-1.218)	0.081
16 -19	8(42.1)	11(57.9)	0.216(0.070-0.671)	0.006
20 – 24	37(77.1)	11(22.9)	Ref	
Education level				
None	4(80.0)	1(20.0)	18.000(1.242-260.918)	0.036
primary school	44(72.1)	17(27.9)	11.647(2.279-59.517)	0.001
Secondary school	2(18.2)	9(81.8)	Ref	
Residency status				
on street	6(85.7)	1(14.3)	3.545(0.404-31.108)	0.411
of street	44(62.9)	26(37.1)	Ref	
Marital status				

Married	33(80.5)	8(19.5)	4.610(1.675-12.687)	0.002
Not married	17(47.2)	19(52.8)	Ref	
Duration on the street				
More than 1 year	49(69.0)	22(31.0)	11.136(1.228-101.026)	0.018
≤ 1year	1(16.7)	5(83.3)	REF	
Occupation				
Employed	3(75.0)	1(25.0)	1.660(0.164-16.775)	0.665
Unemployed	47(64.4)	26(35.6)	Ref	
Locality				
California	8(53.3)	7(46.7)	0.381(0.073-1.992)	0.247
Eastleigh	4(57.1)	3(42.9)	0.444(0.061-3.242)	0.617
Juma Hajee	3(75.0)	1(25.0)	1.000(0.073-13.644)	0.998
Langas	4(66.7)	2(33.3)	0.667(0.078-5.678)	0.610
Mangula	15(75.0)	5(25.0)	1.000(0.192-5.222)	0.997
Maruti	7(53.8)	6(46.2)	0.389(0.071-2.133)	0.271
Soweto	9(75.0)	3(25.0)	Ref	

IV. DISCUSSION

Approximately four out of 5 study participants had primary school education. This has been one of the characteristics of street families. This perhaps is because their families lack enough money to support them through the school period and hence may not finish or may not further their studies after the primary level of education (Cumber et al, 2015). These results agree with a study done by Cumber and colleagues (2015), among the street families in Africa where 70% had primary school education levels. Approximately four out of every five respondents had some information about RTIs and most mentioned sources were friends, colleague and family members. This finding is similar to that of Rabiu et al. (2010) among women in Nigeria where they concluded that most women (77.2%) had information on RTIs. Studies have shown that having connections with guardians/parents/caregivers is associated with youth seeking information regarding RTI (Barman-Adhikar and Rice, 2011). This finding is in line with the study done by Desmennu and colleagues among street youth where the results revealed that the young street females had a lot of information regarding RTIs but they could not identify the various types of these infections (Desmennu et al, 2018). Rabiu and colleagues in their study concluded that despite women having heard about RTIs, they still demonstrated poor understanding on the complications and how to manage the problem (Rabiu et al, 2010).

The findings showed that more than half of the respondents had experienced RTI in their lifetime. This finding were differed with that of a study done in Nigeria by Rabiu et al. (2010) where only 37% of the respondents had experienced RTIs. This perhaps is because the environmental conditions of these groups present difference in level of vulnerability. Of the group that had ever experienced RTIs, approximately four out of every five respondents had sought treatment for the illness more than two days after commencement of symptoms. Most (57%) sought treatment at the advanced stages of the disease followed by those (20%) who sought at the early onset of symptoms. Similar results were reported in Punjab where more than 80% of the study subjects sought care for RTIs (Mamta & Kaur, 2014). Additionally, the main first points of seeking treatment were health facilities (51%) followed by pharmacies (43%).. This is similar to the study done in Nigeria where it was found that most respondents

had their first point of care as government health facilities (Rabiu et al., 2010). 27% of the respondents did not complete the prescribed course of treatment.

Univariate analysis of socio-demographic factors correlated with RTIs

The findings on the analysis of the association between ever contracting STI and socio-demographic characteristics showed that the age of the respondent was significantly predictive of the lifetime prevalence of STI with those who reported to have ever experienced any RTI being significantly older than their colleagues who reported on the contrary (mean±standard error (se): 21.0±0.48 years versus 18.9±0.66 years respectively, p=0.014). Indeed, the study participants who were aged between sixteen and nineteen years were about 80% less likely to report having had STI in their lifetime when compared to those aged between twenty and 24 years (odds ratio (OR) (95% CI) 0.216 (0.070-0.671), p=0.006). This finding agrees with the findings reported by Morris and Rushwan (2015) in their study where they concluded that prevalence of RTIs was higher among young females aged between 20—24 years old followed by those between 15-19 years. This manifestation perhaps is brought about by long period of exposure to RTIs compounded by early sex debut

V. CONCLUSION

In conclusion, the study findings show there is a high burden of STIs among young street females in Eldoret. Information on RTIs seems to be low among this group. It is therefore recommended that; it is necessary to formulate an intervention that will reduce cases of STIs most preferably though health education, continuous syndromic screening and referrals to health facilities.

Conflict of interest

Authors declare no conflict of interest.

Acknowledgement

My sincere gratitude goes to Mr Jean-luc Azasito Mafuka for his unconditional support during my data collection and throughout the study. I also with to recognize the input from my colleague Mr. Wambani Rapando Japheth, who supported in reviewing and approving this manuscript. Lastly, I wish to thank Mr Murima Ng'ang'a who assisted in data analysis. With God, everything is possible.

VI. REFERENCES

Rabiu K. A., Adeniyi A. A., Fatimat M. A., & Oluwarotimi I. A. (2010). Female reproductive tract infections: understandings and care seeking behavior among women of reproductive age in Lagos,Nigeria. *BioMedical Central Women's Health*.10;8.

Isik G., Demirezen S., Donmez H. G., & Beksac M. S. (2016). Bacterial vaginosis in association with spontaneous abortion and recurrent pregnancy losses. *J Cytol*. v;33(3):135–40;

Kerubo E., Kayla F. L., Otecko N.,Odhiambo C., Mason L., Nyothach E., Oruko K.., Bauman A., Vulule J., Zeh C., & Penelope A. P. (2016). Prevalence of reproductive tract infections and the predictive value of girls' symptom-based reporting:findings from a cross-sectional survey in rural western Kenya.*SexTransmInfect* .0:1–7.

Geetha M. (2014). Prevalence of reproductive tract infections among rural married women in Tamil Nadu, India: a community-based study. *Journal of Pioneering Medical Sciences*, vol. 4, no. 1, pp. 18–24, 2014.

Nagarkar A, & Mhaskar P. (2015). A systematic review on the prevalence and utilization of health care services for reproductive tract infections/sexually transmitted infections: Evidence from India. *Indian J Sex Transm Dis AIDS*. v36(1):18–25.

Embleton L., Wachira J., Kamanda A., Naanyu V., Winston S., Ayuku D. & Braitstein P. (2015). "Once you join the streets you will have to do it": sexual practices of street children and youth in UasinGishu County, Kenya. *Reproductive Health*. 12:106.

Braitstein, P., Ayuku, D., DeLong, A., Makori, D., Sang, E., Tarus, C., Kamanda, A., Shah, P., Apondi, E., & Wachira, J. (2019). HIV prevalence in young people and children living on the streets, Kenya. *Bulletin of the World Health Organization*, 97(1), 33–41.

Winston E. S., Chirchir A. K., Muthoni L. N., Ayuku D., Koech J., NyandikoW., Carter E. J., &Braitstein P. (2015). Prevalence of sexually transmitted infections including HIV in street-connected adolescents in western Kenya. *Sexually Transmitted Infections* .0:1–7.

Mamta & Kaur N. (2014). Reproductive Tract Infections: Prevalence and Health Seeking Behaviour among Women of Reproductive Age Group. *International Journal of Science and Research*. 2319-7064.

Cumber S. & Tsokha-Gwegweni. (2015). The health profile of street children in Africa: a literature. *Journal of public health in Africa*. 6:566.

Barman-Adhikari A., Bowen E., Kimberly B., Brown S., & Rice E. (2016). A social capital approach to identifying correlates of perceived social support among homeless youth. *Child & Youth Care Forum.*45(5); 691-708

Morris J. L., & Rushwan H. (2015). Adolescent sexual and reproductive health: The global challenges.*International Journal of Gynecology & Obstetrics*. v