

Original Research Article

Utilization of sexual reproductive health services among public service vehicle operators in Nairobi City County, Kenya

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ABSTRACT

Background: Public service vehicle operators and owners are a susceptible demographic in need of specialized treatments due to their high vulnerability to these problems. The primary purpose of this research was to learn on the utilization of sexual reproductive health services (SRH) among public service vehicle (PSV) operators in Nairobi County use sexual and reproductive health care services.

Methods: A descriptive cross-sectional study design was adopted for the study. The research approach used both qualitative and quantitative techniques. Operators at bus terminals made up the bulk of the research population. The Cochran's formula was used to precisely estimate a sample's contribution to a population, and the sampling estimate had a variance (margin of error) of 0.5.

Results: The logistic regression model results showed that, after controlling for demographics, female PSV operators were 97% more likely to use SRH services on at least four separate occasions than their male counterparts (95% CI (0.21 to 0.96), $p=0.015$). When controlling for age, marital status, and education, PSV operators from universities are 75% more likely to use SRH services than those from primary schools (95% CI (1.12 to 0.75), $p=0.001$), and those from secondary schools are 68% more likely to use SRH services than those from primary schools (95% CI (0.241 to 0.679), $p=0.004$).

Conclusions: This study concluded that, the utilization of SRH services among PSV is at 36.6%, married PSV operators utilize sexual reproductive health services was more than unmarried PSV operators. Age, level of education and employment status are determinants to utilization of the selected sexual reproductive health services.

Keywords: Sexual reproductive health, Public service vehicle operators, Utilization

INTRODUCTION

Sexual and reproductive ill health forms a major proportion of the global burden of disease.¹ Health in all areas pertaining to reproduction, including sexuality, is referred to as sexual and reproductive health. To ensure quality sexual and reproductive health services, including contraceptive services, and to address sexually transmitted infections (STIs), cervical cancer, violence against women and girls, and the sexual and reproductive health needs of adolescents are all part of promoting sexual and

reproductive health and rights (SRHR) (high-level task force for International Conference on Population and Development, 2015).²

Pregnancy-related causes account for a disproportionate share of deaths among young women (15-24) in low and middle-income nations globally.³ In order to decrease maternal mortality, it is crucial to increase access to sexual reproductive health information and services.^{4,5} When it comes to girls' and women's health rights, national policy and legislation are crucial instruments that determine legal requirements, government programs, societal norms, and

the power to hold governments to account.⁶ Access to sexual reproductive health education and information for sexually active population is a priority for the East African Community (EAC), a regional intergovernmental organization that includes Kenya. In 2012, the EAC States enacted the HIV and AIDS Prevention and Management Act (EALA, 2012).⁷

Objective

Objective of the study was to investigate the utilization of sexual reproductive health services among public service vehicle operators in Nairobi City County, Kenya.

METHODS

A descriptive cross-sectional study approach was adopted in the investigation. For the study, a mixed method approach combining qualitative and quantitative research was used.⁸ The research was carried out in Nairobi, which is the nation's most populous city. The city of Nairobi can be found inside Nairobi County. The county has a total area of 696.1 km² and is located between longitudes 36° 45' East and latitudes 1° 18' South. The period of study was from January 2021 to April 2023. The inclusion and exclusion criteria for study participants were based on occupation, Participants were actively employed as public service vehicle operators (e.g., matatu drivers, conductors) within Nairobi City County, adults between 18 and 60 years old, residents or work within Nairobi City County to ensure that they are part of the local population, Participants had to provide informed consent to voluntarily participate in the study. The exclusion Criteria was individuals who are not employed as public service vehicle operators (e.g., office workers, students), Minors (individuals below 18 years of age) and elderly individuals (above 60 years of age) who are not actively involved in public service vehicle operations, individuals residing outside of Nairobi City County, individuals with physical or mental health conditions that prevent them from actively operating public service vehicles, Individuals who do not provide informed consent to participate in the study and retired public service vehicle operators who are no longer actively working in the field.

The approval of conducting the research study was obtained from the Graduate School. Ethical clearance was sought from the Kenyatta University Ethical Review Committee (KU-ERC). A research permit was obtained for the National Commission for Sciences, Technology and Innovation (NACOSTI). Permission from the public transport industry was sought from, NTSA, Digital Taxi Company Offices, Public Health Institution, Terminus Operators Management and the Motorbike Association's Management. Informed consent was sought from the study population, and confidentiality was ensured. The sample estimate was carried out with a margin of error (variance) of 0.5, and the Cochran's formula was utilized in order to arrive at an absolutely accurate estimate of the proportion of the total population.⁹

$$n_0 = \frac{(t)^2 \times (p)(q)}{(d)^2}$$

Where n_0 is the required size of sample, and q and p are estimates proportion, 1.96 is t (from the t -tables).

The margin of error, denoted by d , is the allowable deviation from the mean.

Hence, in this instance,

$$n_0 = \frac{(1.96)^2 \times (0.5)(0.5)}{(0.05)^2} = 384.16$$

The number (385 participants) is significantly more than the minimum requirement of 5% of the overall population. Thus, the following formula is used to make the necessary modifications.

$$n_1 = \frac{n_0}{1 + n_0 / \text{Population}}$$

The calculation is as follows.

$$n_1 = \frac{385}{1 + 385 / 600} = 234.51$$

There are 235 participants in the sample. In spite of this, in order to account for attrition, the sample size was:

$$N = (10\% \text{ of } 235) + 235 = 258.5$$

As a result, the total number of participants in the study is 259 participants.

Table 1: Proportionate to size sampling.

Type of PSV operators	Registered PSV operators-NTSA 2022 (Nairobi)	Proportion to size sample
Boda boda	7400	70
Matatu drivers	7083	67
Matatu conductors	3489	33
Digital taxi	2326	23
SACCO/stage attendants	1903	18
Ordinary taxi	5074	48
Total	27274	259

The open data kit (ODK) method was utilized in order to collect both quantitative and qualitative information. The collection of data was carried out through the use of key informant interviews and the administration of client surveys by means of face-to-face engagement inside Nairobi. The online questionnaire was pretested among 10% of the sample in Thika town to see if it captures all

aspect of data elements in the questionnaire and there is ease of transition from individual respondent question to the next question. As underlined by Cooper and Schindler, this was achieved by pre-testing the instrument to be used to identify and alter any ambiguous, imbalanced, or aggressive questions. In this work, instrument reliability was ensured through pilot testing using Cronbach's alpha to determine the instrument's suitability. An excellent research tool should have a Cronbach's alpha of 0.7 or above. The research tool was deemed to be dependable after a test, with an overall reliability coefficient of α 0.786 above the necessary 0.7.¹⁰

Quantitative data analysis was done using statistical package for the social sciences (SPSS) while qualitative data was done using NVIVO version 12. The descriptive statistics such as mode, mean, cross-tabulations and frequency distributions was used. Bivariate analysis was conducted using the Pearson's Chi-square test to analyze the relations between the various variables. Multivariate analysis was conducted through logistic regression in examining the factors of the reproductive health status retrieved from bivariate analysis on the categorical variables that would be directed towards the multivariate model.

RESULTS

A total of 259 questionnaires were administered and only 243 questionnaires were returned as complete representing a response rate of 94%. 6 structured KIIs were successfully conducted with the relevant stakeholders drawn from NMS, NTSA, MoH-DRMH, MoH-NASCOP, SACCOs.

Most of the participants age in this study was between 25-35 years (98=40.3%) followed by those ranging from 35-44 years (58=23.8%) those who were 18-24 years were (57=23.5%) while those above 44 were the least with a tally of (24=18.1%). College/technical/diploma registered the highest number of participants (97). Those in Secondary education were (79=32.5%) while those in University Degree and above had a total of (41=16.8), those with the least number of participants were primary (14=5.7%) and those with no education who were only (6=4.9%). Gender representation was essential in understanding the respective thoughts about sexual reproductive health. From the results, (184=76%) of the participants were men while the rest (59=24%) were women. Most participants were married (34.6%) followed by single (26.3%). Those dating with a girlfriend or boyfriend had a percentage of 23.5% where as those who were cohabiting had a tally of 10.7% the least number of participants were widowed (1.2%). The type of PSV is critical for evaluating the participants' working schedule and how these aspects affect their reproductive health practices. Most participants were Boda boda operators 26.7%, Matatu drivers (25.9%), 19.8% were taxi operators and followed by Matatu conductor (12.8%) digital taxi operator bolt/Uber and others 7.8% of the participants. Stage/SACCO attendants were the least with (7%).

Majority of the respondents (75.3%) consumed alcohol while (24.7%) did not consume alcohol (Table 2).

Table 2: Distribution of socio-demographic characteristics among respondents (n=243).

Variable and participant response	Frequency (n)	Percentage (%)
Age of participants (years)		
25-35	98	40.3
35-44	58	23.8
18-24	57	23.5
Above 44	30	18.5
Educational status		
No education	12	4.9
Primary school education	14	5.7
Secondary education	79	32.5
College/technical/diploma	97	39.9
University degree and above	41	16.8
Gender		
Female	59	24.3
Male	184	75.7
Marital status		
Single	64	26.3
Married	84	34.6
Girlfriend/boyfriend	57	23.5
Cohabiting	26	10.7
Divorced/separated	9	3.7
Widowed	3	1.2
PSV type		
Boda boda operators	65	26.7
Matatu drivers	63	25.9
Matatu conductors	31	12.8
Digital taxi	19	7.8
Stage/sacco attendants	17	7.0
Ordinary taxi operators	48	19.8
Consume alcohol		
Yes	183	75.3
No	120	24.7

Of the respondents aged between 18-24 years, (12.4%) use SRH services, while (20.2%) of respondents aged between 25-35 years use SRH services, participants (24.7%) aged 36-44 years use SRH services. Majority (42.7%) aged above 44 years. The PSV operators with no education had a lower uptake of SRH services (2.6%), compared to PSVs with primary school education (11.24%), but PSVs with secondary education had an uptake of SRH services of (12.4%), PSVs with college, technical, or diploma education had a higher uptake of SRH services (24.7%) of the respondents, and respondents with a university degree or higher had a higher (47.1%) uptake of SRH services. The majority of the respondent's female (61.8%) had a higher uptake of sexual reproductive health services, of the respondents' male (39.9%) where the only users of SRH

services. Majority of users of SRH services were married PSVs (33.7%), followed by cohabiting PSVs (22.5%), a lower number of divorced/separated (13.5%), uptake by single respondents was (12.3%), girlfriend/boyfriend PSVs was (11.2%) and widowed PSV respondents was (6.7%), Matatu drivers (23.6%) where the majority users

of sexual reproductive health services. This PSV type was followed by Boda boda operators (18.0%), and ordinarily taxi operators (16.9%) respectively, followed by SACCO/stage attendants (15.7%), then Matatu conductors (14.6%) and digital taxi operators were least type of PSV utilizing SRH service (11.3%) (Table 3).

Table 3: Socio-demographic factors associated with uptake of SRH services among respondents (n=243).

Independent variables	Utilization of SRH services		Statistical significance
	Use N (%)	Non-use N (%)	
Age of participants (years)			
18-24	11 (12.4)	12 (7.7)	$\chi^2=23.233$ df=2 p=0.001
25-35	18 (20.2)	21 (13.6)	
36-44	22 (24.7)	43 (27.9)	
Above 44	38 (42.7)	78 (50.6)	
Total	89 (36.6)	154 (63.4)	
Educational status			
No education	4 (4.5)	20 (12.9)	$\chi^2=69.125$ df=21 p=0.001
Primary school education	10 (11.2)	25 (16.2)	
Secondary education	11 (12.4)	41 (26.6)	
College/technical/diploma	22 (24.7)	35 (22.7)	
University degree and above	42 (47.2)	33 (21.4)	
Total	89 (36.6)	154 (63.4)	
Gender			
Female	55 (61.8)	30 (19.5)	$\chi^2=34.421$ df=4, p=0.001
Male	34 (38.2)	124 (78.5)	
Total	89 (36.6)	154 (63.4)	
Marital status			
Single	11 (12.3)	50 (32.5)	$\chi^2=26.244$ df=12 p=0.001
Married	30 (33.7)	20 (12.9)	
Girlfriend/boyfriend	10 (11.2)	34 (22.3)	
Cohabiting	20 (22.5)	15 (9.7)	
Divorced/separated	12 (13.5)	25 (16.2)	
Widowed	6 (6.7)	10 (6.5)	
Total	89 (36.6)	154 (63.4)	
PSV type			
Boda boda operators	16 (18.0)	49 (31.6)	$\chi^2=12.112$ df=7 p=0.001
Digital taxi operators	10 (11.2)	9 (5.8)	
Matatu conductors	13 (14.6)	18 (11.7)	
Matatu drivers	21 (23.6)	42 (27.3)	
Stage/Sacco attendants	14 (15.7)	3 (1.9)	
Ordinary taxi operators	15 (16.9)	33 (21.4)	
Total	89 (36.6)	154 (63.4)	

The study results revealed that the majority (90.5%) of the responded knew where 17% of the responded had no idea on where to get SRH services. 2.5% of respond new provided any response. According to the participants most SRH services are easily accessible in private clinics (24.1%) followed by private hospital 20%, chemist (17.1%) health centre/dispensary 12.3%. Respondents who preferred NGO/FBO facilities were 12.8% while national/county hospital preference was at 9.5%. The least preferred to get SRH service was at the National hospital at 5.5%. Family planning services was the commonly known SRH service at 25.5%, followed by HIV testing at

18.7%, skilled birth at 15.3%, SGBV services at 11.2%, ANC/PNC services at 9.3%, HIV/AIDS at 8.5%, STI screening at 4.5% while CA screen was at 2.7% and Psychosocial counselling and CA Screening were the least known SRH services at 1.8% each (Table 4).

Results in Table 5 show that majority of the respondents got information on Sexual reproductive health from the internet at 24%, hospital at 22%, social media at 21%, television/radio at 17%, while TV at 3%, relative at 2% and print media at 1%. The participants in this study were also asked about the many forms of sexually transmitted

infections. HIV was the STD that was most commonly known by the participants (35.8%), followed by gonorrhea (32.6%), syphilis (19.2%), HBV (7%) and HCV (6.4%). On the topic of respondents' knowledge of the various forms of sexual and gender-based violence, the vast majority of people stated they were familiar with rape (67.4%), then physical abuse (16.9%), then assault (12%), and finally those who were familiar with intimate partner violence (1%).

Table 4: Uptake of sexual reproductive health services source (n=243).

Variable and participant response	Frequency (N)	Percentage (%)
Do you know where one can acquire/get RH services?		
Yes	220	90.5%
No	17	6.9%
Don't know	6	2.5%
Total	243	100
Preferred SRH facility point		
Chemist	39	17.7
Private clinics	53	24.1
Private hospitals	44	20
Health centre/dispensary	27	12.3
FBO/CBO hospital	24	10.8
County/Sub County hospital	21	9.5
National hospital	12	5.5
Total	220	100
Knowledge on types SRH service?		
HIV testing	125	18.7
Screening for STI	30	4.5
HIV/AIDS/PEP	55	8.3
CA screening	18	2.7
ANC/PNC	62	9.3
Skilled birth	102	15.3
Family planning	171	25.6
SGBV	75	11.2
YFS	12	1.8
Total	668	100
Knowledge on types of family planning methods		
Pills	28	16.4
Emergency pill	32	18.7
IUCD/coil	41	24.0
Implants	32	18.7
Permanent methods	15	8.8
Condom	13	7.6
Natural	11	6.4
Total	171	100

One of the managers at a Matatu Sacco spoke publicly about SRH services in a KII interview and said when asked “to what extent do you think public transportation companies should be offered health services, including in

particular reproductive health services?” Respondent “for a long time, we have ignored public service operators in Kenya, a large and diverse group that includes many young people. These young people are often left to fend for themselves in the workforce, and their reproductive health needs are not considered by employers or government agencies. I'm referring to problems with sexual and reproductive health care, with sex education and information, with HIV/AIDS, and with sex and gender-based violence. Yet, we have never targeted this population with targeted SRH interventions. They go to the hospital and get the standard care, but this is something we should investigate more.”

Table 5: Knowledge on sexual reproductive health; (n=243).

Responses on knowledge of SRH services	Frequency	Percentage
Where did you get/learn on about sexual reproductive health?		
Internet	53	24
Hospital	48	22
Relative	7	3
Television/radio	37	17
Social media	46	21
Training	4	2
Print media	2	1
Other	22	10
Total	220	100
Knowledge of types of sexually transmitted infections		
Gonorrhea	10	32.6
Syphilis	6	19.2
HBV	2	7
HCV	2	6.4
HIV	11	35.8
Total	30	100
Knowledge of sexual gender based violence		
Yes	75	89.52
No	168	10.48
Total	243	100
Knowledge of sexual gender based violence types		
Defilement	2	2.7
Physical abuse	13	16.9
Rape	51	67.4
Assault	9	12
IPV	1	1
Total	75	100

Respondents were asked what they think about the cost of delivering in health facility, (112=46%) said it was expensive while (60=24.6%) said it was affordable with (55=22.6%) saying it was free. Only (16=6.8%) reported that they don't know about the cost of delivering in a health facility (Table 5). The researcher asked the respondents if SRH Service was readily available when they seek the service in hospitals. Majority of the respondents

(154=63.4%) reported that it is not available while (89=36.6%) said it SRH service was readily available (Table 6).

Table 6: Health system factors that impact provision of sexual reproductive health.

Participant response	Frequency (n=243)	Percentage (%)
What do you think about the cost of delivering in health facility for you or your partner?		
Free	55	22.6
Affordable	60	24.6
Expensive	112	46
Don't know	16	6.8
Total	243	100
Is SRH service readily available when you seek them?		
Yes	89	36.6
No	154	63.4
Total	243	100
What is the main challenge of not accessing the SRH services?		
Long working hours of PSV	124	51
High cost of HC services	70	28.8
Distance to facility is long	34	13.9
Lack of drugs at the facility	20	8.2
Total	243	100
How could you describe the attitude of health care workers when providing SRH services?		
Bad	140	57.6
Fair	17	7.0
Good	68	28
Very good	9	3.7
Poor	1	0.4
Can't tell	8	3.3
Total	243	100
Is there confidentiality when seeking SRH services?		
Yes	118	48.6
No	105	43.2
Can't tell	20	8.2
Total	243	100

“Availability of SRH services is challenging because we have tight work schedules and in the event we get time to visit the facilities they are already close or the health care workers are tired”.

The researcher also sought to know the main challenge of not accessing the SRH services. Majority of the respondents (124=51%) said long working hours of PSV was the main challenge with (70=28.8%) citing high cost of HC services. A slightly lower number of respondents (34=13.9%) said distance to facility was long compared to

(20=8.2%) who said there was lack of drugs at the facilities (Table 6).

“PSV operators face a number of challenges that prevent them from accessing reproductive health care, including awkward clinic hours, high prices, and a lack of privacy and confidentiality.”

The attitude of health care workers when providing SRH services, majority of the respondents (59.3%) said the healthcare workers' attitudes were bad compared to (7%) who reported their attitudes were fair. A moderate (31%) of the respondents said the attitudes of the health workers was good (Figure 1).

“Some of the healthcare workers even abuse us when we visit their health facilities when we have STIs. Majority of us fear the stigma associated with STIs from the health care workers”. “When we go to the health facilities, we encounter a number of health staff who have an extremely condescending attitude. They yell at us, which makes one feel ashamed and humiliated” (KII interview) (Figure 1).

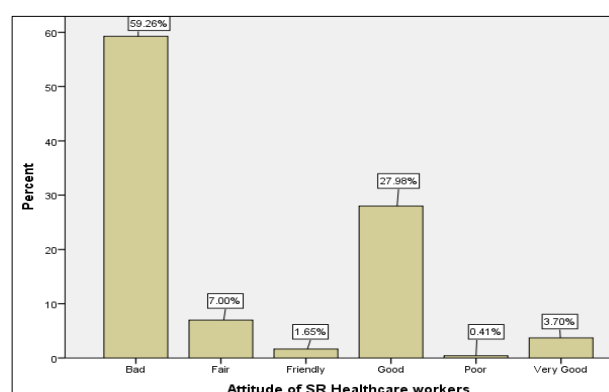


Figure 1: Attitude of SRH workers.

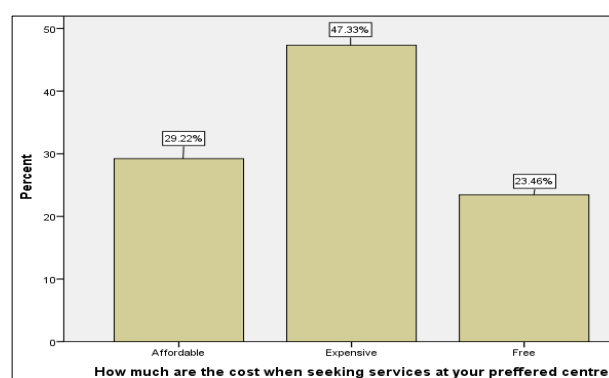


Figure 2: Cost of SRH services.

In comparison to the number of PSV operators who reported that the cost of SRH services was within their budget (29.2%), the results presented in figure (7) show that a considerable percentage (47.3%) of PSV operators thought that the cost of SRH services was too high. Only a fraction, or 23.5%, of people thought it was free (Figure 2).

Table 7: Association between knowledge and utilization of SRH services among respondents.

Independent variable	Total	Dependent variable (uptake of SRH services n=243)		P value
		Yes (%)	No (%)	
Do you know where one can acquire/get SRH services?	243	80 (32.9)	163 (67.1)	0.512
Is SRH service readily available when you seek them?	243	89 (36.6)	154 (63.4)	0.032
How much is the cost when seeking services at your preferred centre?				
Free	243	55 (22.6)	163 (67.1)	0.215
Affordable		60 (24.6)		
Expensive		112 (46)		
Don't know		16(6.8)		

Table 8: Logistic regression analysis of demographic predictors of utilization of SRHS.

Variable constant	95% CI		
	Lower	Upper	P value
Age of participants (years)			
25-35	0.561	1.724	0.816
35-44	0.501	0.982	0.465
18-24	0.456	0.876	0.671
Above 44	0.611	0.981	0.761
Educational status			
No education	0.823	1.213	0.061
Primary school education	0.351	1.434	0.057
Secondary education	0.241	0.679	0.004
College/technical/diploma	0.320	3.197	0.012
University degree and above	0.012	0.751	0.001
Gender			
Female	0.214	0.968	0.015
Male	0.615	2.184	0.007
Marital status			
Single	0.344	1.120	0.771
Married	0.547	0.784	0.014
Girlfriend/boyfriend	0.364	1.357	0.035
Cohabiting	0.487	1.226	0.006
Divorced/separated	0.544	1.978	0.078
Widowed	0.659	1.345	0.062
PSV type			
Boda boda operators	0.243	0.365	0.096
Digital taxi operators	0.629	2.463	0.019
Matatu conductors	0.826	3.371	0.014
Matatu drivers	0.987	4.019	0.057
Stage/Sacco attendants	0.085	0.817	0.051
Ordinary taxi operators	0.430	1.048	0.005
Consume alcohol			
Yes	0.776	2.183	0.013
No	0.486	1.120	0.002

The findings of this study suggested that the cost of seeking SRH services is high (46%, $p=0.215$) according to the respondents, in contrast to the (22.6%, $p=0.215$) of

respondents who said that it was free. Additionally, the majority of those who responded (63.4%, $p=0.032$) said that it was not easily accessible, in contrast to the percentage who said it was (36.6%, $p=0.032$). When compared to the moderate proportion of respondents (32.9%, $p=0.512$), the majority of respondents (67.1%, $p=0.512$) stated that they were unaware of where to obtain SRH services (Table 7).

This study found that female public service vehicle (PSV) operators were 97% more likely to employ SRH services on at least four distinct times than their male counterparts (95% CI (0.21 to 0.96), $p=0.015$). This was the finding after the researchers controlled for demographic factors. Respondents aged 35 to 44 years had a 98% likelihood of using sexual reproductive health services, with a 95% confidence interval ranging from 0.5 to 0.98 ($p=0.465$). According to the findings on respondents' marital status, those who were married had a 95% confidence interval ranging from 0.547 to 0.784, which indicates that they were 78% likely to use sexual reproductive health services. According to the findings, the levels of education held by PSV drivers were found to have a correlation with the frequency with which they sought out SRH care. The PSV operators who attended universities had a 75% higher likelihood of using SRH services compared to PSV operators who attended primary schools (95% CI: 1.12 to 0.75; $p=0.001$), and PSV operators who attended secondary schools had a 68% higher likelihood of using SRH services compared to PSV operators who attended primary schools (95% CI: 0.241 to 0.679; $p=0.004$). These results hold true when age, marital status, and education levels are also taken into consideration. This study found that Stage/Sacco attendants were 82% more likely than Boda boda operators to visit an SRH institution twice, even after controlling for socioeconomic status, education level, and other demographic factors (Table 8).

DISCUSSION

Findings from this study have revealed the uptake of different aspects of reproductive health services, demographic, socio economic and health facility factors associated with the SRH uptake. The results indicate that

the overall rate of utilization of SRH services among the respondents was relatively low, with a majority (63.4%) not having utilized any SRH services in the last three months. However, a significant proportion (36.6%) reported utilizing specific SRH services. When examining the specific SRH services accessed by the respondents, it was found that HIV testing was the most commonly utilized service, with 33.7% of the respondents having received an HIV test. This finding is consistent with the global study conducted by Logie et al on topic uptake and provision of self-care interventions for sexual and reproductive health: findings from a global values and preferences survey which emphasized the importance of knowledge and uptake of self-care interventions for SRH. The study revealed that some interventions, such as oral contraception for preventing STIs, were more commonly known and utilized than others, indicating variations in SRH self-care knowledge and uptake.^{11,20}

Family planning services were the second most utilized SRH service, with 32.2% of the respondents reporting having accessed these services. This aligns with the regional study by Habte and Dessu in 2023 conducted in rural Southern Ethiopia, which emphasized the need for education programs and creating an open environment for discussing SRH among adolescents. The findings suggest that increased awareness and access to family planning services can contribute to improved SRH service utilization.¹²

The study identified several factors that contribute to the low rate of SRH service utilization among PSV operators. Busy work schedules emerged as a significant barrier, with 26.6% of the respondents indicating that their work schedules did not allow them to seek SRH services. This finding is in line with the study by Manoti in 2015 on the topic factors influencing access to sexual reproductive health services, which highlighted the influence of socioeconomic factors, including time away from work, on SRH service utilization.¹³

Regarding sources of information on SRH, the respondents mentioned the internet, hospitals, social media, and television/radio. These findings are in line with the literature review, which highlights the role of technology and media in disseminating SRH information. The internet and social media platforms have become crucial sources of information, as observed by Alomair et al in 2022.¹⁴

The qualitative results from the study further emphasize the importance of addressing SRH needs among public service operators. The manager of a Matatu Sacco highlighted the neglect of this population and the lack of targeted SRH interventions. This finding resonates with the literature, which emphasizes the overlooking of marginalized populations, including public transportation workers, in reproductive health programs.^{4,5,12,15,23} These findings underline the necessity of recognizing and addressing the unique SRH needs of public service operators through tailored interventions, education

programs, and collaborations between stakeholders. The cost of delivering in a health facility was perceived as expensive by 46% of the respondents, while 24.6% considered it affordable, and 22.6% believed it was free. These findings resonate with the literature review, which highlights the significance of cost as a barrier to accessing SRH services. Hamid's study in Malaysia in 2019 revealed that SRH services for adolescents were not prioritized, leading to inadequate provision of safe sexual practices and prevention of unintended pregnancies.^{15,18} This suggests that high costs may deter public service operators, particularly those with limited financial resources, from seeking SRH services.

The main challenges reported by the respondents for not accessing SRH services were long working hours (51%), high cost of healthcare services (28.8%), distance to the facility (13.9%), and lack of drugs at the facilities (8.2%). These challenges reflect the interconnected factors that influence SRH service utilization. The literature review supports these findings, highlighting the influence of demographic variables, such as age, education level, and familiarity with the location of SRH services, on the likelihood of seeking SRH care. Ontiri's study in Nakuru County, Kenya, emphasized the significance of these factors in influencing young people's utilization of reproductive health services.^{17,19}

The availability of SRH services was reported as a challenge by the majority of the respondents (63.4%), while only 36.6% considered them readily available. This finding aligns with the literature, which emphasizes the need for improved access to SRH services. DeMaria et al's study in Ethiopia highlighted the government's efforts to enhance the healthcare system and promote broader access to reproductive and sexual health care.^{16,17}

The logistic regression analysis revealed important associations between PSV operators and the uptake of SRH services among the respondents. Female public service vehicle (PSV) operators were found to be more likely to utilize SRH services than their male counterparts, highlighting the gender dynamics in SRH service utilization. This finding aligns with the literature, which recognizes the specific SRH needs of different population groups and the importance of addressing gender-related barriers.

Furthermore, the study identified that respondents aged 35 to 44 years and those who were married had a higher likelihood of using SRH services. This suggests that age and marital status play a role in SRH service utilization among public service operators. The literature review supports these findings, emphasizing the influence of demographic factors on SRH service uptake. Education levels also showed a significant association with the frequency of seeking SRH care.²¹

PSV operators with higher education levels, such as attending university or secondary school, were more likely

to utilize SRH services compared to those with a primary school education. This highlights the importance of education in promoting awareness and knowledge about SRH and its significance. The literature review echoes this, stressing the need for healthcare professionals to be trained on the importance of SRH awareness and the involvement of political will at the national level.²²

Limitations

Several limitations should be acknowledged in this study. Firstly, the research relied on self-reported data from public service vehicle operators, which may introduce recall bias and social desirability bias, potentially leading to an overestimation or underestimation of sexual reproductive health service utilization. Secondly, the study's descriptive cross-sectional design limits the ability to establish causal relationships or assess changes over time. Additionally, the findings may not be generalizable to all public service vehicle operators in Kenya, as the study focused solely on Nairobi City County. Furthermore, the study did not explore in-depth qualitative aspects that could provide a deeper understanding of the barriers and facilitators to service utilization.

Lastly, the COVID-19 pandemic, which occurred during the study period, may have impacted healthcare-seeking behaviours and service accessibility, but this factor was not explicitly addressed.

CONCLUSION

The study concluded that, the utilization of SRH service among PSV operators is at (36.6%) using the WHO recommendation the utilization rate on SRH services is low. Social demographic factors influence the utilization services. Married, educated (college and university) and people above age of 45 in the PSV industry have a higher likelihood of using SRH services than unmarried PSV operators or those between 18-24 years. There are disparities between knowledge on SRH does and utilization of SRH services among this cohort. Knowledge on a SRH service does not translate to utilization of that service. Cost of health care, availability of SRH services, HCW attitude and time are key barrier in the utilization of SRH services.

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