

The incertitude surrounding the use of HIV preventive services among male boda boda operators in Homa Bay County, Kenya.

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Abstract: Bodaboda operators in the transport sector are a bridge population that gets in contact with both the general population and the key population. This places them at a greater risk of HIV and AIDs acquisition. Due to their high mobility, it makes it difficult to acquire and use HIV prevention measures appropriately. However, this population's service utilization is not known. The study used the theory of reasoned action due to the fact that it sees a person's behavior as an intention which is a function of one's attitude towards the behavior and their subjective norm. The study targeted male bodaboda operators who were aged between 20-40 years. The sample size for the study was 122. Findings from the thematic analysis showed medical pluralism among the operators, low condom use at last sexual intercourse and stigma and discrimination when acquiring and using HIV preventive services. Myths and misconceptions regarding HIV preventive service utilization were ranked the highest (21.3%) while provider attitude was ranked the lowest (2.78%) challenges/barriers towards acquiring and using these services. The study recommends to the CACC through NACC to formulate user-friendly information to reach the operators who in many cases have limited time to attend training on correct use and benefits of these preventive measures.

Keywords: Incertitude Surrounding use HIV Preventive Servicicers

Introduction

In the last 30 years, HIV/AIDS epidemic has emerged as one of the major challenges for the world, going from a relatively small problem in the 1980s to one of the leading causes of mortality and burden over the last decade (Murray *et al.*, 2012). The current global trend is towards a larger share of disease burden coming from non-communicable diseases and injuries; however, HIV/AIDS is a dramatic exception. Mortality and burden from HIV/AIDS increased steadily until around 2004, against the general trend of declining infectious diseases.

Sub-Saharan Africa, the hardest hit region, is home to 70% of people living with HIV but only about 13% of the world's population. Most children with HIV live in this region (88%). Almost all of the region's nations have generalized HIV epidemics—that is, their national HIV prevalence rate is greater than 1% (UNAIDS, 2014). A total of 1.6 million people are living with HIV virus in Kenya (Avert, 2019).

The bodaboda operators fall in the transport sector, considered a high risk occupation due to movement of peoples and sexual interactions with key populations that lead in the spread of HIV such as sex workers (CDC, 2007). The high mobility of workers in the transport sector enables HIV transmission between high and low prevalence areas, while the sexual behaviours of transport sector workers and the populations that interact with them, such as sex workers, carry a high risk of contracting or transmitting HIV. The risky behaviour of transport sector workers, and of the populations that interact with transport sector workers, also puts their partners and communities at risk (IOM, 2009). In East Africa, long distance truck drivers were identified very early in the epidemic as a group at risk of HIV and STIs due to the relatively high number of unprotected sexual acts and low availability of condoms (IOM, 2009). Just like the truck drivers the boda boda operators are also highly mobile, engage in frequent seasonal rural-urban migration and spend long hours on the road away from their families. Due to this they are likely to engage the services of other sexual partners such as female sex workers (FSW). In addition to having sex with FSW, they do also have regular girlfriends or wives at home who are likely to become infected

with HIV by their husbands and boyfriends, and continue spreading the virus in their local communities (World Bank 2003). A study of long-distance truck drivers in KwaZulu-Natal in South Africa found that long absence from home, stressful working conditions, limited recreational opportunities and restricted social conditions combined to stimulate a flourishing commercial sex network along the freeway system (Marcus, 1997). This study also found that 35% of drivers studied had had two or more partners in the week prior to the study and condom use was absent or irregular. The Kenya behavioural surveillance report of 2012 showed that the bodaboda operators were involved in a number of HIV risk behaviours (NASCO, 2005). These included, low condom use with casual partners (non-regular partners), having many sexual partners and use of alcohol and drugs. This study also showed that boda boda operators exchanged sex as payment for transport services from their female clients, a predisposing factor for HIV acquisition (NASCO, 2005).

In this regard, various strategies have been employed to mitigate against HIV spread (NACC, 2014). These strategies include voluntary medical circumcision that has shown to be an effective HIV prevention strategy by reducing HIV acquisition by over 60% (Barley *et al*, 2007). Additionally, treatment as prevention (TAS) by use of antiretroviral drugs has shown prevention from infected partner to uninfected partner by over 96% (Cohen *et al*, 2012). Use of condoms correctly and consistently is also an effective method to mitigate against HIV spread and acquisition (NACC, 2014). These strategies have been used over time by the general population and key population including HIV prevention organizations in the fight against HIV. Among the bodaboda group in Homa Bay town, there is no available data detailing the prevention strategies that are in use in the fight against the spread of HIV. There is equally no empirical data showing the kind of strategies employed by boda boda operators in the fight against HIV spread. This study also examined the various prevention strategies that are employed by this highly mobile group in the fight against HIV spread in Homa Bay town.

Methods

Study Design

This was a cross-sectional study with both descriptive and analytic components.

Study Area and Study population

The study was done in Homa Bay County, Kenya which is adjacent to Lake Victoria. The sample size of 112 for the study was drawn from 1120 which is the population of bodaboda operators in Homa Bay town. Homa Bay County is one of the counties in Kenya with high prevalence rate of HIV of 27.7% compared with the national prevalence of 5.6% (NACC, 2014).

Sample size determination and sampling

The study adopted Gay (1981) 10% recommendation for adequate sample size to determine the sample size from the total number of bodaboda operators (1120) in Homa Bay Town. Main respondents for the study comprised of a total of 112 while 10 group leaders of bodaboda operators were also recruited for the study as key respondents. Homa Bay town was clustered into 7 clusters depending on operation units and regions of operation by the bodaboda. One bodaboda group was randomly sampled from each cluster to take part in the study. Proportionate sampling was further used to determine the number of operators to take part in the eventual study.

Data Collection

The questionnaires for the study were pretested on 10 operators prior to the study to obtain homogeneity and clarity of the questions. Questionnaires were administered after risk and benefits of the study were well explained to each of the participants. Questionnaires were administered while in-depth interviews were conducted.

Data analysis

Thematic analysis was used to analyse qualitative data while quantitative data was analysed using frequencies and percentages and presented in tables and figures.

Results and discussions

The government has intensified campaigns against the spread of HIV by strengthening the operations of NASCOP and formulating KNASP 2014/2019 which also established HIV/AIDS within which all HIV and AIDS interventions take place. NACC too has, to date, led the national response by coordinating the five-year strategic plan. All these actions are geared towards increases awareness and knowledge of HIV prevention methods thus increasing uptake (Adedimeji *et al.*, 2008). High awareness and high knowledge levels about HIV prevention methods is therefore equated to high adoption of these methods. Studies have shown that with the increase of both education level and knowledge of HIV/AIDS, accurate information about the disease and its causes and modes of transmission seem to have led to high adoption of HIV preventive methods (Peltzer *et al.*, 2009).

Prevention strategies employed by bodaboda operators

Responses obtained from the bodaboda operators show that there is high level of awareness of HIV preventive methods among the bodaboda operators with 111 (99.1%) saying that they are aware of HIV preventive methods while 1 (0.9%) are saying that they are not aware of any HIV preventive method.

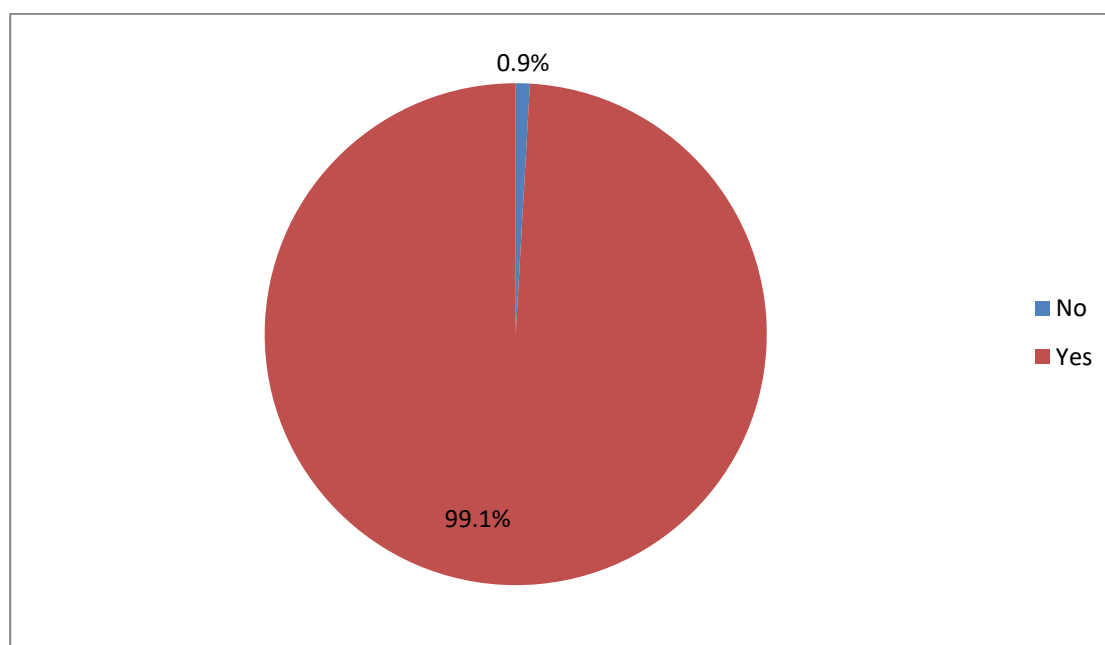


Figure 1: Awareness of HIV prevention Methods

From the findings above, awareness of HIV preventive methods is very high with only 1 (0.9%) of the respondents saying they are not aware of any HIV preventive method. This disagrees with the findings of Olofinbiyi *et al.*, (2018) on Human immunodeficiency virus awareness and condom use in Lagos, Nigeria which found out that there was low level of HIV/AIDS preventive method awareness despite the high level of awareness of HIV/AIDS.

This could be attributed to the fact that the government is committed to intensify campaign against the spread of HIV and has come up with HIV and AIDs Prevention and Control bill-Act No. 14 of 2006 gazetted in August 2004 and assented into law in 2006. High awareness may also be attributed awareness creation in majority of hard hit counties like Homa Bay being stepped up by both government and nongovernmental organizations. The government has also established Kenya National AIDs Strategic Plan (KNASP) 2005/2010 which provide action framework for HIV/AIDs within which all HIV and AIDs interventions in Kenya take place and finally, NACC has, to date, led the national response by coordination the the five-year strategic plan.

Out of the operators who are aware of HIV preventive methods, 8 (7.4%) said they are aware of only one method, 32 (28.7%) said they are aware of two methods, 38 (34.3%) said they are aware of three methods, 27 (24.1%) are aware of four prevention, while 5 (4.6%) said they are aware of five prevention methods. 1 (0.9%) said they are not aware.

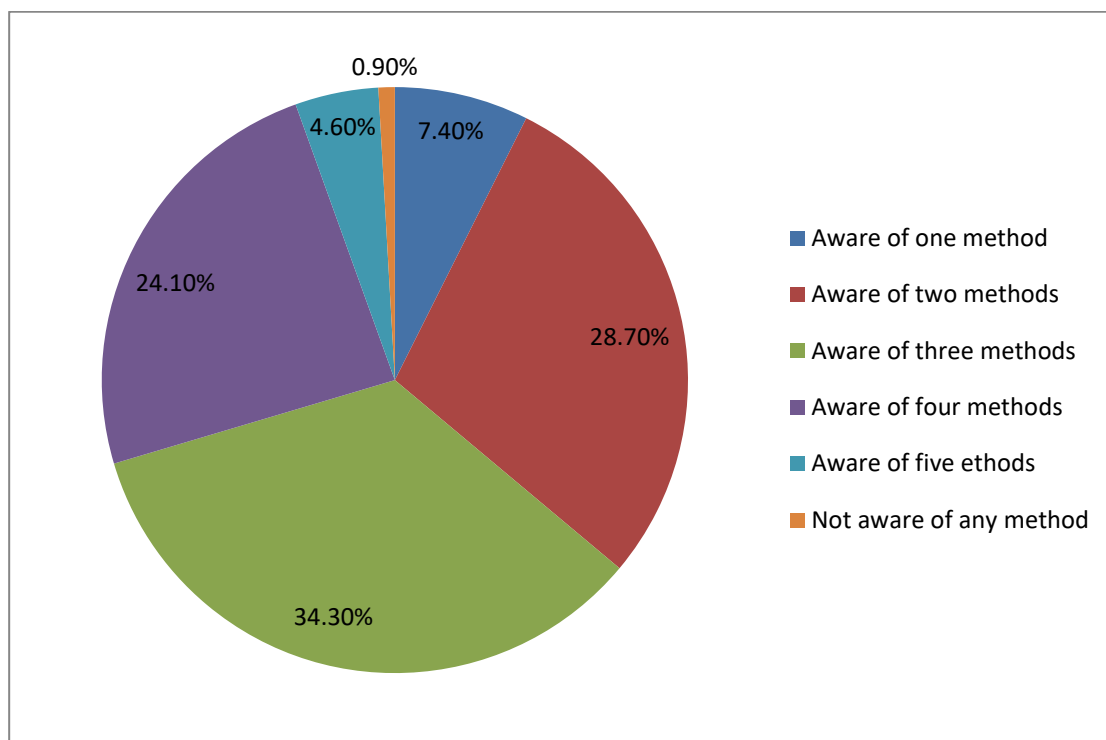


Figure 2: Number of HIV prevention methods

From the findings of the study, majority of the respondents are aware of two or more methods of HIV prevention. The high level of HIV prevention method awareness may be as a result of the fact that they were in contact with information either from their peers or media which in many cases does not give detailed information regarding HIV (Okal *et al.*, 2020). Similarly, some preventive methods work hand in hand with the others in order to ensure effective prevention of HIV infection i.e. circumcision and correct and consistent condom use. High awareness levels can also be due to the fact that awareness creation has been done in the country and majorly in hardest hit counties like HomaBay by both government and non-governmental organizations. This finding concurs with the findings of Carrasco *et al.*, (2017) on Correlates of Condom Use and Procedure Knowledge Among Men Accessing Voluntary Medical Male Circumcision in Malawi which also found out that there was high awareness of HIV preventive services among men who live in urban areas.

Prevention Strategies Employed by boda-boda Operators

Utilization of HIV prevention method have been shown to be relatively low as compared to the high level of awareness of the various methods used to prevent HIV as shown in (Figure 4.8). Though abstinence have been seen as the surest way of protecting one’s self from HIV infection it is one of the least prevention strategy used by boda-boda operators with only 17 (14.8%) reporting to be using it, 16 (13.9%) utilised being faithful, 38 (34.3%) used VMMC and finally 72 (63.9%) showed that they have utilised condom use, this is shown in (Figure 3).

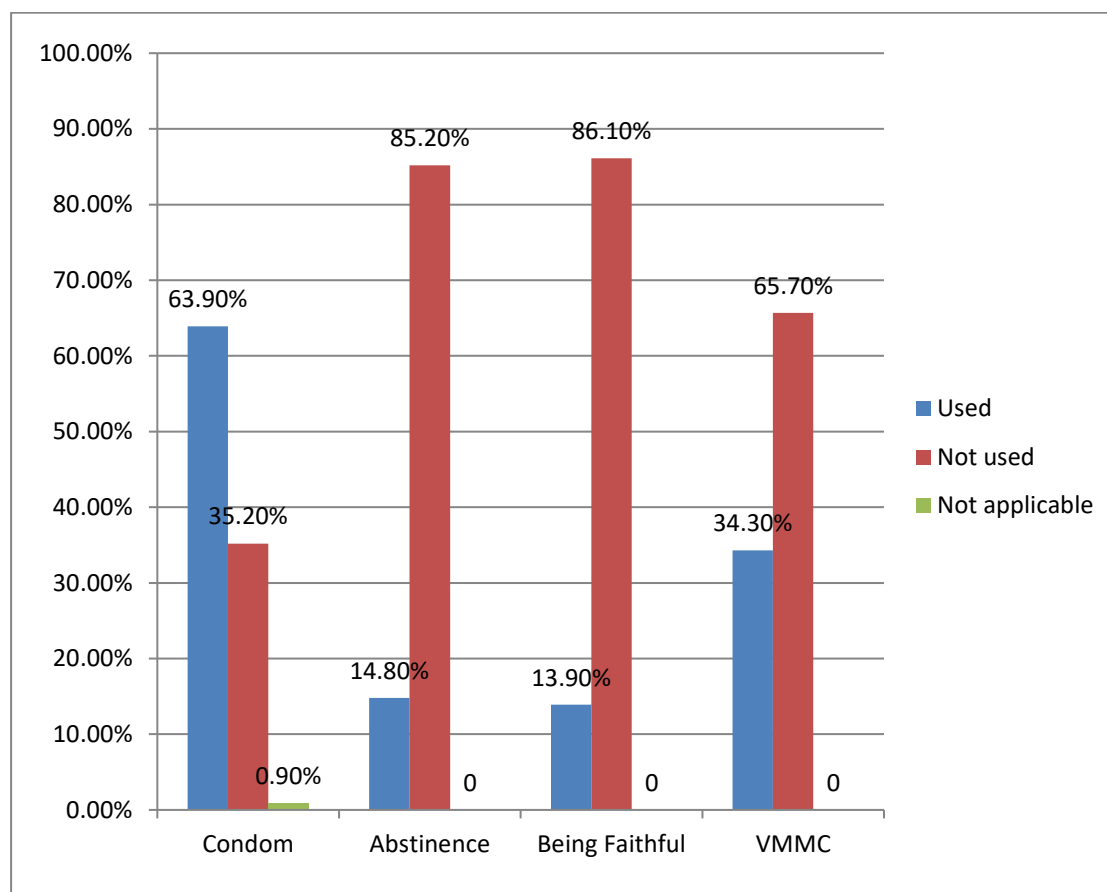


Fig. 3 Prevention Strategies Utilized

Condom was the most utilised HIV/AIDS prevention method by the operators. Despite the fact that majority of the operators reported being married, few of them are faithful to their partners. This shows the risky sexual behaviors that the operators involve themselves in. This could be as a result of low perception of risk and held the belief that they had a small chance of getting infected with HIV. This concurs with the findings of Okal et al., (2020) on “It is always better for a man to know his HIV status”—A qualitative study exploring the context, barriers and facilitators of HIV testing among men in Nairobi, Kenya which reported respondents lacking self-awareness of their risk despite engaging in unprotected sex with casual partners.

The study found Bodaboda operators to be having random partners who are in most cases their customers, whom they also offered free rides in exchange of sexual intercourse. These sexual activities, in many instances, would take place in the bushes or unfinished building on their way to their destination and in most cases there was no consistency in condom use as indicated by this respondent

“I start to talk to my client and i introduce a topic that is personal by asking about their marital status. This way i will be able to know their mood, if she is ok with the topic then i will get deeper to find out if they could be willing to get into the act. If they say yes i have to hurry before they change their mind, at this point i might use or not use condom depending on the client and availability of the condom”

It was also revealed from the study that bodaboda operators used condoms for various reasons which were not limited to HIV/STI prevention. 42% used condoms because they were readily available, 37.7% used condom to avoid HIV infection, 18.9% used condom to avoid STI infection and 17.4% for family planning. This is shown in (Figure 4).

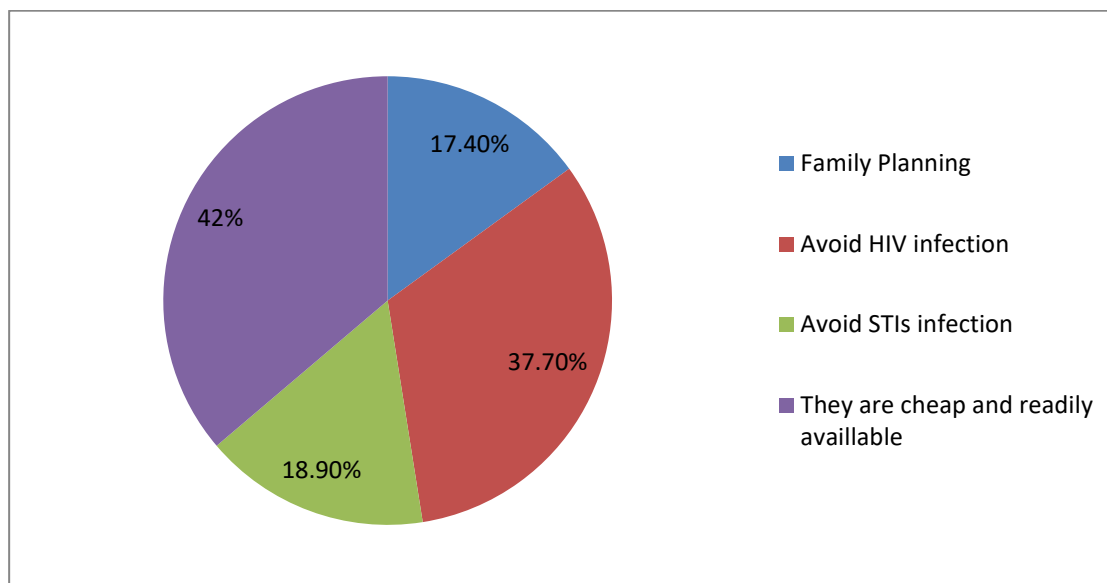


Fig. 4 Reasons for Using Condoms

Research has also shown that correct and consistent condom use is highly effective in reducing both the rate of HIV transmission and other STDs by 80% to 90%. However, it was found out that there was low condom use at last sex (Figure 4) and low levels of abstinence among the operators. Some of the reasons given for not using condom were shame associated with condom use for example people viewing those who buy condoms from shops as promiscuous, knowing one’s HIV status (low risk perception), partner declining and lacking knowledge of condoms.

This concurs with the findings of Okal, Lango, Matheka, Obare, Ngunu-Gituathi, Mugambi and Sarna (2020) on “It is always better for a man to know his HIV status” in Nairobi, Kenya which found out that some men were concerned about the reaction they would receive from their peers, close relatives, and health providers. They described fears about disclosure of their HIV status, fear of being seen at the facility, including physical appearance due to HIV disease and rumors of deteriorating health. A lot of emphasis should therefore, be put in utilization of HIV prevention methods among the boda-boda operators.

4.4.3 Condom use at last sex

Information reported from the respondents concerning condom use at last sex indicated that 55 (49.10%) used condom at last sex while 57 (50.9%) did not use condom at last sex.

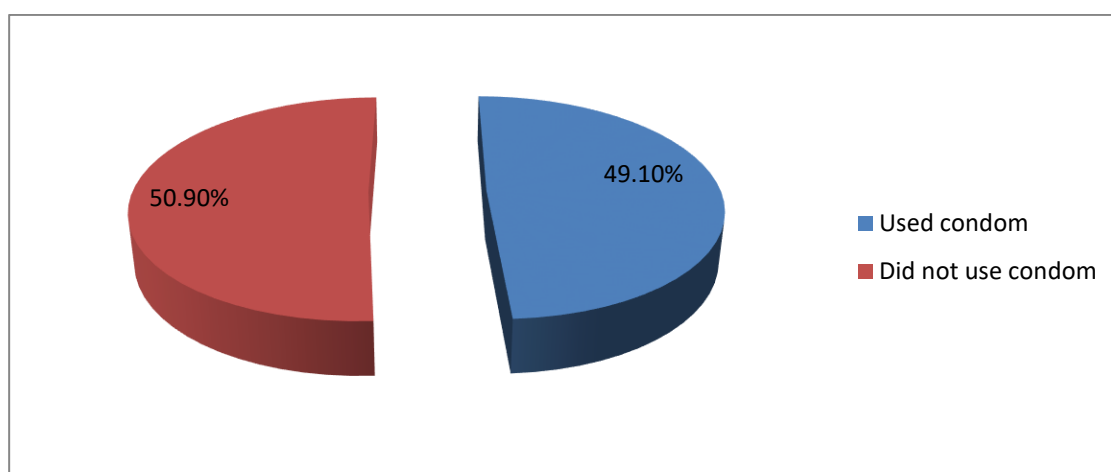


Fig. 5 Proportion of condom use at last sex

The above findings indicate that a good number of the respondents did not use condom at last sex. This finding does not concur with the findings of Sharma and Nam, (2018) on Condom use at last sexual intercourse and its correlates among males and females aged 15–49 years in Nepal which reported low prevalence of condom use at last sexual intercourse. This could be as a result of the fact that majority of the respondents are married and had poor HIV knowledge, therefore having low risk perception as compared to those who are not in stable relationships (Farahani, Akhondi, Shirzad & Azin, 2018; Bjekić, Sipetić-Grujičić, Vlajinac, & Nikolić, 2018). Condom use at last sex could also be associated with having non-casual sex partners during the last sexual intercourse (Moreira, Dumith & Paludo, 2018)

Reasons for using condom at last sex were explored and the respondents gave the following responses 24 (43.64%) said they used condom for family planning purposes, 23 (41.81%) used condom to avoid HIV infection and 8 (14.55%) used condom to avoid STIs infection.

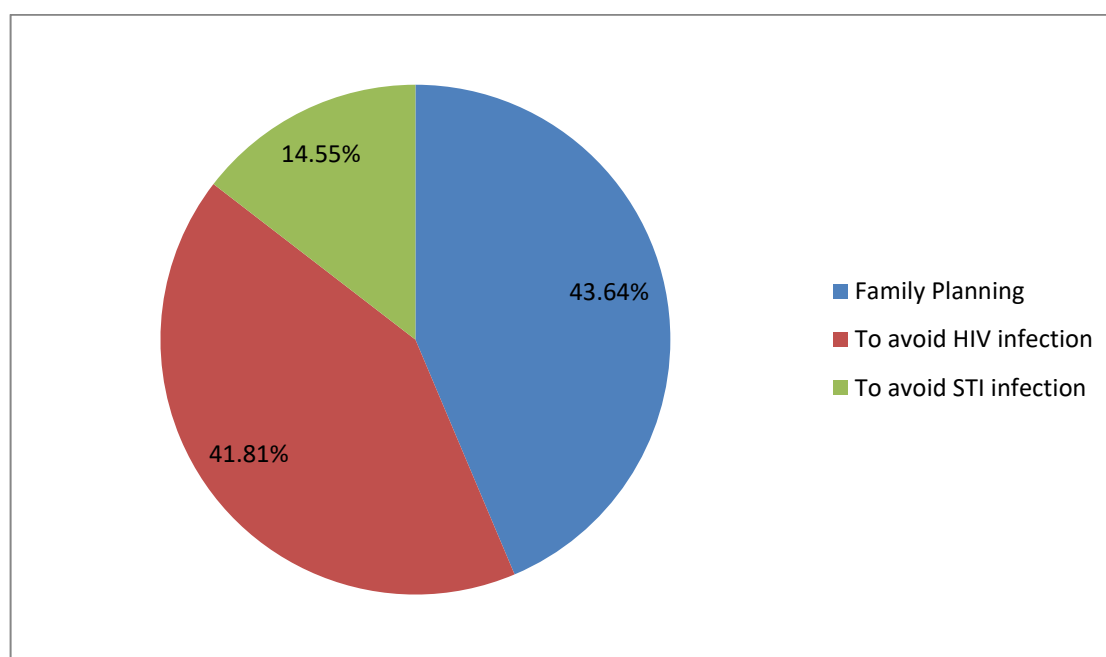


Figure 6: Reasons for condom use at last sex

From the findings above, majority of the operators use condom at last sex for family planning purposes. Avoiding pregnancy was the main reason for condom use (Coleman, Gabriel, Coleman, & Carmack, 2018). This indicates the fear of getting children as opposed to HIV infection. This finding agrees with the findings of Longmire-Avital and Oberle (2016) on Condoms are the standard, right?": Exploratory study of the reasons for using condoms by Black American which found out that condom use was associated with pregnancy prevention, cost effectiveness and easily accessible and finally, its reliability.

Response of the bodaboda operators on preference of HIV prevention strategies indicated that 73 (64.8%) first preference was condom use, 13 (12.0%) preferred abstinence, 5 (4.6%) preferred circumcision, 17 (14.8%) preferred being faithful and 4 (3.7%) did not show preference to any method of HIV prevention. This does not agree with the findings of Quaipe, Eakle, Cabrera Escobar, Vickerman, Kilbourne-Brook, Mvundura & Terris-Prestholt, (2018) on Divergent preferences for HIV prevention: a discrete choice experiment for multipurpose HIV prevention products in South Africa which found out that there is preference for an effective and attractive multipurpose prevention products which are long lasting and offer protection from HIV infection, other STIs.

4.4.4 Challenges faced when acquiring HIV prevention methods

The reported responses from the bodaboda operators concerning the challenges they face when acquiring HIV prevention services 5 (4.63%) said their partners declined the HIV prevention method they wanted to use, 22

(19.44%) said they lacked funds needed for them to use a given prevention method, 11 (10.19%) said the service providers were far from them, 24 (21.30%) did not acquire HIV prevention strategies because of myths and misconceptions around some preventive methods, 5 (4.63%) was because of pain and duration it takes for them to resume work, 3 (2.78%) talked of provider attitude/unfriendly providers, 7 (6.48%) talked of confidentiality factors and 3.70% said they lack knowledge concerning the preventive services (PS).

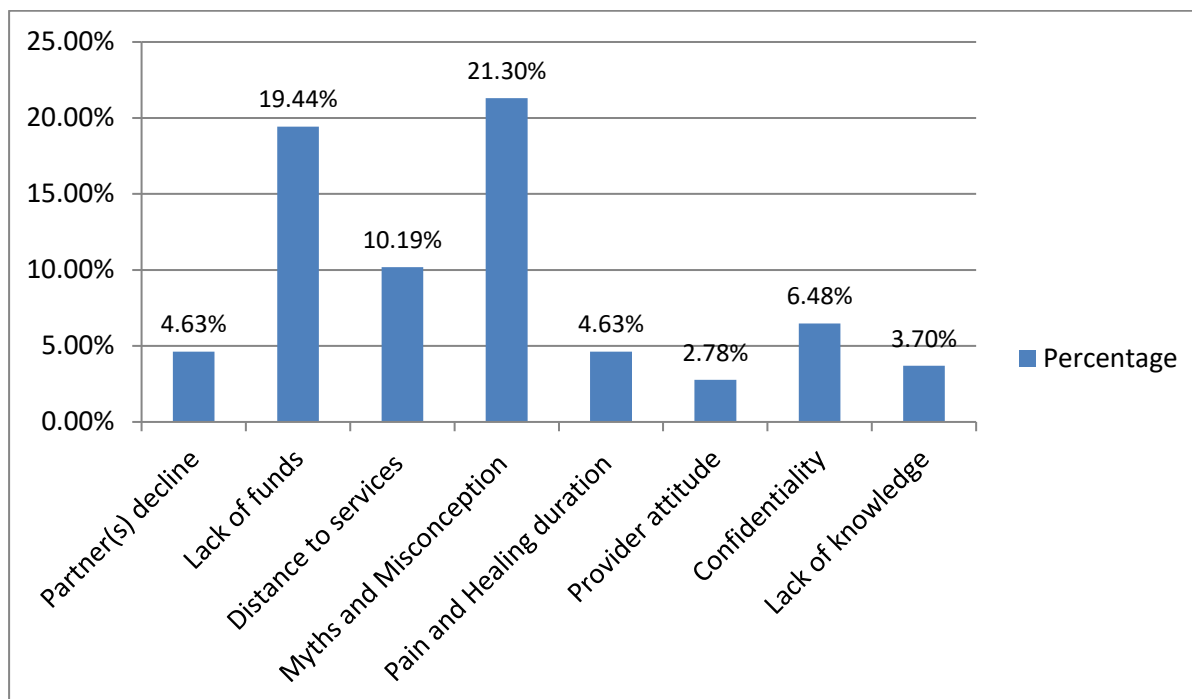


Figure 7: Challenges faced when acquiring HIV prevention method

As existing evidence suggests common reason for hesitating to be tested for HIV centers on limited knowledge of HIV and misconceptions of being infected with HIV. While majority of the respondents knew about basic information about HIV, it was clear that detailed information they had on HIV was insufficient likely due to where they initially obtained the formation (such as from schools, peers, media, and herbalists etc) (Okal et al., 2020).

Similarly, men often tested “by proxy”, believing their wives’ HIV test results to be their status while “traditional” masculine gender norms which seen men as stronger and unemotional enhanced risks (Camlin *et al.*, 2016). Equally males in the African societies are considered tough and therefore do not seek medical attention (Treves-Kagan, El Ayadi, Pettifor, MacPhail, Twine, Maman & Lippman, 2017), there is stigma associated with social norms and gender. Gender inequalities contributes to fear and mistrust (Bhatia *et al.*, 2017).

Closely related to stigma and discrimination is location and set up of facility which was a key consideration in choosing where to test. A good number of the respondents reported that they sought services at a specific facility owing to its “privacy” or for being located “far away” from where people know them. (Okal et al., 2020). Findings also suggest that site location, setup of facilities, perceived providers attitudes, privacy and confidentiality overlap with a strong sense of anticipated stigma. Often, participants were conscious of provider attitudes especially where and how facilities were set up mainly due to concerns around their privacy and confidentiality which points to deep rooted fear of testing or being identified to be HIV positive (Chanda *et al.*, 2017; Kojima & Klausner, 2018). In some cases, respondents would not seek for services due to lack of privacy in the clinic and fear of HIV stigma (Conserve, Alemu, Yamanis, Maman, & Kajula, 2018), evidence also show men preferring self-test (Pintye *et al.*, 2019).

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Utilization of HIV prevention method have been shown to be relatively low as compared to the high level of awareness of the various methods used to prevent HIV as shown in (Figure 1). Though abstinence have been seen as the surest way of protecting one's self from HIV infection it is one of the least prevention strategy used by boda-boda operators with only 17 (14.8%) reporting to be using it, 16 (13.9%) utilised being faithful, 38 (34.3%) used VMMC and finally 72 (63.9%) showed that they have utilised condom use, this is shown in (Figure 3). This therefore shows that despite the fact that majority of the operators reported being married; few of them are faithful to their partners. This shows the risky sexual behaviors that the operators involve themselves in. It was also revealed from the study that boda-boda operators used condoms for various reasons which were not limited to HIV/STI prevention. 42% used condoms because they were readily available, 37.7% used condom to avoid HIV infection, 18.9% used condom to avoid STI infection and 17.4% for family planning. This is shown in (Figure 6).

Research has also shown that correct and consistent condom use is highly effective in reducing both the rate of HIV transmission and other STDs by 80% to 90%. However it was found out that there was low condom use at last sex (Figure 5) and low level s of abstinence among the operators. Some of the reasons given for not using condom were because of shame associated with condom use for example people viewing those who buy condoms from shops as promiscuous, knowing one's HIV status(low risk perception), partner declining and lacking knowledge of condoms. A lot of emphasis should therefore, be put in utilization of HIV prevention methods among the boda-boda operators.

Conclusion

On the HIV prevention method employed by the boda-boda operators, the study concluded that boda-boda operators mostly use condom as compared to the other HIV preventive methods like, abstinence, being faithful and VMMC. Furthermore, a good number of the respondents used condom for family planning which indicated fear of unwanted pregnancies as compared to HIV infection.

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Recommendation

The study strongly recommends to the Government Kenya through NACC to intensify knowledge creation campaigns on HIV prevention methods with the aim of equipping boda boda operators with correct information. This will dimistify myths on HIV prevention methods and appropriate information on HIV preventive services

which are short and easily understood should be emphasized for these group to increase their level of knowledge. Since there exists minimal uptake of HIV preventive services among boda boda operators in Homa Bay town, the County Government Health Department of Homa Bay should roll out programs that educate the boda-boda operators on HIV prevention methods in Homa-Bay town to equip boda-boda operators with adequate knowledge on how to use the preventive services available in Homa Bay town.

County government of Homa Bay through CACC should provide enough condoms to the operators because it was the most preferred HIV prevention method. Condoms should be freely available at no cost. Mobilization of bodaboda operators to take these services should be prioritized.

Finally, Homa Bay County Government department of health and non-governmental organizations dealing with HIV to provide knowledge of correct and consistent condom use.

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