Introduction

HIV/AIDS remains a major public health and development problem. By the end of 2012 there were about 35.3 million HIV positive people worldwide [1]. About two thirds (68%) of all people living with HIV worldwide are living in sub-Saharan Africa (SSA) among which 59% are women. Nearly 1.9 million new infections were reported in SSA in 2010, representing more than two-thirds (70%) of all new infections globally [2].

In Kenya the number of people living with HIV was 1.5 million in 2015. The number of deaths from AIDS related illnesses in Kenya is still high for it was approximately 36,000 deaths in 2015 [3]. Moreover, in Kenya the proportion of women living with HIV is disproportionately more (7.6%) compared to men (5.6%) in 2014 [4].

Mortality and morbidity from HIV/AIDS have reduced with the advent of antiretroviral treatment and now people with HIV are living longer and healthier [5,6]. However, there is a concern regarding HIV transmission to other sero-negative individuals and acquiring drug resistant viral strains from HIV infected people if condoms are not used during sex [7-10]. It is always recommended to use condom consistently [11], though there is low risk of HIV transmission through sexual contact from people who are on ART unless other sexually transmitted infections are present [12-14]. Any reduction in the capacity of HIV to replicate is likely to reduce the risk of HIV transmission [13,14].

There is evidence that condoms remain one of the most cost effective tools available in HIV prevention [15,16]. Nonetheless, condom use has not received enough attention among HIV positive women when compared to HIV negative people. HIV programs always focus on prevention of HIV among uninfected people [17,18]. Therefore, information on condom use among HIV positive people is paramount to prevent the transmission of HIV to sero-negative sexual partners as well as preventing reinfections with different strains [19,20].

In spite of the recognition that condoms are among the most important weapons in the fight of HIV/AIDS, there is little qualitative information regarding barriers of condom use among HIV positive people. The aim of this study was therefore to explore the barriers of condom use among HIV positive women at Comprehensive Care Centre of Thika Level 5 Hospital, Kenya.

Materials and Methods

Study setting

The study was conducted at the Comprehensive Care Center (CCC) of Thika Level 5 Hospital. It is located at the heart of Thika Town of Kiambu County which is about 40 kilometers North East of Nairobi city. It provides health services to an average of 20,000 inpatients and 350,000 outpatients annually to a catchment population of 3-5 Million people on average. It has a comprehensive care center wing that handles HIV/AIDS patients, dispensing medicine and counseling.

Study design and population

The study used qualitative data collection approach. Three focus group discussions (FGDs) and 10 key informant interviews (KIIIs) were used. Eligible participants were 34 HIV positive women between the ages of 18 and 49 years and those who were able to provide informed consent. A focus group discussion is a way of gathering people together from similar backgrounds or experiences to discuss on a defined area.

Abstract

Human immunodeficiency virus (HIV)/Acquired immune deficiency syndrome (AIDS) is the key public health concern particularly in sub-Saharan Africa including Kenya. Consistent condom use is crucial especially among HIV positive people to prevent HIV transmission as well as re-infection with different resistant virus strain. It is important to identify the obstacles of condom use among HIV positive individuals in order to constitute preventive measures. Thus, the study was conducted to explore barriers and challenges of condom use among women living with HIV attending Comprehensive Care Centre of Thika Level 5 Hospital, Kenya. We conducted qualitative method of data collection using three focus group discussions and ten key informant interviews. Purposive sampling was used to select participants. Descriptive quotes representing key themes were identified and then analysed thematically. The result indicated that the main barriers of condom use were inability to negotiate in condom use, fear of mistrust, non-disclosure of HIV positive status to partner, alcohol use, and reduced sexual pleasure. In addition, among the negative beliefs and misconceptions identified as barriers of condom use were feeling promiscuous for carrying condoms, religion (being Catholic) and perceived pores in condoms. HIV positive women face many challenges in using condoms and the specific areas of focus should include the barriers mentioned above.
of interest. Key informant interview is a conversation with one person in which the participant is encouraged to talk in depth about the topic under investigation without the researcher’s use of predetermined, focused, short-answer questions.

**Sample size and technique**

Three FGDs and ten KIIs were conducted. Each FGD was consisted of 8 participants. The twenty (24) participants for the FGDs and ten (10) for the KIIs were selected purposively. Purposive sampling is a non-probability sampling method also known as 'judgmental sampling' that is used to select participants based on the researchers personal judgment about which ones will be most representative or informative.

**Focus group discussions (FGDs)**

An FGD guide was developed and it was mainly concerned about perceptions and use of condoms among HIV positive women. The discussions were conducted by the principal investigator, who acted as the moderator and a second person to record (both females). A tape recorder was used to capture all data from the groups. Participants were selected based on age (18-24 years, 25-32 years and 33-49 years). The discussions were conducted in the counseling room in the CCC clinic which offered a quiet and conducive environment. A written informed consent was obtained from each participant.

**Key informant interviews (KIIs)**

Key informant interviews (KIIs) were used to gather data on experiences with condom use. It was developed to guide the interviews. This approach was useful to capture insights that would otherwise be difficult to voice in gatherings of people (FGDs). Ten participants were selected based on age and female sex. The interviews were conducted by the researcher at the same venue as FGDs. After written informed consent was obtained, a voice recorder was used to collect the data.

**Analysis**

All transcripts were read through and codes generated. Responses with similar codes were re-categorized under unifying sub-themes or theme. A matrix was created and individual matrices were reviewed until an agreement is reached. The categories were then interpreted for theme. A matrix was created and individual matrices were reviewed with similar codes were re-categorized under unifying sub-themes or theme. A matrix was created and individual matrices were reviewed with similar codes were re-categorized under unifying sub-themes or theme.

**Ethical considerations**

Ethical clearance was sought and obtained from Kenya Medical Research Institute (KEMRI), Ethical Review Committee. All study participants consented after a detailed explanation of the purpose of the study was given.

**Results and Discussion**

**Socio demographic characteristics**

Demographic information on the 34 participants (24 in FGDs and 10 in KIIs) is shown in Table 1. The highest percentage (41.2%) was within the range of 30-39 years with the mean age of 32.8 years. Majority (58.8%) of the participants were married. Most of participants were Protestants (70.6%), followed by Catholics (23.5%) and the least were Muslims (5.9%).

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
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</thead>
<tbody>
<tr>
<td>18-29</td>
<td>13</td>
<td>38.2</td>
</tr>
<tr>
<td>30-39</td>
<td>14</td>
<td>41.2</td>
</tr>
<tr>
<td>40-49</td>
<td>7</td>
<td>20.6</td>
</tr>
</tbody>
</table>

**Table 1: Socio-demographic characteristics.**

<table>
<thead>
<tr>
<th>Residence</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thika</td>
<td>28</td>
<td>82.4</td>
</tr>
<tr>
<td>Outside Thika</td>
<td>6</td>
<td>17.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>10</td>
<td>29.4</td>
</tr>
<tr>
<td>Married</td>
<td>20</td>
<td>58.8</td>
</tr>
<tr>
<td>Divorced/widowed</td>
<td>4</td>
<td>11.8</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
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<tbody>
<tr>
<td>Christian Protestant</td>
<td>24</td>
<td>70.6</td>
</tr>
<tr>
<td>Christian Catholic</td>
<td>8</td>
<td>23.5</td>
</tr>
<tr>
<td>Muslim</td>
<td>2</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Some participants believed that condoms are safe and effective in preventing HIV infection and re-infection. They also indicated that they were aware of existence of the female condoms. These were pointed out in the following quotes;

“Condoms protect us from acquiring other strains of HIV from infected partners and hence the CD4 counts remain high”. (FGD 3)

“We have been showed a female condom during our clinics and how to wear it although most of us opt for the male condom as it is always available and comfortable to use”. (FGD 1 and 2)

“Condom use should be emphasized as it is the single most channel for prevention of spread of HIV… it is hard to make people abstain”. (FGD 3)

“The staff at the CCC are very helpful and kind; we are counseled during our return clinics, they take time to address our concerns and there is a toll-free line where we can call for any enquiries”. (FGD 2)

However, some other study participants indicate that condoms are not 100% safe and sometimes they break and also they perceive that condoms have pores. These negative beliefs and misconceptions could be associated with non-condom use. Other studies have revealed that women with negative attitude to condom use reduces safe sexual practices [21,22].

“Condoms are not always 100% safe; some are of poor quality with aeration pores and tend to easily break”. (1DI 4)

Cultural misconceptions or inaccurate beliefs may impair use of condoms. The popular belief that latex condoms have pores is erroneous [23]. The source of these beliefs was unclear but health professionals should be aware of these potential barriers to the use of condoms.

It was also indicated that women still feel shy and embarrassed to openly buy condoms from chemists especially from public facilities. It was emphasized that the inaccessibility or unavailability condoms especially in remote areas were the main factors affecting the use of condoms. These were stated as follows:

“Women unlike men do not go buying or carrying condoms in their pockets or bags...if seen people might think we are whores”. (FGD 2)

“Sometimes the condoms we get from the clinic don’t sustain us until the next visit and we are forced to buy or engage without, especially when my husband claims he forgot to buy or were out of stock”. (FGD1 and 3)
“It is shameful to ask for so many condoms from the clinic and sometimes we run out of them and the clinic is quite distant hence have to wait for the clinic day”. (FGD 1)

In this study religion was a main obstacle for using condoms as it is believed to be illegal especially among Catholics. This was consistent with a study conducted in Uganda which found that religion was a significant factor influencing condom use [24]. It was quoted as follows:

“Our religion does not allow use of condoms, although with time this has changed”. (IDI 8)

The source of these beliefs was unclear but health professionals should be aware of these potential barriers to the consistent use of condoms. These misconceptions should be considered in efforts to improve consistent condom use among HIV positive women.

**Spoiling of pleasure and satisfaction**

Participants of the study pointed out that sexual pleasure is reduced when using condom which is in line with the study conducted in Dar es salaam, Tanzania which indicated that condom use was significantly less among respondents who perceived reduced sexual pleasure when using condoms [25]. Sexual pleasure and satisfaction are paramount to improve condom use among HIV positive women.

“Sex is mutual between partners so should the decision to use a condom…he even gets violent when I deny him” . (IDI 8)

Partner’s alcohol consumption/use

It was reported that participants find difficult to negotiate with their male partners’ especially those who are married. Male partners may resist use of condoms in marital and steady relationships because sex ought to be natural. This attitude has previously been described in studies conducted both in young and older women [29] and underlines the difficulty for women with HIV to negotiate safer sex practices. Therefore, trust and negotiation for condom use should be addressed in educational programs during counseling.

“Sometimes my partner comes home drank and is very difficult to discuss condom use….he even gets violent when I deny him”. (IDI 8)

Non-disclosure of HIV positive status

Non-disclosure of HIV status is the main hindrance to condom use. Therefore, public awareness campaigns should be mounted through programs to focus on interventions to increase condom use among HIV positive women with emphasis on need for disclosure.

“We rarely use condom because my husband does not know my HIV status and he has refused to go for testing with me…I cannot disclose to him because he might blame me and then leave me, so we rarely use condom”. (IDI 8)

Partner’s alcohol consumption/ use

Unprotected sex with HIV positive is high risk sexual behaviour for HIV transmission and a major public health issue [32]. It is found that 50%-70% of seroconcordant, serodiscordant, and unknown status couples reported unprotected sex with their partners [33]. Not disclosing one’s HIV status to a sexual partner increases the risk of having unprotected sex among HIV positive people [34]. Knowledge of partner’s HIV status contributes to condom use among HIV positives, which subsequently reduces HIV infection [35,36].

Partner’s alcohol consumption/ use

Alcohol use by the male partners was significant cause of barrier in condom use. Alcohol use has been linked to HIV-1 risk in previous studies as well [29,37-39].

“Sometimes my partner comes home drank and is very difficult to discuss condom use…he even gets violent when I deny him”. (IDI 8)

So efforts should be strengthened towards reduction of alcohol use among HIV positive women.

**Conclusion and Recommendations**

In conclusion, our findings reflect multifactorial barriers for condom use among HIV-positive women. The major hindrances to use condom mentioned by the participants were inability to negotiate condom use, fear of mistrust, non-disclosure of HIV positive status to partner, alcohol use, and reduced sexual pleasure. Moreover, among the negative beliefs and misconceptions identified as barriers of condom use were feeling promiscuous for carrying condoms, religion being Catholics and thinking condoms have pores. Therefore, ministry of health and other concerned stakeholders should continually educate HIV positive women and their partners to increase awareness on the importance of consistent condom use during counseling at the comprehensive care center. More specifically efforts should be strengthened towards empowering women to negotiate condom use, towards educational programs on fear of mistrust and non-disclosure, towards reduction of alcohol use, and towards increasing access to

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**ISSN:** 2155-6113

**Volume 8 • Issue 8 • 1000722**
information on negative beliefs and misconceptions especially among Catholic followers.

Acknowledgement

The authors acknowledge to all women who participated in this study for their time and willingness. The authors also give special thanks to the manager and all staff members of Comprehensive Care Centre of Thika Level 5 Hospital for their cooperation during the collection of data for this study and allowing us to conduct this research.

References