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Abstract

HIV/AIDS is still a major killer disease among adolescents in sub- Saharan Africa and Uganda in particular. There are many factors attributed to high HIV infections among young people in Uganda such as, multiple sexual partners, low condom use, those born with HIV and poverty. High level misinformation in the indigenous knowledge related to sexuality and HIV prevention remains an under investigated and under documented factor escalating the disease. Yet, the indigenous knowledge health information system is a major critical information source adolescents depend on for health information on HIV prevention in Uganda. Indigenous knowledge informs health interventions for HIV prevention among young people in many African communities and is relied on for decision making on health choices. This paper documents indigenous knowledge on practices for HIV prevention among secondary school adolescents in an urban context in Kampala District. A qualitative case study research design was employed. The findings revealed use of witchcraft, local herbs, male circumcision, elongation of labia menorah, abstinence, sexual taboos like not having sex with women in their menstrual periods and avoiding homosexuality as the key indigenous management practices for HIV prevention. Some of the findings were in agreement with existing biomedical information on prevention strategies while others were in contradiction. The findings also revealed that adolescents have a lot of misinformation on HIV prevention; such information may not support right healthy choices. The study contributes to the body of existing knowledge on HIV prevention using indigenous knowledge practices. The findings appeal to information science professionals to participate in ensuring that communities they serve have access to accurate and timely information to curb health emergencies and improve on health of societies they serve.

KEY WORDS: Misinformation, Indigenous Knowledge, Indigenous Knowledge Systems, Health information, adolescent information seeking, Knowledge management, Knowledge processing, HIV prevention, Adolescents, Uganda

1. Introduction

Theoretical and empirical investigations have emphasized the crucial role Indigenous Knowledge (IK) plays in guiding health choices of African communities (**WHO, 2016**). These types of investigations are now seen as crucial to prevention of HIV infections among adolescents in secondary schools, and they are recognized as important components of policy and IK planning. In most third world countries, governments are making effort to lower HIV infection among their citizens and more so adolescents in schools(**Ministry of Education and Sports, 2018**; **Ministry of Health, 2019; PEPFAR, 2017; WHO, 2016).** A lot of studies have highlighted biomedical interventions as critical in curbing HIV infections

among adolescents in school. However, few studies have focused on documenting indigenous practices and information related to HIV prevention employed by adolescents for HIV prevention. Yet, indigenous knowledge is one of the key information sources relied on by adolescents for their health choices.

Understanding indigenous knowledge guiding health choices of indigenous communities in Uganda is critical in reducing the new HIV infections. This information is also important in revealing the misinformation that communities may have that fuel the spread of diseases. Indigenous information that supports health behavior has been recognized to curb diseases through guiding and enhancing health interventions (**Chiotha, 2010; WHO, 2016**).It is also globally known that health promotion programs that embrace both biomedical and indigenous representations are more successful than those that ignore lay representations (**Chisamba et al.,2011; Homsy et al. 2004; Liddell et al., 2006; Meyer-Weitz et al 1998**). While indigenous knowledge is paramount for the survival of poor societies in Africa, the management of indigenous knowledge systems is still a neglected area among information scientists in Africa (**Chinana et al., 2015**; **Dube et al., 2015; Magara, 2015**).Yet, cultural values, norms, beliefs and practices are a major contributor to the health - status of a population (**Sengendo et al., 1999).** Given the high HIV prevalence in Uganda estimated at 6% in 2017(**MoH, 2019**) identifying and documenting indigenous knowledge influencing adolescent sexuality and health choices in HIV prevention is important. Empowering adolescents with timely, accurate and comprehensive HIV prevention information may improve health choices in regards to HIV prevention. This study presents findings on documented indigenous cultural practices and information associated with HIV prevention among secondary school adolescents in Uganda where ten secondary schools in Kampala District were studied as cases in the five divisions of Kampala District. The main concern of the study was to explain why IK of potential value to HIV prevention is not widely diffused.

2. Literature review

Every society of the world has its own unique knowledge that is passed on from generation to generation. This knowledge, also referred to as Indigenous Knowledge (IK) is as old as mankind. IK is dynamic, context specific and society relies on it for its own survival (**Baumwoll, 2008**; **Grande *et al.*, 2015**; **Grenier, 1998**; **Johnson, 1998**; **Matsui, 2015**; **Mawere, 2015**). IK is broad and includes knowledge on ecology, hunting, food preservation, aesthetics, local organization controls and enforcement, traditional water management, local classification and quantification systems and indigenous human health systems (**Grenier, 1998**), soil conservation practices, agro forestry and agricultural information (**Lwoga *et al*., 2011**), conflict resolution (**Abdulla, 2016**) and learning systems (**Mawere, 2015**).

2.1 Health studies

In relation to health, studies indicate that majority of rural African people depend on IK health systems for their health needs, HIV/AIDS and psychosocial support (**WHO, 2016**; **Chiotha, 2010**). In Uganda, health is a distant community priority ranked behind food, utilities, transport, communication and education in the last 15 years in national household surveys (**UBOS, 2017**). The Uganda country operational plan 2017 report revealed that 90% of HIV commodities were funded by the United States Presidential Emergency Plan for AIDS Relief (**PEPFAR, 2017**). This indicated that HIV/AIDS programs are highly donor dependent, and with the high HIV prevalence in the country this approach is not sustainable. Identifying indigenous strategies to compliment biomedical approaches to HIV prevention is critical to effective HIV prevention.

2.2 Health based programs

Health based programs that blend both biomedical and Indigenous Knowledge Systems (IKSs) are more effective than those that ignore IK representations (**Chinsembu et al.,2011; Homsy et al. 2004; Liddell**

et al., 2006; Meyer-Weitz et al 1998). This knowledge is essential in problem solving strategies especially for underprivileged local communities (**MoLGSD, 2006**). In 2015, Uganda accounted for 4% of the new global HIV infections and was ranked the third country in Africa with the highest levels of new HIV infections after South Africa and Nigeria (**UAC, 2015**; **UNAIDS, 2016**). This situation was compounded by high levels of poverty in Uganda and high donor dependent HIV/AIDS programs amidst an already constrained health system (**PEPFAR,2017**; **UAC, 2017**).

Uganda still has one of the highest HIV prevalence in the whole world, estimated at 6% in 2017(**MoH, 2019**). However, Indigenous Knowledge Systems are still under developed and utilized in Uganda (**MoLGSD, 2006**). This knowledge base is still in people's minds especially the elders, as custodians of knowledge (**Grenier, 1998; TDG, 2011**) and needs to be captured,so that it can be preserved and accessed on global information infrastrures. IK of a community is one of the lenses through which diseases are interpreted and related beliefs and contributes to effective disease management. When the custodians of Indigenous health systems die all this valuable knowledge is lost, yet societies especially the poor depend on it for survival. Management of IK Systems is still a neglected area among librarians and Library and Information Science curriculums in most African Universities (**Chinaka et al., 2015**; **Dube et al., 2015; Magara, 2015; Tumuhairwe, 2013**).Yet, cultural values, norms, beliefs and practices are a major contributor to the health - status of a population (**Sengendo et al., 1999).**

2.3 Identifying this information

Identifying this information is paramount to the efforts to fight the increasing HIV infections in nations of the world since IK influences people's attitudes and health seeking behavior (**UNESCO, 2009; UAC, 2017**). Identifying IKS on health and documenting both negative and positive cultural practices is critical in improving the health of the communities in Uganda. Indigenous knowledge is traditionally concerned with skills, attitudes and values about life organized through family, friends, peers and mass media (**UNESCO, 2009**). In many African communities information on sexuality is communicated to adolescents through the paternal aunties for the girls and maternal uncles to the boys (**Mullen, 2001**; **Muyinda et al., 2001**). These persons are celebrated in the traditional African family setting for their role in initiating young people into adulthood and imparting knowledge. In school settings in Uganda, the senior women and senior men teachers are charged with the duty of communicating both sexuality and HIV/AIDS information to adolescents in secondary school. Schools can be used as vehicles to facilitate adjusted behavior by communicating relevant indigenous information for HIV prevention. This is because adolescents have many information sources on sexuality related issues (**Amuyunzu-Nyamongo et al., 2005; Nobelius et al., 2010**). Understanding how IK informs sexual behavior of local communities highlights information critical in improving adolescents' health choices on HIV prevention.

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2.4 HIV Statistics on Adolescents in Uganda

As of 2014, about 3.9 million young people aged between 15-24 years were living with HIV globally while 62,000 young people (age range 15-24years) were newly infected with HIV virus (**UNAIDS,2015**). Alarmingly, high infection rate among girls aged 15-24 years old were being infected with HIV(570) weekly in Uganda as compared to other East African countries (**UNAIDS,2015**). HIV prevalence had been higher among adolescent females than males aged 15-19 years and 20-24 years in Uganda which was attributed to maternal - born transmission, early sexual debut, cross generational sex and sharing unsterilized piercing objects (**UAC, 2017**; **UNICEF, 2013; UNAIDS, 2015).** There was also wide acknowledgement by various studies that adolescents are getting infected with HIV due to lack of comprehensive HIV prevention information to support healthy choices (**MoES, 2011; UNESCO, 2014; UNAIDS, 2016; WHO, 2016**). The latest statistics on school going adolescents and HIV prevalence in Uganda reveals that among those aged 15-19 years 1.8% girls and 0.5% boys were infected in 2016 (**Ministry of Health, 2019**). Also, 10.8 % of girls reported sexual intercourse prior to age 15 compared

to 19% of males in 2017 (**Ministry of Health, 2019**). The statistic reveals that the adolescents are predisposed to high risk to HIV infections and need to be targeted with right timely information to empower them make health choices. It was also globally recognized that health promotion campaigns on HIV/AIDS that combined both biomedical and indigenous information have better outcomes than those that ignored indigenous representations (**UNAIDS, 2015; UAC, 2015; 2017)**. Understanding how IK informs sexual behavior of local communities highlights information critical in improving adolescents' health choices on HIV prevention. Therefore, the current study anchors the concepts of information needs, person in context, information processing and use adopted from Wilson's (1999) Information Behavior Model. We explored cultural practices of secondary school adolescents in the context of HIV prevention.

3. Materials and Methods

3.1 Research Design

The study employed a qualitative case study to document secondary school adolescents' perceptions of cultural practices that promote HIV prevention in a school environment from 10 selected schools in Kampala District. The ten (10) schools had been selected in an earlier study that employed a mixed methods sequential explanatory design with the first stage of the study involving a survey of 10 secondary schools selected from the five divisions of Kampala District. This paper presents findings from the second stage that employed qualitative case study to collect qualitative data from the study participants.

3.2 Study Area

The study was conducted in Kampala the largest urban city center in Uganda. Kampala accounts for 80% of the country's industrial and commercial activities; and generates 65% of national GDP (**Kampala Capital City Authority, 2015**). According to the City's Strategic Plan 2014/15-2018/19, Kampala is divided into five urban divisions namely Central, Kawempe, Makindye, Lubaga and Nakawa. Kampala occupies a total of 189 squares Kms with 169 squares Kms of land and 19 square Kms of water. About 23% of Kampala is considered fully urbanized, 60% semi-urbanized and the rest (17%) considered as rural settlements. Kampala is a home to an estimated 1.75 million residents. This study was conducted in 2016 in ten secondary schools selected from the five divisions of Kampala district. These were selected from a total of 157 secondary schools registered by MoES in Kampala district by 2014. The researchers deliberately selected Kampala district because it was among the regions with high HIV prevalence in Uganda by 2016, estimated at 6.9% as compared to the national average at 6.1%(**Uganda AIDS Commission, 2017**)hence, most suited for investigating IK strategies for HIV prevention. Besides, Kampala district is a cosmopolitan setting, the researchers assumed that this context would facilitate capture of indigenous information adolescents in urban settings use for HIV prevention. Kampala District was also selected because by that time it was among the Districts with high HIV prevalence. Ten secondary schools in Kampala District were studied as cases in the five divisions of Kampala District.

3.3 Study Population

The study population consisted of 166 participants, including senior Male teachers, senior women Female teachers, aunties, uncles and student leaders of HIV /AIDS school initiatives. The participants were identified using purposeful and snowball sampling techniques.

3.4 Sampling strategies and selection criteria

The schools were purposively selected following a survey that had earlier identified the schools. A methods and data triangulation was employed in this study to increase the validity and reliability of the study findings by ensuring that appropriate methods were used to address specific research questions.

Purposeful sampling was employed to recruit participants with relevant information in the study, while snowball sampling was used to identify students' aunties and uncles that were communicating to them indigenous knowledge for HIV prevention but could not be easily identified by the researchers in the schools. This technique enabled the researchers to identify the aunties and uncles who were followed up to their areas of residence for interviews.

3.5 Data collection methods

Two (2) single sex Focus Group Interviews (FGIs) of 7 participants each were conducted in the ten schools to understand indigenous information used by adolescents for HIV prevention. FGIs were also adopted to enable the participants freely express themselves in sexuality issues that were considered by the adolescents as culturally sensitive. Thus, single sex FGIs were conducted separately for males and female adolescents. This enabled the researchers to capture collective views of the adolescents in relation to the study subject. Key informant in-depth interviews were used to capture thick and descriptive information from senior men, women teachers and students' aunties and uncles in relation to IK for HIV prevention.

4. RESULTS AND DISCUSSION

4.1 Background characteristics of study participants

Distribution of the Study Population

Characteristics of participants	**%(n)**
Gender	
Male	(50%)83
Female	(50%)83
Categories of study participants	
Senior men teachers	(6%)10
Senior women teachers	(6%)10
Ssengas (Aunties)	(1.8%) 03
Kojjas (Uncles)	(1.8%) 03
Student leaders in charge of HIV/AIDS initiatives	(84%)140

The study population consisted of five categories of key informants including; senior men and women teachers, ssengas (aunties), Kojjas (uncles) and student leaders in charge of HIV/AIDS initiatives. Senior men and women teachers are teachers in charge of counseling adolescents on sexuality related issues in secondary schools in Uganda. They are also involved in the Presidential Initiative on HIV and AIDS Strategy and Communication to Youth (PIASCY) school program where they disseminate HIV/AIDS information to adolescents at school. The ssengas and *kojjas* refer to those aunties and uncles who were identified by adolescents in the schools for communicating to them IK for HIV prevention. Another category of key informants consisted of Students' leaders in charge of HIV/AIDS initiatives in the selected schools. Both male and female participants were represented in this study.

Findings

Findings revealed that adolescents receive both useful and misleading *IK* for HIV prevention. The findings in this paper have been categorized into two main themes namely; IK cultural practices in line with existing biomedical information for HIV prevention and that that conflicts biomedical information.

4.2 **Conflicts between biomedical and traditional practices on HIV prevention**

Witchcraft, Use of Local Herbs and HIV Prevention

The belief that HIV is associated with witchcraft was noted in this study among adolescents and other key informants. Some male and female adolescent participants explained that HIV/AIDS can be caused by

witchcraft. The male participants alleged that some people use charms and spells to make their victims HIV positive. On the other hand, some female adolescents said that some witch doctors provide them with herbs that are smeared in one's private parts to prevent HIV infections. The same view was reinforced by another female adolescent respondent who emphasized that some adolescents believe that they can have sex provided they have used local herbs for protection against HIV/AIDS. She said that: ''*Youth Alive Club educates students not to use bad methods for HIV prevention… some students like using herbs to prevent HIV/AIDS. Students can go in for sex having used these herbs like 'bombo', 'mululuza', and bbuza ', 'kayayana.'*

An aunt supported the view that some people still believe that HIV/AIDS can be caused by witchcraft. She asserted that HIV/AIDS was so much associated with witchcraft especially in the early 90s when the disease was still new in most Ugandan communities. Another auntie said that there is a belief in her community that when pork is eaten frequently it lowers risks to HIV/AIDS infections, just like it is also believed to protect the community from evil spirits and spells sent by evil people.

4.3 First Sexual Encounter and HIV Prevention

Another unique response regarding HIV prevention was noted in another female Focus Group Interview (FGI), where one adolescent girl explained that she had been told that the first time she has sex she should not worry about protecting herself from HIV infections because her body provides her natural immunity to HIV infections during her first sexual encounter. The female adolescents in the same FGI indicated that it is also believed that a girl cannot become pregnant if it is her first sexual encounter. Other participants in the same Focus Group (FG) agreed to this view echoing that they have heard about this belief too, but they were not certain whether the belief was founded on accurate or inaccurate information.

4.4 Elongation of the Labia Minora and HIV prevention

Adolescent respondents identified elongation of the labia minora, among some of the cultural practices promoting early sexual awareness among adolescent girls. This view came out dominantly among many male and female adolescent respondents in this study. This cultural sexual initiation practice featured predominantly as a common practice among the Baganda, but it was also cited among the Bagisu, Basoga and Banyankore. Female respondents from Buganda described the practice by the local name '*okukyalila ensiko'* (*visiting the bush*). There was agreement between many female and male adolescent respondents that this practice creates early sexual awareness among adolescent girls because they are initiated at the age of eight and twelve years before on set of menstruation. Other female respondents in the same FGI suggested that the practice increases the sexual libido of girls who have been initiated making them more vulnerable to HIV infections than their counterparts ignorant of this cultural practice.

In addition, many female adolescent respondents in various FGI indicated that during the initiation practice they received contradictory statements on abstinence, where they were told by their '*ssenga*' (paternal auntie) that the practice will ''*safe guard their marriages''* and ensure that they ''*sexually excite men during sexual intercourse''*. Some girls also suggested that the counseling given by the *ssenga* during the initiation practice signifies that they "*have become mature women ready to know adult secrets and to have sex,"* because the ssenga emphasized that the practice prepares them for marriage.

A key informant (aunt) reinforced this view by saying that:

> *…a girl child at the age of 10 goes to the paternal aunt and she is introduced to the cultural practices of 'visiting the bush'. This practice involves establishing a door in the girl's private parts to protect her femininity and keep her always warm* (KIWMD, 2016).

Another concern that was highlighted strongly from the findings is that children are initiated in the practice of elongating their labia minora at an early stage of between 8 -12 years, a tender age to be introduced to sexual issues especially, messages such as *"exciting men sexually," ''enjoying sex"* and to *''keep your marriage."* The finding emphasized that there could be a relationship between the practice, early sexual awareness, increased curiosity about sex and early engagement in sex. The findings also suggested that the practice increases the sexual urge of

adolescent females, making it hard for them to abstain. This was a concern raised by some female adolescents who had been initiated and needs further investigation.

4.5 Local Practices Associated with Reproductive Health of Female Adolescents and Women

It was also observed that ''*visiting the bush''* (elongation of the labia minora) is also associated with enhancing the reproductive health of girls and women in this study. There was agreement among various female respondents in the study particularly; aunties, senior women teachers and female adolescents that, apart from increasing sexual pleasure for the man in marriage, the practice also protects the girl's femininity, enhances hygiene, facilitates safe child birth and shields women from embarrassment, when being examined by the health personnel.

A female adolescent respondent commented:

> *P3: If one does not go to the bush then they are likely to get AIDS easily because they are given herbs and this can reduce the chances of HIV infection. Pulling protects their private parts they are not open like for those girls without 'curtains' meaning elongated labia minora* (PFFGD, KHS, 2016).

This study noted that "*pulling"* as used by the adolescents to describe the cultural practice of elongation of the labia minora is generally associated with reproductive health of girls and women in the study. Majority of the female adolescent respondents' from Buganda emphasized that they have been told by the "*ssenga*" that "*pulling*" offers protection against HIV infections and other sexually transmitted diseases, when local herbs for example "*kayayana*", *"bbuza"* and "*bombo*" are used in elongating the labia minora.

Some female respondents also emphasized that they have been told that girls with elongated labia minora have ''*curtains*'' (elongated labia minora) that offer the female reproductive organ more protection than girls not initiated in the practice. The respondents also indicated that they believe that those not yet initiated into the practice are therefore more vulnerable to HIV infections because they lack "*curtains*".

Nonetheless, one of the female key informants (*ssenga)* indicated that much as the practice has many advantages to a woman, the practice is being abused by men, who are defiling the young girls brought to their aunties for initiation, yet they are much older than the young girls, exposing them to HIV infections.

The finding revealed that when the adolescent girls are being initiated in this practice, they are exposed to environments that make them vulnerable to HIV infections. For example, one of the aunties (key informant) emphasized that some men defile the young girls, when they are brought to undergo the practice of elongating their labia menorah at their paternal aunt's home. Such sexual safety information is very valuable *information need* for adolescents in risk reduction to HIV infection resulting from sexual abuse and cross generational sex.

4.6 Real Men have Many Girl Friends

One of the views that came out strongly among adolescent males in this study is that their local communities condone the engagement of male adolescents in risky sexual behavior. The respondents indicated that having many girlfriends is viewed as very prestigious among their peers and it is a sign that one is ''a *real man.''* Many respondents agreed that boys with few girl friends are considered inferior to those with many, among their peers at school and in their local communities.

One male adolescent respondent asserted that: "*in my culture, a muganda man has to show that he is a real man and it is acceptable, boys know that Omusajja alina okusajalaata"* meaning a real man should have more than one wife. Other male respondents added that they sleep with many girls to prove to their peers about their sexual prowess and that they are "*real men"*. Another male respondent emphasized that even girls understand that it is culturally acceptable for boys and men to have many sexual partners. He

emphasized that: ‘‘even *women believe that a man cannot be for one woman. In my tribe it is said ‘‘omusajja tabawomu … this encourages all the boys to have many girlfriends.’’*

Other participants echoed his view emphasizing that the practice is acceptable, more so, if the man has resources to take care of the women. The participants agreed that such beliefs encourage adolescent boys to have many sexual partners hence increasing risk to HIV infections. A senior man teacher echoed the same view expressed by the adolescent males that those with girl friends are quite popular at school and this has encouraged risky sexual behavior.

4.7Adolescents and Sexual Relationships with in-laws

A cultural practice of promoting sexual relationships between in laws was identified by respondents as a risk factor to HIV infections in this study. Generally, both male and female adolescent respondents indicated that in many communities in Uganda, the practice of promoting sexual intercourse between in laws is acceptable.

A female adolescent respondent emphasized that it is considered acceptable among the Basoga (her tribe) for a man to have a sexual relationship with his sister(s) in - law because culturally, they are considered wives too. She further explained that incase a relationship developed, no one would take offense in her society because it is a strong practice backed up by many proverbs. She gave an example: ‘‘*muka mugandawo azira nsonga’ this means that your brother’s wife has no problem (laughs loudly and the rest of the group joins, then she proceeds) because she is also his wife. It is done in our tribe the Basoga. It is okay and accepted in our society.’’* The rest of the female participants agreed to this view and explained that this is a common practice and considered acceptable in their tribes too because their in-laws call them wives.

Male adolescent respondents complemented this view arguing that this practice explains why a sister to a deceased wife is usually inherited by a widower and they usually consider younger sisters, most preferable one with likeness of the deceased. Such practices, the respondents explained expose young people to HIV infections.

4.8 Female Genital Mutilation (FGM)

Female Kup-Sabin respondents explained that the practice of female ‘*circumcision’* (Female Genital Mutilation) promotes early marriages among adolescent girls in their communities. They suggested that they receive conflicting messages regarding *circumcision*. They indicated that they were told the practice would reduce their sexual desires to enable them abstain from sex to prevent HIV infections. However, immediately the adolescents are *circumcised*, double standards come into play, where the girls gain a new status of ‘*woman’* in their community. Thus, they are expected to get married by their community making the girl child vulnerable to HIV infections. Male Kup – Sabin respondents complemented that *circumcision* indicates that a girl has become mature and is ready for marriage in their culture.

Results indicate that Kup’ Sabiny and Nga’ karimajong adolescent girls were concerned that they received conflicting messages regarding FGM from their communities. Firstly, they were told that undergoing the initiation practice would reduce their sexual urge and enable them to abstain from sex and protect them from HIV infections. However, after being initiated in the practice they were forced into early forced marriages because they gained a new status of “woman” after undergoing the initiation practice. This practice increases the vulnerability of many girls in these communities practicing FGM in Uganda through encouraging early marriages and risk to HIV infections.

4.9 Local Practices Associated with strengthening adolescent Love Relationships

Blood Pacts

A cultural practice of blood pacts was identified by a few adolescent respondents in this study as one of the cultural practices increasing the risk of HIV infections among adolescents in schools and in their communities. Blood pacts commonly known as *‘okutta omukago’* (covenant relationships) among the Ganda was identified by some female respondents as still practiced by some adolescents in their school.

They emphasized that this practice was common among adolescents involved in boy and girl relationships. The respondents explained that it is believed by the adolescents that the practice strengthens the bond between the lovers such that their relationship is made eternal. They also emphasized that the practice is becoming popular because adolescents in relationships fear losing their partners. As a mechanism of securing their relationships from break ups they participate in '*okutta omukago'*. They also emphasized that the practice involves cutting fingers and leaking blood by both parties as a ritual to strengthen their relationship. Hence, they argued that this practice exposes the adolescents to the risk to HIV infections.

4.10Diminishing Value on Virginity for Girls by the Local Community

Similarly, many female adolescent respondents shared the view that the value attached to virginity among the girls is diminishing and this is perceived as another cause of increasing HIV infection among girls. They argued that virginity is slowly losing meaning and times have changed, because virginity is no longer cherished in the community. Some of the female respondents also explained that boys emphasize that virginity is archaic and primitive and they prefer girls who are experienced in sex.

They further emphasized that virgin girls are also teased by boys at school and at times several local proverbs are used to discourage them from abstaining; for example, reference is usually made to local herbs like "*kayayana*" and *"bbuza"* (Luganda) where they say that "*tebabanaza kayayana"* (literally means they were not bathed in the local herbs for bringing good luck to baby girls, when still infants) a herb believed to bring good luck to girls. This is to emphasize that they have bad luck and lack favor, as a reason to explain why some girls are still virgins. Other female adolescent respondents said that they are also told by boys and men in their communities that they are not desirable and they lack opportunity, as another reason to justify why they are still virgins.

The female adolescent respondents emphasized that ridicule of virgin girls has gone to a higher level in the local community, where even local musicians emphasize in some of their indigenous songs that non-virgin girls are no longer desirable. Proverbs are used in local songs such as ''*eggaali njagala ekozeeko ebeera ngumu,''* (meaning they prefer second hand bicycles because they are better). An analogy of a second hand bicycle is used to represent non-virgin girls and a new bicycle for virgin girls. Then comparison is made emphasizing that second hand bicycles are more efficient than new ones', to indicate that non - virgins are experienced, stronger, better and more dependable than virgins (newer bicycles) who are novices in sexual matters.

4.10.1 Menstruation

Female adolescent respondents from various ethnic groups also emphasized that some beliefs and cultural practices attached to the first menstruation period undergone by the girl child are promoting early marriages and vulnerability to HIV infections among adolescent girls. They argued that their first menstruation period was very frightening and stigmatizing because they were told by their parents that menstruation was an indicator that they had become women and were ready for marriage. Other female respondents added that this new experience marked a new phase in their lives because their families started treating them differently; as adults after experiencing their first menstruation period. They were bought their first traditional attire put on by women, to celebrate their womanhood and were taught to cook traditional delicacies in preparation for marriage. Such treatment from their family members, they explained makes some girls to rush for early marriages because they believe that they are women ready to enjoy adult privileges like sex. Besides, their parents consider them as grownups in their families and such attitudes encourage early marriages that increase their risks to HIV infections.

4.10.2 IK in line with biomedical information on HIV prevention

Bad Peer Groups and HIV infections

There was general consensus among all participants that adolescents should avoid bad company. This was identified as another long held cultural value for promoting good morals among the adolescents in African communities. Failure to abide by this value they argued exposed the adolescents to risk to HIV

infections. Adolescent respondents specifically, argued that they have been advised by elders and parents not to associate with bad company so that their lives are not ruined. Besides, they indicated that they are encouraged to visit, eat, make friends and later seek for marriage partners, only among those families known to their parents or those recognized in their villages for good reputation as remedy to HIV infections. They emphasized that they have also been told that their manners are a reflection of the character of the peers they associate with, and that if they have bad friends they will increase their level of risk to HIV infections.

The finding further suggested that IK for HIV prevention includes discouraging young people from having bad company arguing that peers greatly influenced the character of young people. As such adolescents were cautioned from associating with bad company as a means to delay early sexual engagement and to deter their engagement in risky sexual behavior. This view came out strongly in most FGs. Besides, some adolescents indicated that their parents cautioned them to marry partners from families known to have good reputation within their communities. This would ensure that their risk to HIV infection is reduced.

4.11 Sexual Taboos and Risk Reduction in HIV Infections

No Sex when Girls are in their Menses

Another sexual taboo that was so pronounced in the female FGs is, girls and women are forbidden from having sex with any man, when they are in their menses. They also explained that they were also told that ignoring this cultural taboo attracts a lot of curses to the parties involved and leads to suffering later in life.

4.11.1 Bestiality and Homosexuality

Some male respondents also indicated that: "Boys should not be homosexuals because it is not acceptable in Ugandan culture, even in Africa and sleeping with animals. People can even kill you in the village and that animal cannot be eaten." Hence, the male adolescent respondents emphasized that homosexuality and bestiality are considered sexual taboos among various local communities. The respondents explained that indulging in homosexuality or bestiality is considered an abomination among most local communities in Uganda. They further explained that in situations entailing bestiality the animal involved in this practice is considered unclean and is usually killed. Another male respondent emphasized that boys who get involved in homosexuality are despised and often punished harshly by the community.

Most adolescents indicated that bestiality and homosexuality are considered abominations in their communities. They revealed that these sexual taboos attract harsh punishments from the community such as spite and rejection. Also, the animal involved in bestiality is killed because it is considered unclean by the community.

4.11.2 Circumcision and HIV infections

Male circumcision was identified by majority of respondents in this study as one of the local practices used to initiate adolescent boys into adulthood among the Bakonzo and Bagisu. The respondents also indicated that the practice promotes personal hygiene, reduces the risk to sexually transmitted diseases, including; HIV/AIDS.

A few male and female respondents specifically, Bakonzo and Bagisu emphasized that because circumcision formalizes the status of boys into adults and recognition from their communities as adults, adolescents are made to believe that they are ready to enjoy adult privileges, like sex because they have become 'real men', exposing them to HIV infections.

This study noted that majority of the adolescent respondents (both male and female) suggested that much as circumcision promotes personal hygiene and contributes to reducing the risks to HIV infections among boys, the practice is also promoting risky sexual behavior especially, among some of their peers. The adolescents indicated that some of their peers strongly believe that they are immune to HIV infections because they have been circumcised. One of the male adolescent respondents commented that:

"*this thing of circumcision has caused confidence among boys so indulging in risky sexual behavior; they think they are safe from HIV/AIDS infections."* A female respondent echoed the same view but also emphasized that some of them also believe that circumcision makes the boys immune to HIV infections. She said: *"circumcised boys think they cannot catch HIV, even some of we girls believe so."*
The findings suggest that there is a strong misconception among some adolescents and local communities that circumcision makes men immune to HIV infections. The researcher noted that this belief was highly pronounced in this study among both female and male adolescents.

5. DISCUSSION

5.1 Conflicts between biomedical and traditional practices on HIV prevention

Witchcraft, Use of Local Herbs and HIV Prevention

The findings suggest that adolescents in secondary schools in Kampala District still have a lot of misinformation on modes of HIV transmission and prevention. This is line with many earlier studies (**MoES, 2011; UNESCO, 2014; WHO, 2016; Vu et al., 2017; MoH, 2019**) that have continued to assert that adolescents lack comprehensive HIV prevention information to support rightful health choices. The finding also reveals that adolescents' health information needs especially in the context of HIV prevention are not being met at school. Teachers seem to have neglected this important role of protecting young people's lives through communication of accurate, comprehensive and timely HIV prevention information. The finds also suggest minimal role of school librarians in disseminating health information to adolescents in the schools. As a result adolescents are seeking this information from unreliable information sources such as witch doctors and peers to make health choices. Thus, if this information need is not urgently addressed adolescents in Kampala secondary schools are vulnerable to increased risk to HIV infections due to limited access to accurate information on HIV prevention.
The findings agree with **Guttmacher, Kelly and Ruiz-Janecko(2010**) research involving four sub-Saharan countries that reported that 60% or more of adolescent females and males had a lot of misconceptions and limited knowledge about how to prevent HIV and unplanned pregnancy. The findings also agree with studies (**UNESCO, 2014; UBoS, 2017; WHO, 2016; Vu et al., 2017; MoH, 2019)** that have emphasized that much as the adolescents have awareness of HIV prevention they lacked comprehensive information for effective HIV prevention.

5.1.1 Elongation of the Labia Minora and HIV prevention

The findings were overtly clear that some of the messages received from the aunties during this initiation practice were not age appropriate and contained misinformation on HIV prevention and information that promoted early sexual debut. The finding also revealed that during the initiation ceremonies the aunties focused mostly on sex education and did not disseminate information on HIV prevention. The same finding was reported by a similar study (**Butts et al., 2018)** among adolescent girls in Zambia revealing that adolescents had limited knowledge on HIV and risk factors. Such communication hinders efforts to promote abstinence as the most secure method of HIV prevention, rather it promotes early sexual debut increasing the risk to increased HIV infection.
This finding in Uganda's context raises many concerns because this cultural practice is also commonly practiced in some boarding schools where adolescents are encouraged by the school matrons to elongate their labia menorah. The worry is on the type of information the matrons are disseminating to the female adolescents and whether it supports safer sexual practices.

It would be interesting to find out the type of information the young girls receive when being initiated in this cultural practice when at school. This is critical *information need* especially for female adolescents and women to reduce on their vulnerability to HIV infections due to misinformation, amidst the persistently high HIV prevalence reported in national statistics (**UPHIA, 2019; UAC, 2017; 2016; 2015**) in Uganda.

Another concern that is highlighted strongly from the findings is that children are initiated in the

practice of elongating their labia minora at an early stage of between 8 -12 years, a tender age to be introduced to sexual issues especially, messages such as *"exciting men sexually," ''enjoying sex"* and to *''keep your marriage."* A UNESCO (2014) study emphasized that sex education that is age appropriate facilitates delayed sex among adolescents and encourages the development of healthy sexual behavior and life skills critical for HIV prevention.

The finding also emphasized that there could be a relationship between the practice, early sexual awareness, increased curiosity about sex and early engagement in sex. The findings also suggested that the practice increases the sexual urge of adolescent females, making it hard for them to abstain. This was a concern raised by some female adolescents who had been initiated and requires further investigation. Earlier studies conducted on elongation of labia minora in Central Mozambique (**Pérez, 2015**), and Uganda (**Martínez Pérez & Namulondo, 2011)** suggested that elongation of labia menorah was not linked to risky sexual behavior for HIV transmission. However, the study recommended that more research was needed to investigate the phenomenon among many participants for concrete conclusions. This study reiterates the views of earlier studies to conduct additional research among adolescents to investigate whether there is any relationship between the practice with early sexual debut, as well as increased sexual urge as alleged by some female adolescents who have undergone the practice. Availing adolescents with accurate, relevant, comprehensive information regarding any negative effects associated with the practice of elongating the labia menorah disseminated in a timely manner would empower the adolescents to make informed health choices.

5.1.2 Real Men have Many Girl Friends

The finding suggests that the indigenous communities of Uganda are still promoting negative IK on multiple sexual partners among men and adolescent boys amidst the high HIV infections in the country. Findings suggest that adolescent males have been culturally socialized to have many girlfriends and the practice is supported by various proverbs common to various ethnic groups in Uganda. Much as the adolescents seemed aware that multiple sexual partners predispose them to risk to HIV infections, the support and cultural orientation of having multiple sexual partners excited them in to indulging in risky sexual behavior. In the context of this study, cultural orientation was a formidable force to reckon with in the fight against HIV infections. Thus, adolescent males with multiple sexual partners need to be socialized to adopt safer sexual practices to protect their partners, especially women and adolescents who are very vulnerable to HIV infections. Coupled with poverty, unequal power relations, girls and women are not able to negotiate safer sex hence very vulnerable to HIV infections. HIV prevention information should focus on changing the mindset of the young people from such negative attitudes gained through cultural orientation. Hence, young people need to be socialized to respect women and protect them from risks from infections especially, in a cultural context where they have been socialized to have multiple sexual partners.

The study finding equally agrees with earlier studies for instance, Schoepf (2001) that indicated that the AIDS epidemic in Africa is sustained through social and cultural processes indigenous to African societies. Adolescent males revealed that those adolescents who do not subscribe to the traditional view that ''*real men''* must have many girlfriends, face pressure from both their peers and local community to conform to the norm, otherwise they are ridiculed as ''*cowards*'' and are not considered ''*real men''*. Such social constructs predispose adolescent boys to pressure to engage in risky sexual behavior and vulnerability to HIV infections. The findings emphasize that the local communities are playing a key role in sustaining increased infections among adolescents. Thus, abstinence must be promoted for both boys and girls to combat increased HIV infection among the Ugandan population. There is need to highlight that indigenous knowledge is dynamic and must adjust to the modern health living lifestyle in order to have a healthy society.

The implication of the finding is that the HIV/AIDS scourge cannot be curbed without bringing on

board cultural leaders as key stakeholders in the fight against HIV infections. Cultural leaders must be viewed as change agents condemning negative cultural beliefs and practices that make the communities vulnerable to HIV infections. As a result, the negative cultural beliefs and practices may become unpopular. This is why documentation of negative cultural beliefs and practices is important. The local masses also need to appreciate that IK is dynamic and must adjust to healthy living lifestyles.

5.1.3 Cultural practices encouraging early marriage

Results indicate that Kup' Sabiny and Nga' karimajong adolescent girls were concerned that they received conflicting messages regarding Female Genital Mutilation (FGM) from their communities. Firstly, they were told that undergoing the initiation practice would reduce their sexual urge and enable them to abstain from sex and protect them from HIV infections. However, after being initiated in the practice they were forced into early forced marriages because they gained a new status of "*woman*" after undergoing the initiation practice. This practice increases the vulnerability of many girls in these communities practicing FGM in Uganda through encouraging early marriages that exposes them to increased risk to HIV infections. This practice and gender challenges faced by girls and women, have been highlighted by a number of earlier studies in other parts of the world(**Alsibiani etal.,2010**) and Uganda that have emphasized that they are a barrier to national development and have dire consequences on the reproductive health of women(**NPA,2010**).

It is also not surprising that among girls aged 6-15 who drop out of primary school, in Uganda 31% do so in order to marry and 21% do so due to pregnancy (**USAID,2015**). Also secondary school completion rates in 2014 were extremely low with 34% of girls completing secondary school compared to 45% of boys (**USAID, 2015**). Adolescents thus, need to be equipped with information on the negative effects of female genital mutilation and the negative consequences of early marriage as critical information needs for HIV prevention. Besides, it is paramount that adolescents are equipped with information on factors contributing to early sexual debut and their negative effects. Uganda was reported to have had the highest teenage pregnancy in Sub -Saharan Africa (**UBoS, 2012**). Similar studies in a subsequent year indicated that the challenge was still persistent, with one in four adolescent girls aged 15 -19 in Uganda, reported to be already a mother or pregnant by this age (UNFPA, 2013).

Another Demographic Health Survey (**UBoS, 2017**) conducted in Uganda has emphasized the same issue that 53.9% of the adolescents aged 15-19 in Uganda had already began childbearing by their 19th birthday. Thus, the findings highlight early sexual debut as a persistent negative health behavior among adolescents aged 15-19, a cohort of interest in this study. Thus, there is need to scale up dissemination of information condemning cultural practices such as elongation of labia minora, multiple sexual partners, Female genital mutilation deep sited traditional practices that are promoting early sexual debut and marriage among adolescents in Ugandan communities. In the context of HIV prevention, indigenous knowledge that highlights these risk factors contributes to reduction in the high teenage pregnancies, negative health outcomes associated with early sex and high HIV prevalence by empowering adolescents with accurate and comprehensive information for HIV prevention.

5.1.4 Cultural practices for strengthening relationships among lovers

Similarly, findings on local practices associated with strengthening relationships among adolescent lovers indicated that the practice of *blood pacts* is common in secondary schools as a way of cementing ties between adolescent lovers to have lasting relationships. The finding illuminates that adolescents still lack comprehensive and relevant information to support their health choices. Besides, the results highlight that adolescents with boy or girl friends at school desire to have long lasting relationships. This is a critical information need among adolescents for HIV prevention. The same information need was

identified by earlier studies (**Aggleton, etal., 1998; Kelly, 2002; Khoza, 2004**), that young people preferred to be equipped with knowledge on supporting relationships with their families, friends, boyfriends and girlfriends, as a critical information need. Another study (**Liesbeth, etal. 2013)** reported that adolescents in Uganda recommended inclusion of "…*forming lasting relationships*" (p.415) as one of the key aspects for a comprehensive sex education programs in schools. The findings of this study further reiterate the importance of this information need by the adolescents, as revealed by their determination, willingness and effort to ensure that their relationships work out by participating in blood pacts. This is influenced by the cultural belief that a blood pact with a partner will make their relationship eternal.

The implication of this finding is that forming lasting relationships is considered very essential to adolescents and should be addressed urgently with accurate information. Another implication is that adolescents are vulnerable to HIV infections without sex education in schools. They need to be equipped with information on establishing lasting relationships, identifying toxic relationships because without this information they are more vulnerable to HIV infections. Schools should not ignore the fact some adolescents are already sexually active by their 14th birthday (**MoH, 2019**). Hence, need to be supported to remain alive.

The finding is supported by studies (**Fantasia & Fontenot, 2011**: **Paul, etal., 2000**) that argued that adolescents should be sensitized on the dangers and risks that may result in having relationships with the opposite sex for instance, dating patterns such as, one time sexual encounters without the expectation of a relationship and other risky behavior that expose them to risks of sexual exploitation. The implication is that providing such relevant information will ensure that the adolescents are well guided to understand the challenges of relationships, how to manage relationships and risky factors that boy girl relationships pose in HIV infections. Besides, IK for HIV prevention should highlight this information as a means of empowering them to mature and make rightful decisions regarding their health.

5.1.5 Diminishing Value on virginity for Girls by the Local Community

This study notes that the community is playing a big role in strengthening and promoting risky sexual behavior, especially among adolescents. The findings revealed that virginity is no longer a highly cherished cultural value in the indigenous communities in Uganda and that times have changed. Adolescent females in this study emphasized that they were abandoning abstinence because "*it does not pay to abstain*", when their boyfriends are having multiple sexual partners. They also indicated that girls who were abstaining are ridiculed by boys and their peers at school who prefer girlfriends experienced in sexual matters. Female adolescents also argued that many local songs have been played that ridicule girls who are abstaining and instead promote those who are leading a reckless lifestyle. As a result many of the female respondents indicated that such attitudes from their peers and community are discouraging girls from abstinence and encouraging early sexual debut. Such attitudes and negative indigenous knowledge from the community needs to be checked and condemned because it has made girls and young women more vulnerable to HIV infections. Thus, information promoting abstinence as the safest method of HIV prevention needs to be emphasized for both male and female adolescents.

The finding highlights the need to promote abstinence as the most effective method for preventing HIV infections among adolescents to have an HIV free generation. However, it will not work if abstinence is emphasized mostly among adolescent girls. Otherwise, if this valuable cultural practice is demeaned their will be increased HIV infections among adolescents. The findings especially on double standards on abstinence that is recurring in earlier studies and being emphasized in this study results, point to the need for health policy -makers to focus more on addressing gender aspects and beliefs that predispose girls and women to higher HIV risk in Uganda. The recurring negative statistics for the past six years, on HIV epidemiology statistics have indicated consistently that women have higher HIV prevalence compared to their male counterparts (**UAC, 2011; UAC, 2015; 2017; UPHIA,2019**) in Uganda. This findings emphasizes the need to highlight more and condemn such cultural practices that promote risky

sexual behavior in our communities to have a healthy society. HIV prevention information should focus on changing the mindset of the young people from such negative attitudes gained through cultural orientation. Hence, young people need to be socialized to respect women and protect them from risks from infections especially, in a cultural context where they have been socialized to have multiple sexual partners.

5.1.6 Menstruation and Stigma

Evidently, the researcher also noted from the female adolescent participants that a lot of stigma is attached to menstruation in their local communities. The onset of menstruation among girls is appreciated by some parents as a time to prepare the girl child for marriage because the parents and local community regard her as an adult once she has menstruated. Girls are treated like adults in the household. These actions as revealed by moderate numbers of adolescent female participants from their parents reinforced that they were no longer children. Besides, the girls indicated that this new treatment and information from the parents that they had become women encouraged some girls to believe that they are ready for marriage. Thus, such messages from parents promote early sex and marriage. Adolescents need information that supports abstinence and highlights the negative consequences of early marriages as essential information need for HIV prevention.

The finding agrees with studies that have reported that menstrual management among female adolescents still has many challenges such as stigma associated with it, for example harassment from boys at school, lack of sanitary products, poor sanitation at school that have contributed to adolescent girls dropping out of school in Uganda (**Women of Uganda Network, 2015**) and other parts of the world (**Jewitt & Ryley, 2014**). Adolescents need accurate information on menstruation management as important information need. This would help to counter negative attitudes and cultural beliefs that encourage early sex and marriage after the onset of menstruation. The implication of this finding is that if the adolescents do not have access to this information, traditional beliefs about menstruation that the adolescents are socialized in(''*they have become women''*) would thrive. Thus, the trend of early marriages among girls and early sexual debut would continue. Yet, this is associated with many negative health consequences for the girl child, such as HIV infections and negative reproductive challenges (**Karei & Erulker, 2010**; **UBoS, 2017; UNFPA, 2013**).

In addition, the misinformation is depriving the adolescents of their childhood and inflicting on children psychological torture with the current trend where some children have already experienced their menses by their tenth birthday (Ministry of Education and Sports, 2018). Parents need to be sensitized to support the girl child more at this stage of their lives, to reduce on school drop outs, early marriage and HIV infections. Another implication is policy makers in the MoES should prioritize creating a conducive environment in schools to handle the sanitary concerns of the girls to prolong their stay at school. Given that girls staying longer at school is associated with positive health outcomes and HIV prevention, efforts must be made to ensure that they do not drop out of school at a tender age (**UNICEF, 2009; WHO, 2013**).

5.2 IK in line with biomedical information on HIV prevention

Bad Peer Groups and increased HIV infections

The finding suggested that IK for HIV prevention entailed discouraging young people from having bad company, because culturally it is believed that peers greatly influence the character of young people. As such adolescents indicated that they are cautioned from associating with bad company as a means to delay early sexual engagement and risky behavior. This view came out strongly in most Focus Groups. Besides, some adolescents indicated that their parents cautioned them to marry partners from families known to have good reputation within their communities. This would ensure that their risk to HIV infection is reduced.

The findings are supported by various earlier studies **(Ali, et al., 2011; Miller, et al., 2000; Romer, et al., 1994)**, that examined the impact of peers in influencing sexual behavior among adolescents. The studies concluded that peers influenced adolescent sexual behavior. Adolescents whose peers were sexually active, were more likely to be sexually active themselves, while, adolescents with peers, who are abstaining, were highly likely to abstain themselves (**Kaiser Family Foundation, 2000a, 2000b**). Fletcher, (2007) also emphasized that adolescents' behavior choices were partly influenced by how acceptable a norm or behavior was viewed by their peers. The findings highlight that peers are very influential in the lives of adolescents and should be used as change agents in promoting positive behavior change. Thus, such IK should be promoted for HIV prevention in school.

5.2.1 Sexual Taboos and Risk Reduction in HIV Infections

Most adolescents indicated that bestiality and homosexuality are considered abominations in their communities. They revealed that these sexual taboos attract harsh punishments from the community such as spite and rejection. Also, the animal involved in bestiality is killed because it is considered unclean by the community.

The findings suggest that the traditional views discourage bestiality and homosexuality as inappropriate sexual practices. The views are aligned to biomedical facts that discourage homosexuality as a risky factor to increased HIV infections (**UAC, 2011; UAC, 2015; UAC, 2017)**. The implication of this finding is that given that there is some ground of agreement between traditional and biomedical views, on some sexual taboos, it is much easier to discourage sexual practices that predispose adolescents to HIV infections because they are in line with culture they have already been socialized. Thus, IK that promotes safer sexual practices is critical information for HIV prevention in schools.

Similarly, findings also indicated that there is IK that promotes sexual health of women. For example, one of the aunties explained that women are discouraged from having sexual intercourse during menstruation. She emphasized that this is a bad practice and a sexual taboo that attracts curses to those involved in this practice. This traditional view is aligned to biomedical views on reproductive health of women and sexual health that highlights that the practice of having sex during menstruation increased susceptibility to HIV infections, where a partner infected is highly likely to pass on the HIV virus to their uninfected partner (**Marcel, et al., 2013**). The implication of this finding is that indigenous information on sexual taboos that promotes safer sexual behavior is essential for HIV prevention among adolescents in schools in Uganda.

5.2.1 Circumcision and HIV infections

This study noted that majority of the adolescent respondents (both male and female) suggested that circumcision promotes personal hygiene and contributes to reducing the risks to HIV infections. However, the respondents also argued that the practice is also promoting risky sexual behavior especially, among some of their peers who strongly believe that they are immune to HIV infections because they have been circumcised. The findings suggest that there is a strong misconception among some adolescents and local communities that circumcision makes men immune to HIV infections. The researcher noted that this belief was highly pronounced in this study among both female and male adolescents. This finding is in line with Naidu and Khumalo **(2016)**'s study conducted among black African University students that revealed that while some students appreciated the benefits of medical circumcision in reducing the risk of contracting STIs and HIV infections, others were convinced that when they are medically circumcised they are immune to HIV infections. The finding highlights that this is a strong cultural belief still shared by even University students expected to be more knowledgeable on HIV prevention information. Thus, emphasizing the need to highlight negative IK based on

misinformation that is encouraging risky sexual behavior among young people in school and communities.
The finding is also in conflict with biomedical studies that emphasize that circumcision reduces the risk to HIV infections by 60%, (**Ministry of Health, 2019**), but does not make circumcised men immune to HIV infections. This result highlights conflicting views between biomedical and traditional beliefs on HIV transmission as a source of misinformation. Thus, the finding highlights the need to provide accurate, relevant, comprehensive and timely information so as to reduce adolescents' risks to HIV infections.

5.3 CONCLUSIONS AND POLICY IMPLICATIONS

On a general level it was discovered that adolescents in secondary schools in Kampala District still have a lot of misconceptions on HIV infection. The success of HIV prevention is dependent on ensuring that adolescents receive accurate, comprehensive, relevant and timely information to counter misinformation. Some of the misconceptions they have on HIV prevention emanate from indigenous knowledge that is in contradiction with biomedical facts on HIV prevention. The implication is that if IK is to play a critical role in HIV prevention among adolescents in secondary schools it must be accurate and well processed to suit the information needs of the adolescents

The policy implication to practice is that school librarians need to embrace their role as partners in disseminating health information to adolescents in schools and work together with the teachers and other school stakeholders to ensure that adolescents access, comprehensive, relevant and timely information in the context of rising infections among adolescents in Uganda. This would protect the adolescents from misinformation that is exposing them to risk to HIV infections. To this end the following recommendations are made.

Recommendations

The study recommends that the Ministry of Education and Sports prioritizes identifying, documenting and processing indigenous information for HIV prevention so that this rare information is preserved for future generations and young people have access to more reliable information from schools. In addition, information sources accessed by adolescents should be mapped out to facilitate easy access to indigenous information and also curb misinformation from unreliable sources. Last but not the least, for effective provision of comprehensive HIV prevention information to adolescents in schools, indigenous information documented; needs to be integrated in the existing HIV/AIDS school information resources to facilitate access and its utilization.

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