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Question box: a tool for gathering information about HIV and AIDS

Abigail Kazembe

Nurse-Midwife and Midwifery lecturer, University of Malawi, Maternal and Child Health Department, Kamuzu College of Nursing

Abstract

Previous studies on knowledge of HIV transmission and prevention have used surveys. This study used the question box method to create a safe environment for collecting information on knowledge of HIV transmission and prevention. The aim was to encourage young people to ask questions about HIV, which they would otherwise not ask because of fear of being judged negatively, ridiculed, punished or stigmatized. Seven question boxes were placed at each community secondary school in Lilongwe Rural West District of Malawi. In total participants asked 394 questions. Six categories of questions emerged and included: general questions about HIV, sexual practices, perinatal transmission, other modes of transmission, contact/sharing items and prevention and condom use. The question box method created a safe environment for asking sensitive questions anonymously about HIV and AIDS.

HIV remains a public health challenge throughout the world. In Malawi, approximately 100 000 new infections occur annually. Half of all new infections occur in those aged between 15–24 years (National AIDS Commission [NAC], 2009). Approximately 20% of the people aged between 15 and 23 years are HIV positive (Guttmacher Institute, 2005). This is above the national prevalence rate of 12% among 15–49 year olds (National Statistics Office (Malawi), ORC Macro 2004).

Accurate knowledge of HIV transmission and prevention is important prerequisites for curbing the incidence of HIV among young people. In Malawi, HIV/AIDS awareness is almost universal. However, comprehensive knowledge of HIV transmission and prevention is low: 41% for males and females of ages 15–24 years (NSO, 2006). In addition, misconceptions about HIV transmission persist, with 25% of young people believing that HIV/AIDS could be transmitted through casual contact, such as drinking from the same glass, sharing soap, sharing eating utensils, holding hands, and social kissing (McCreary et al, 2008). Ekridge et al (1997) found that 6% of respondents indicated that HIV could be transmitted through mosquito bites. Similarly, UNAIDS reported that over 50% of young people participating in 40 surveys around the world harbour serious misconceptions about HIV/AIDS (UNAIDS, 2005). Misconceptions about condom use and HIV transmission may have implications for subsequent protective behaviour. Other than abstinence, consistent and correct condom use is one of the effective ways of preventing HIV transmission (Hearst and Chen, 2004).

Previous studies on knowledge of HIV transmission and prevention have been through surveys (NSO, 2006). Typically, surveys assess knowledge using a person's ability to respond to simple factual questions by selecting from true/false or multiple choice answer options (Siegel et al, 1995). Surveys do not encourage participants to ask questions. Participants are expected to respond to questions rather than give meaningful explanations or ask questions themselves, although surveys may raise questions in people's minds. This is

not a desirable situation because if there is no opportunity to ask questions, lack of information may result in high-risk behaviours.

Little is known about sexuality and the questions that young people have regarding HIV transmission and prevention. The question box method is rather used but it can capture sensitive and confidential information about HIV and AIDS, and sexuality among the young people. The method is used to create a safe environment for collecting information on knowledge of HIV transmission and prevention. It aims at encouraging spontaneous questions about HIV from young people, which would otherwise not have been asked through fear of being judged negatively, ridiculed, punished or stigmatized. The purpose of this study was to examine the spontaneous questions that young people asked when they had an opportunity to ask questions anonymously, and to use those questions to add to the researcher's understanding of young people's concerns.

Method

Seven community schools were randomly selected from a pool of 34 schools in Lilongwe Rural West, in Malawi. All the schools were coeducational. The total student population was 2 820: 1 238 girls and 1 582 boys. All schools had students in forms 1–4 (Grade 9–12). An assembly was held at each school to inform students about the study.

From the comments and questions of students, it emerged that students had many questions and misunderstandings about HIV and sexuality. In view of the magnitude of the number of questions and the time constraints of the assembly, a question box was designed. A question box is a sealed cardboard box with a slit opening, designed to allow only deposit of thin paper. Only the researcher would open it. Seven question boxes were prepared and one was placed at each secondary school foyer from June–September 2005. Students were invited to write down any question that they might want to ask about HIV and AIDS on a blank piece of paper and to put them anonymously into the question box. Students were cautioned not to write their names on the question sheet to ensure confidentiality. They were informed that their questions would not be discussed with anyone at the school. Further, they were assured that no attempt would be made to identify anyone who had submitted a question. Participants were informed that the researcher would collect the questions and respond to them during subsequent visits to their schools.

The question box was used to provide students with opportunities to ask questions anonymously. These questions were collected and reviewed weekly and responded to during subsequent visits.

Ethical issues

Approval of the protocol of the study was obtained from the University of Malawi College of Medicine Ethics Committee and University of Illinois at Chicago Institutional Review Board (Protocol 2004-0822) with an amendment regarding the question box. Access to the schools was obtained from the Ministry of Education and Culture. Informed consent for participants to take part in the study was granted by the headmasters/headmistresses for each school. Headmasters are legal custodians of students in Malawi and act on behalf of parents. The questions were kept in a lockable cabinet at the Research Center of Kamuzu College of Nursing where the researcher was operating.

Data analysis

Participants had questions about sexuality and HIV and AIDS transmission and prevention. The questions were submitted in either English or Chichewa. Chichewa is the predominant indigenous language in Malawi. The latter were translated into English, and all questions

were subsequently typed. Questions were reviewed and divided into categories. Two graduate students and a professor coded the questions to ensure that coding was understood by all and applied in the same way. The inter-rater reliability was around 80%, and the disagreements were resolved by discussion.

Results

Participants asked 394 questions. The questions were of a nature that is perhaps too sensitive and personal to be asked through other methods of data collection, suggesting that the question box created a safe environment for asking questions. Six categories of questions emerged and included:

- General questions about HIV
- Sexual practices
- Perinatal transmission
- Transmission through other modes of transmission
- Contact/sharing items
- Prevention and condom use.

Table 1 shows the type of questions in each category and number of questions raised.

General questions about HIV (31 questions)

Participants posed questions regarding the origins, appearance of the virus and its location. Ten participants wondered where the virus came from:

- ‘Who brought the virus into Malawi?’
- ‘Why do people say AIDS came from a monkey?’
- ‘Did it get into a man or woman first?’

Some 16 participants were keen to learn about its appearance:

- ‘How does the virus look like?’

Fifteen participants wanted to know where the location of the virus is in the body:

- ‘What fluid is it in?’

Sexual practices (107 questions)

Participants asked whether reducing exposure to sexual fluids would prevent HIV transmission. Reduction of exposure to HIV was conceptualized as: absence or presence of ejaculation, sex positions, brief sex, type of sexual partner and one-time sex. Additionally, some participants wondered why saliva exchanged during kissing could not transmit HIV.

On fast ejaculation, twelve participants asked:

- ‘Can a man get HIV even if he ejaculates very fast?’

On absence of ejaculation, 10 participants asked questions such as:

- ‘Can a young boy [before puberty] get AIDS because [he does not ejaculate] AIDS is transmitted through body fluids?’
- ‘Can one get HIV even if he withdraws the penis and ejaculates outside the vagina?’

On brief sex, some 15 participants asked:

‘I want to know if one can get AIDS if you have sex with a man and he had HIV/AIDS and they have sex only for one second. Can one get HIV/AIDS?’

Ten participants asked about sexual positions as a method of HIV prevention. There was only one common question about sex position that participants asked. Participants wondered whether having sex while standing could prevent HIV transmission.

Fifty-four questions were asked regarding type of sexual partner. Many questions focused on age as key in transmitting the virus. Other partner characteristics included those with physical disabilities and those who are mentally ill, and virgins.

On age, some participants asked:

‘Can a 15-year-old HIV-positive girl transmit the virus through sexual intercourse to another 15-year-old boy who is HIV-negative?’

‘Can a 13-year-old girl acquire HIV from a 17–18-year-old boy?’

‘I want to know if a 12-year-old girl can get AIDS if she has sex with a man of 39 years.’

On partners with physical disabilities and mental illness, participants wondered whether having sex with a mentally or physically disabled person could cure AIDS:

‘Is it true that when an HIV-positive person has sex with a disabled person or a mentally ill person becomes HIV negative?’

On virgins, many participants asked if HIV-infected people can be cured by having sex with virgins.

Seven participants wondered whether having sex only once could transmit HIV. One of the participants asked:

‘If one has sex with an HIV-positive person only once, can one still acquire HIV?’

Eight participants asked questions about transmission of HIV from mother to child. Others wanted to know if pregnant women could transmit the virus to the baby during delivery.

‘Explain... what happens when an HIV-positive pregnant woman gives birth to an HIV-negative baby?’

‘Can a pregnant woman transmit HIV to her baby during delivery?’

Other modes of HIV transmission and prevention (36 questions)

There were questions that centered on other modes of transmission such as menstruation, witchcraft, and insect bites.

Twenty-six participants wanted to know whether having sex during menstruation with one partner being HIV positive can transmit the virus to an HIV-negative person:

‘A boy sleeps with a girl who is menstruating and has got HIV/AIDS. Can the boy get HIV/AIDS?’

‘If a girl is menstruating and has sex with a person who is HIV positive, can the girl acquire HIV?’

Ten participants had questions regarding witches and their role in transmitting HIV:

'It is believed that witches eat human flesh, can such a witch get infected from this act?'

Twenty-five participants wanted to know if mosquitoes or lice could transmit HIV. Thirty questions were asked regarding mosquito bites and HIV transmission, such as:

'Can one get AIDS from a mosquito bite?'

On the contrary, other participants wanted to know if mosquitoes could cure HIV:

'I hear a mosquito does not transmit HIV but it has the ability to kill HIV.'

'Why are scientists not manufacturing any AIDS drugs from mosquitoes?'

'Is it true that mosquito saliva can cure HIV/AIDS?'

Ten questions were asked about lice and HIV transmission, such as:

'Can lice transmit HIV?'

Transmission through contact/sharing (57 questions)

Other than sexual, participants wanted to know whether HIV would be transmitted through other means like sharing food, eating utensils, shaving machines, toilet seats, toothbrushes, and contact with an infected dead body:

'Can one get HIV from sharing food with a person that is HIV positive?'

'Is it true that one can get HIV-infection from using a toothbrush that belongs to a person that is HIV positive?'

Can HIV be transmitted from shaving machines (barber shop)?'

'Can one get HIV from washing a dead body?'

'How long does the virus survive after one has died?'

Prevention and condoms (30 questions)

There were three sub themes under condom use that participants asked. They wanted to know if condoms were harmful, efficacious and whether there was pleasure in using condoms, and how to use them. An example of a question on harm includes:

'What problems do condoms cause?'

Another question on condom efficacy:

'If there were no condoms do you think HIV and AIDS would have been as widespread as it is now?'

On sexual pleasure some participants asked:

'Having sex while wearing a condom is like eating sweets in a packet'.

On condom use, participants wanted to know if:

'wearing two or more condoms during a single sexual act can prevent HIV and AIDS?'

Discussion

The findings from this study suggest that young people in rural community secondary schools in Malawi raised a lot of questions about sexual practices. This may reflect the absence of sex education in their lives. Participants asked sensitive questions about

transmission of HIV through sexual practices, perinatal, other modes and transmission through contact/sharing items. This shows that young people have some important unanswered questions regarding HIV transmission and prevention. Knowledge of such gaps is key for designing relevant HIV-prevention interventions.

Participants asked general questions about the origin, location and appearance of the virus. On reflecting on health education messages about HIV transmission and prevention, in the author's experience, most educators in Malawi do not talk about the origin or appearance of the virus. Furthermore, they are not explicit regarding the location of the virus; what is clear is that HIV is found in the blood. The lack of clarity on location of the virus may be as a result of multiple factors. For instance, the terminology for semen and menstruation in vernacular language may sound offensive and obscene to both educators and audience. It may also reflect a culture of silence surrounding issues of sexuality and AIDS that is prevalent in the country (Lwanda, 2003).

Culturally, issues of sexuality are neither discussed at home nor at school. Such questions are personal and private, and may be embarrassing for young people to ask adults.

The participants' questions about exposure to contaminated fluids and the possibility of HIV transmission may reflect the type of information that is available regarding scientific explanation of women's vulnerability to HIV. It is well established that prolonged exposure to infected fluids can facilitate transmission (Green, 2003). Participants might have asked this question to confirm what they may have read or been told about transmission. In addition, it may also explain some of the questions that young people asked regarding brief sex and HIV transmission.

Although some participants wanted to know whether having sex while standing was safe, it is not established whether certain positions during sexual activity offer any protection against HIV.

Questions about HIV transmission and age were common which probably reflects the sexual behaviour in the region. Sex between older men and younger women is widespread in sub-Saharan Africa (Maluwa-Banda, 2001; Piot and Bartos, 2002; Green, 2003). Older men prefer sexual relationships with younger people because young girls are assumed to be free from HIV (Maluwa-Banda, 2001; Luke, 2003).

A few questions were raised regarding sexual relationships between adolescent boys and older women. The implication that old age may protect females against HIV transmission may stem from applying age-linked Malawian cultural beliefs about health and illness to acquiring HIV/AIDS. The notion of old age as a protective factor possibly is reinforced by the fact that few old women in Malawi appear to die of AIDS. HIV and AIDS are common among people of ages 15–49 years (National Statistics Office (Malawi) and ORC Macro, 2004).

Participants wanted to know more about perinatal transmission of HIV. Prevention of mother-to-child transmission of HIV was not fully rolled out at the time the study was being conducted. It is possible that messages were not as widely disseminated then as they are now, consequently, leaving unanswered questions.

Participants raised questions on other modes of HIV transmission such as sex during menstruation, and witchcraft. Questions regarding sex during menstruation could be building on cultural beliefs in which menstrual cleansing is believed to offer either some level of protection or natural treatment (Kazembe, 2006). Additionally, the questions may also reflect a cloak of cultural silence regarding women's issues that is prevalent in Malawi.

This belief contradicts scientific explanation about the increased susceptibility to penetration of HIV during menstruation (Green, 2003).

Witchcraft, as a cause of AIDS, is to some extent acceptable by some societies. As is common throughout sub-Saharan Africa, unknown numbers of Malawians believe that witches transmit HIV and also eat human flesh. The questions about witchcraft and HIV transmission may be a reflection of this underlying belief. Participant's questions about the potential for HIV transmission through insect bites suggest that young people have misconceptions (Ekridge et al, 1997; UNAIDS, 2005).

Beliefs about transmission of HIV through sharing items remains a concern. If unchecked, this may lead to stigma and discrimination. This finding is consistent with Ekridge et al, 1997 and McCreary et al, 2008).

The question box revealed that young people have doubts about condoms because they raised questions about their effectiveness. Additionally, they were concerned that condoms reduce sexual pleasure, and some expressed fear that condoms might harm them (Tiessen, 2005; Dancy et al, 2006; McCreary et al, 2008). The question box provided the opportunity to ask such questions.

The questions about HIV transmission and prevention are a reflection of the widespread knowledge deficit and multiple misconceptions among young people in Malawi. Poor HIV knowledge is consistent with survey results of HIV knowledge and may reflect lack of conceptual knowledge of HIV and AIDS (National Statistics Office (Malawi) and ORC Macro, 2004).

Participants had questions about conceptual knowledge of HIV: the location and appearance of the virus; the mechanism of HIV infection, how HIV is transmitted, and how is it prevented. Lack of understanding of how HIV is transmitted during sexual intercourse may lead young people to believe that they can control HIV by engaging in practices that are not safe such as having sex briefly, with very young girls or old women, during menstruation, withdrawing, and in a standing position. Misconceptions are potentially dangerous because they leave students vulnerable to erroneous beliefs that HIV cannot be transmitted if a person has sex only once or that condoms are harmful and not effective.

This study is limited owing to the method of data collection. It is difficult to establish the gender and age of individual students who asked each question about HIV transmission. For example, there were no questions about sharps and HIV transmission. While some questions may be unique to young people, for example, brief sex, and having sex while standing, some are widespread such as condom beliefs and HIV transmission through contact/sharing.

This method of data collection allowed a population of young people opportunity to ask sensitive and highly stigmatized questions. Information that addressed the questions were given to students.

Conclusion

The use of the question box method has shown that young people from rural community secondary schools in Malawi raised a lot of questions about sexual practices and HIV and AIDS. The questions were real and participants wanted to know what it meant for them if they had engaged in sexual activity. These findings have important implications for HIV prevention programmes in schools. The question box method would be helpful to allow students to freely ask questions because there is no fear of being judged negatively or stigma owing to the particular questions asked. Such an approach would be helpful in addressing

issues and misconceptions that concern young people in schools. Moreover, health workers can create a safe environment for discussing sexual issues and HIV and AIDS.

The question box also revealed that young people asked multiple questions about sexual practices and HIV transmission through contact/sharing. This suggests poor understanding of HIV transmission. Therefore health educators need to review HIV transmission and prevention messages and incorporate such issues when designing HIV prevention programmes for young people in school. These findings have implications for policy makers and health educators. Young people need more clear information about HIV transmission to adopt HIV preventive strategies.

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Table 1
Questions that participants asked

Category	Number of questions
General questions about HIV	31
Origins of HIV	10
Appearance of HIV	16
Location of HIV	15
Sexual practices	107
Fast ejaculation	12
Absence of ejaculation	19
Brief sex	15
Sex position	10
Type of sex partner	54
One-time sex	7
Perinatal transmission	8
Other modes of transmission	36
Menstruation	26
Witchcraft	10
Insect bites (mosquito and lice)	25
Transmission through contact/sharing	57
Sharing food an HIV positive person	10
Sharing eating utensils an HIV positive person	10
Sharing shaving machines with an HIV positive person	16
Sharing toilet seat with an HIV positive person	11
Contact with dead body of an HIV positive person	10
Prevention and condoms	30