

Perceived impacts of sex education as a preventive measure for STIs among youths in Lilongwe, Malawi

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ABSTRACT

Introduction

STIs seem to be on the rise among men and women across the world and this is a worrisome development. World Health Organization (WHO) estimated that 1 million curable STIs occur each day globally.

Purpose

The purpose of this research was to assess the perceived impacts of sex education in the prevention of the further spread of Sexually Transmitted Infections (STIs), including Human Immunodeficiency Virus (HIV) among youths.

Materials & methods

Secondary data obtained from both search engines and a few health institutions in Malawi were used for the study. A few questionnaires were also administered to 10 healthcare workers to collect data on sex education and STIs.

Results

Findings suggest that sex education initiatives are available to the youth in Lilongwe, Malawi, but these initiatives are not adequate to prevent STIs among youths. Besides, youths experienced barriers related to service availability and accessibility, and also lacked access to integrated sex education services. Youths reported avoiding services or having confidentiality concerns based on provider demographics and some behaviors. Finally, this study suggested that sex education can be one of the vital tools in the prevention of the further spread of STIs, including HIV if adequately engaged.

Conclusions

Sex education programs are available in Malawi and they are the most preferred services when it comes to sexual behavior change. Efforts need to be mustered to improve or increase sex education initiatives and promote their satisfactory uptake.

INTRODUCTION

Sexually transmitted infections (STIs) seem to be on the rise among men and women across the world and this is a worrisome development (World Health Organization [WHO], 2018) estimated that 1 million curable STIs occur each day globally. It is therefore important to understand

that STIs' diagnosis and management according to guidelines remain the credible cost-effective means of improving the health of the populace and improving the treatment outcomes of the infected. They are also viable options in the prevention of the spread of STIs. The role of sex education in this prevention cannot be

overemphasized. People who have adequate knowledge about a health problem, more often than not, make efforts to avoid contracting them. Therefore, this research intended to focus on assessing the impacts of sex education as a tool in preventing the spread of STIs among the youth.

The research has been motivated by the gap in knowledge on the impacts of sex education in the prevention of STIs in Malawi, specifically among the youth. It is essential to identify the factors that might affect sex education among the youth and find out appropriate interventions to be instituted to counter this problem.

The study covered the impacts of sex education initiatives available to the youth, the initiatives that are mostly preferred by the youth, and the factors affecting the implementation of such initiatives. Furthermore, the study reviewed possible solutions to improve sex education in the fight against the further spread of STIs in Malawi.

MATERIALS AND METHODS

Data sources

The researchers collected both primary and secondary data for this research. The primary data targeted key informants while the secondary data focused on previous research studies.

Sample size and sampling technique for the primary data

The sample size of this study consisted of 10 key informants who were selected from the Lilongwe district health office through the purposive sampling technique. The sampling technique was selected to target those directly involved with handling STIs cases. This research strategy was adopted because it is perceived as authoritative by people in general and is both comparatively easy to explain and to understand.

Primary data instrument

The researchers developed and used a questionnaire for collecting the primary data.

10 questionnaires were distributed among the respondents.

Primary data collection

Primary data was obtained from 9 (90%) people out of a sample size of 10 people working at Bwaila Hospital at the Lilongwe District Health Office and Family Planning Association in Malawi (FPAM).

The respondents were hospital practitioners which included 5 (55.56%) officers from Bwaila District Hospital and 4 (44.44%) officers from FPAM clinic. All these respondents were interviewed at their respective work stations.

Secondary data collection

The secondary data was collected by researching academic journals, health reports, other publications, and sex education survey data.

During the initial study period of August – October 2020, over 51 articles related to sex education and STIs from both local and international publications were reviewed.

Data analysis

The researchers used Microsoft Excel to analyze collected data and used a factor analysis approach. Further, the researchers have also adopted the diagnostic analysis which is a step further in statistical analysis to provide more in-depth analysis to answer the questions.

RESULTS

From the sample of ten (10) participants, 9 responded to the questionnaire (90% response rate). The study achieved a high response rate in the primary data part of the research because of prior notification, advocacy, sensitization, and scheduling of appointments with the respondents.

Of the 9 participants who responded to the questionnaires, 5 (55.56%) were men and 4 (44.44%) were women (Table 1).

The age distribution of the respondents indicated that 66.67% were within the range of 20 to 30 years while 33.33% were 30 years old (Figure 1).

Figure 1
Age distribution of participants

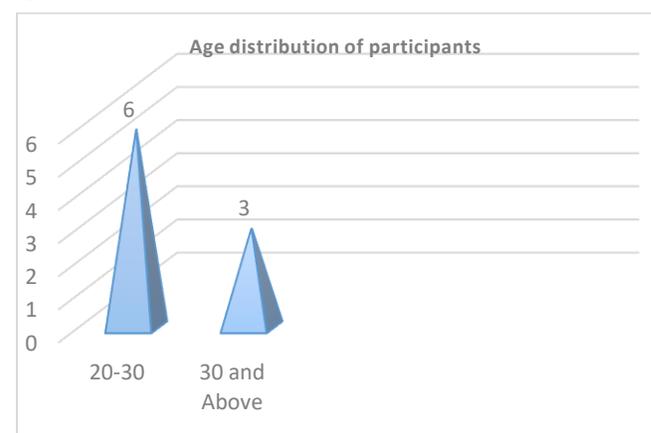


Table 1
Participants distribution (n = 9)

Gender	n (%)
Men	5 (55.56)
Women	4 (44.44)
Total	9 (100)

Identified sex education initiatives available to the youth in Malawi.

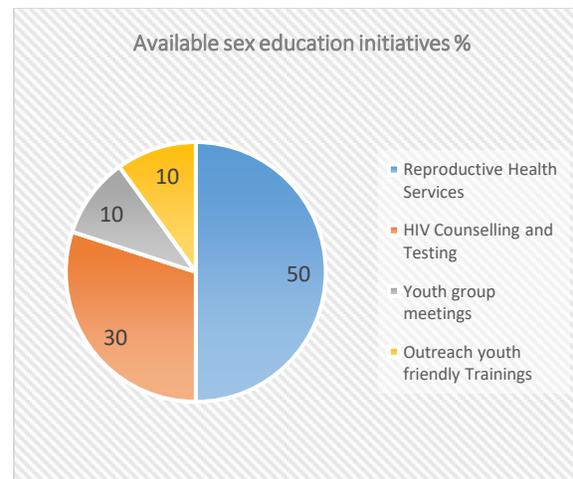
Data from Bwaila District Hospital (Lilongwe District Health Office) and FPAM clinic explicitly indicated that 90% of the respondents acknowledged that there were several sex education programs provided by both the public and private providers. 77.78% of the respondents inferred that both Bwaila Hospital and FPAM clinic are providing youth sex education services such as sexual reproductive health education, STIs training, and assets building sessions to protect the youth from STIs and unwanted pregnancies (Figure 2).

FPAM is also providing youth-friendly outreach services whereby the youth, including those in rural areas, can access HIV counseling and testing. FPAM's monthly report for August 2020 indicated that, through its outreach services, it observed that 60% of the youth in Lilongwe, mostly in rural areas, were facing barriers in accessing sex education as a preventive measure for STIs, including HIV ("Field Observation", n. d.).

The report further narrated that the youth want confidential and safe spaces and that privacy and confidentiality are often lacking where services are offered. In this report, for example, the youth said that they normally queued together with older clients to seek sex education and other health services. Both male and female youth reported that health providers or other clients were known to report youth to their parents, resulting in fear of going to health facilities to access sex education services ("Field Observation", n. d.).

Going through health reports from Bwaila hospital, September 2020 and Kawale FPAM monthly reports, September 2020 revealed that reproductive health services, HIV counseling and testing, youth group meetings, and outreach youth-friendly training are common sex education programs available to the youth in Lilongwe ("Field Observation", n. d.).

Figure 2
Available sex education programs



Results also indicated that 50% of those seeking sex education accessed sexual reproductive health services and 30% of those seeking sex education services participated in HIV testing and counseling. 10% were engaged through youth group meetings and outreach youth services respectively (Figure 2).

The Malawi National Statistical Office (NSO) in the *Malawi Demographic and Health Survey [MDHS] (2018)* discussed the challenges facing the youth-related in accessing sexual and reproductive health services. MDHS emphasized that to avoid the breaches of confidentiality, some youth prefer to access reproductive health services to understand sex issues from health facilities where other users would not know the services they were seeking, over community health workers from their communities or outreach activities that are specifically for sex education provision. The most common suggestion according to *Bongaarts (2016)* is that some youth prefer youth clubs, where youth could share information freely and service providers could offer sex education and commodities. The second most common suggestion among youths according to *Dauglas (2018)* is that the most common service parents prefer was the need for more sex education and family planning counseling for youth. 80 percent of the participants in *Stanley (2020)* study said that counseling would ensure youth understand the importance of sex education in the prevention of STIs.

Sherriff (2020) (Malawi technical assistance on the effects of alcohol and drug abuse) observed that adding youth-specific spaces and times for sex education provision, youth clubs, better counseling services, and family

planning provision and information in school activities is one of the best approaches in sex and behavior change among the youth. Despite these suggestions in the Sheriff's study, the evidence of some interventions is mixed. In the first pilot survey for UNICEF conducted by Chinagwa (2020), youth clubs are the best alternative for sex education and behavior change interventions than schools. Chinagwa believed that youth clubs are associated with improved sex education knowledge but they have inadequate support from both the private and public sectors. Furthermore, according to a review of 18 youth center programs in Lilongwe by The United Nations Educational, Scientific and Cultural Organization - UNESCO (2018), sex education programs benefitted a minority of the target youth population who are likely to be male and educated. According to UNESCO, incorporating sex education information in schools, especially comprehensive sex education, can be effective when it includes a focus on gender and power relations. Malawi's 2015–2020 YFHS strategy aimed to establish and strengthen 'safe spaces for youth' (i.e. youth clubs) and increase access to comprehensive sex education. But societal, political, and funding pressures can affect the content and quality of school- and youth-focused programs according to Likongwe (2016).

Understanding if sex education initiatives promote behavior change among the youth

Sexuality continues to be, in many countries, an area that requires urgent interventions. In recent years, evolution has been observed in terms of sexual and reproductive health in Malawi, but not all claim to have a preventive sexual behavior yet, and not having preventive sexual behaviors can have serious consequences in terms of public health as narrated by Reis et al. (2011). Sex education is an essential package in the prevention of sexual risk behaviors and its associated adverse outcomes of unwanted pregnancy, HIV/AIDS, and other STIs in adolescents. Young people receive reproductive health education from multiple sources, including formal education (e.g., school) and informal education (e.g., parents, peers, and the media).

In Malawi, the rate of pregnancies, births, and STIs among adolescents continue to present public health challenges due to the health implications associated with these events. Certainly, the increased use of condoms and contraceptives among adolescents would help reduce the

effect of sexual risk behaviors on health. However, and despite the good national estimates about condom use (82.5%), and use of birth control pills (53.5%), at last, sexual intercourse among sexually active adolescents suggest room for improvement as documented by Reis et al. (2011).

According to House et al (2010a), a key public health question is why have our risk-reduction strategies not resulted in a uniform reduction in risk behaviors and promotion of health? One partial answer to this question may be that risk-reduction strategies do not promote more general developmental skills that would enable and motivate young people to employ these prevention strategies in their lives. Positive youth development strategies that promote general developmental skills have been seen as an alternative to approaches that promote adolescent health by focusing solely on risk factors. A growing amount of research stresses the importance of understanding the role that promotes and/or protective factors play in reducing negative health outcomes for youth, including adolescent sexual and reproductive health outcomes as documented by Abma et al. (2004).

There is some evidence that positive sex education can be effective for producing long-term behavioral changes and ultimately reduction in teen pregnancy and STIs as described by House et al. (2010b). The most recent systematic review of randomized controlled trials of adolescent pregnancy and STIs prevention programs calls for future research into sex education programs developed from suggestions made by young people that emphasize negotiation skills in sexual relationships and communication as concluded by DiCenso et al. (2002). For this reason, most researchers emphasize the importance of sex education from the earliest school years and identify young people as an important target group for prevention interventions. There are several good reasons to study sex education and its use in the adolescent population. The question remains as to the best way to educate individuals about sex and sexuality in developing countries as documented by Esere, (2008).

According to the behavior theory - the model of information-motivation behavioral skills (IMB), if sex education aims to improve safe sexual behavior of individuals, the first aim must be to improve knowledge and then foster motivation (that includes attitudes,

behavioral intentions, and subjective norms - perceived social support to perform these actions) and behavioral skills. This means that young people who have the knowledge, information, motivation, and skills can change their attitude and subsequently their sexual behavior as stated by Bell (2009).

Alternatives to promote behavior change among the youth According to the Lilongwe District Health Office Report (2018), counseling and behavioral interventions have been considered as primary prevention interventions against STIs including HIV, as well as unintended pregnancies in Malawi. These interventions can be incorporated into many different settings and include comprehensive sex education, safer sex/risk-reduction counseling, condom promotion and provision, and targeted interventions for high-risk and vulnerable populations, such as adolescents, sex workers, and men who have sex with men. Besides, counseling can aim to improve STIs' prevention and care-seeking behavior. These interventions are available, but lack of evaluation for the effectiveness, awareness, and training, discomfort with discussing sexual health issues, and stigma related to STIs remain barriers to the initiatives.

Different researchers and authors have discussed sex education and STIs at global, regional, and local levels as a preventive measure for the further spread of STIs. There are different views and perspectives about sex education and STIs prevention. In a study conducted by Fernandez-Romero et al. (2015), the researchers recommended the use of multipurpose prevention technologies mainly among women to prevent the spread of STIs and also unintended pregnancies. Such advanced innovations are really important in halting the spread of STIs. However, the aspects of promoting accessibility and availability of the products was a gap in this study because such technology will directly be associated with a cost that can be a deterrent factor mainly in developing countries where poverty levels are predominant. Furthermore, the usage of the internet and social media in promoting sex and reproduction education among women has also been underscored by Heart et al. (2018).

In this century, technology is prompting people to access information in real-time and this is capable of increasing sex education coverage thereby reducing the spread of STIs. Nevertheless, this intervention and other cost-effective ones need to be properly supported mainly in

developing countries where internet connections are not stable, expensive and even the coverage of information, communication and technology gadgets is low and this can, in a way, prevent youths, mainly women, from accessing vital information that can promote good sexual behaviors. In a study conducted by Van Wees et al. (2020), it was documented that condom use increased in chlamydia-positive clients but decreased in Chlamydia-negative participants.

Several factors can affect sexual satisfaction and sexual intimacy including shame, envy, self-consciousness, trust, love, attachment, motivation for pleasure, and self-esteem, particularly within minority ethnic and cultural groups (Black et al., 2005). Based on a pilot survey conducted by Ivarsson et al. (2010) professionals' views on sexual information indicated that one of the roles of sex therapists and sexual medicine physicians is to enhance the opportunity and experience of intimacy within both the individual with self-satisfaction as well as within relationships. The interplay of sexual wellbeing and sexual satisfaction and maintaining levels of sexual desire that are favorable for both partners must be a stated and agreed goal.

The study conducted by Kevan (2010) is regarded as one of the most comprehensive worldwide studies of sexual behaviors published by different scholars. The survey was a development of previous annual surveys by a multinational manufacturer of condoms and related products to understand the sexual behaviors among the youth and the needs of the general population and potential customers. By use of a structured questionnaire and by the employment of an independent third-party agency, Harris International, more robust data was obtained than in previous internet surveys. Kevan's study revealed that sexual knowledge among the youth is limited as some youth relates sex directly to the enjoyment of a fully satisfying sex life with their peers.

Clotey and Dalabetta (2010) in the sex behavior analysis journal described young people's recall of school-based sexual health education as poor for positive areas of sexual health, such as having good relationships, rights, and responsibilities, and being good future parents.

Grosskurth (2005) expressed that appropriate sexual behavior to the youth may lead to an improvement in

overall sexual wellbeing. Nevertheless, there is scope for more comprehensive coverage of sexual issues from biological topics to those regarding emotions and relationships.

Based on the findings by Moses et al. (2007) in the sexual wellbeing global survey shows a rich diversity and difference between groups, such as the elderly and among the youth in countries and cultures on sexual influence and satisfaction. Some reasons to account for this have been considered. Several factors can affect sexual satisfaction and sexual intimacy including shame, envy, self-consciousness, trust, love, attachment, motivation for pleasure plus self-esteem, particularly within minority ethnic and cultural groups. Lack of sexual satisfaction has been identified as one of the factors influencing the spread of STIs among the youth.

Some youth in African countries seek services from sex therapists. One of their roles is to enhance the opportunity and experience of intimacy within both the individual with self-satisfaction as well as within relationships. The interplay of sexual wellbeing and sexual satisfaction and maintaining levels of sexual desire that are favorable for both partners must be a stated and agreed goal. Clinical attention to issues that assure sexual satisfaction and sexual wellbeing can have considerable influence on overall sexual desire and general wellbeing.

DISCUSSION

This study captured different study perspectives on sex education and STIs. Data had been obtained from the cross-section of journal articles and other publications. Partly, the study captured primary data from key informants about STIs and sex education as a preventive measure. This allowed the researchers to make within and across section comparisons of data based on different perspectives. However, the study also has a few limitations. Data were explored from 1 district out of 28 districts in Malawi. The researchers did not select any districts in the northern and southern parts of the country to compare responses by region even though regional differences often reflect cultural or religious differences as far as STIs are concerned. Also, given the sensitive nature of sex education, especially among youth, people have been reluctant to share health reports and publications related to this study.

Out of 51 articles captured in this study, 60% concurred that sex education is an essential package in the prevention of sexual risk behaviors and its associated adverse outcomes of unwanted pregnancy, HIV/AIDS, and other STIs in adolescents. 30% of the articles have revealed that young people are having difficulties accessing sex education and this promotes the further spread of STIs among the youth. In Lilongwe, rates of pregnancies, births, and STIs among adolescents continue to present public health challenges due to the health implications associated with these events. Certainly, the increased use of condoms and contraceptives among adolescents would help reduce the effect of sexual risk behaviors on health; however, and despite the good national estimates about condom use and use of birth control pills, at least, sexual intercourse among sexually active adolescents suggest room for improvement (Reis et al., 2011).

This study has also focused on the quality and friendliness of sex education services that include availability, accessibility, acceptability, and equity. Several studies, for example, found issues related to STIs, and in most studies, young people identified barriers to accessibility, including the cost of services in some studies directly related to sex education and STIs. A previous review of various STIs in Malawi also found that cost and shortages of services were barriers to accessing sex education. Besides, a study in Malawi found that cost was also a barrier to STIs services; however, young people were often aware of free health services provided by the Malawi Ministry of Health. In their nonsystematic review, Hock-Long (2018) found out that cost was less of a barrier for adolescents accessing sex education in urban areas in Malawi. A previous review of adolescent health services identified studies in Malawi which found fewer barriers related to cost and availability of other sexual reproductive health services. These findings were supported by other reviews focusing on sex education and STIs across the world and various health services in Malawi.

The researchers used Microsoft Excel to analyze collected data and used a factor analysis approach. Further, the researchers have also adopted the diagnostic analysis which is a step further in statistical analysis to provide more in-depth analysis to answer the questions. This is also referred to as root cause analysis as it includes processes like data discovery, mining, and drill down and

drill through. After performing data analysis, the researchers identified areas requiring further study such as the impact of sex education on teenage pregnancies.

The study has determined causal relationships; hidden relationships were uncovered by looking at events that might have resulted in the identified anomalies. Probability theory, regression analysis, filtering, and time-series data analytics have all been useful for uncovering hidden stories in the data.

CONCLUSIONS

This study used qualitative and mixed methods research focusing on the effects of sex education and STIs as a measure of preventing further spread of STIs including HIV among the youth. Young people in Malawi and Lilongwe, in particular, continue to experience significant challenges with STIs including a lack of knowledge about STIs and lack of awareness of STIs services. Previous research focusing on adolescent pregnancies in Lilongwe also found a lack of awareness and knowledge about STIs. This study also identified the reported effects of sex education on STIs among young people.

Sex education programs are available in Malawi and they are the most preferred services when it comes to sexual behavior change. Efforts need to be mustered to improve or increase sex education initiatives and promote their satisfactory uptake.

Recommendations

These researchers have made the following recommendations;

1. The public and private sectors should work hand in hand to formulate and enforce sex education policies to prevent the further spread of STIs among youth.
2. The government should support community-based youth-friendly services in both urban and rural areas.
3. Non-governmental organizations working in the health sector should formulate partnerships and collaborations in the fight against STIs.

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