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The Effectiveness of HIV Media Communication in Fighting HIV among Adolescents and Young Adults at a Training Institute and a Non-Governmental Organization

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Abstract
The HIV epidemic remains a serious concern to society with its multiplication observed among adolescents and young adults who are transiting to adulthood.Zambia, a part of Sub-Saharan Africa had 48,000 of (15-49years) HIV Infetctions in 2018 with 39% of that adolescents and young adults (15-24 years). The need to reduce the HIV infection rates, especially among adolescents and young adults is a common feature in HIV programming interventions. Particularly, these have been interventions through use of media communication. HIV media communication has been necessary because communication is a process to disseminate or make common or share what has been heard.The study investigated the effectiveness of HIV media communication in fighting the HIV epidemic among adolescents and young adults. A descriptive study design was adopted by use of a sample size of 94 respondents from Solwezi Training Institute and two representatives from the Solwezi Youth Alive Zambia, a non-governmental organisation. A semi-structured questionnaire and an interview guide were used as data collection tools.The findings of this study indicated that 83% of the respondents accessed HIV information through Radio that is inbuilt in a Mobile Cellphone device. Further, 77% of the respondents had engaged into interpersonal communication to talk to their friends about HIV matters.Conclusively, it has become clear that reducing HIV infection rates is partly predicated on the availability and accessibility of adequate information from all forms of media for both adolescents and young adults. Thus,successes to end HIV transmission among adolescents and young adults will depend on continued interventions of HIV media communication to effect Behavioral change and increased knowledge regarding the HIV epidermic
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1. Introduction

The HIV epidemic among Adolescents and Young Adults (henceforth AYA) remains a challenging feature in most societies (Naswa and Marfatia, 2010). Zambia which is part of Sub-Saharan Africa, had 48,000 (15-49years) of HIV Infections representing 39% of AYA (15-24 years) in 2018 (Heri, Cavallaro, Ahmed,et al, 2021). The rate of infections within the AYA population, raises concerns and questions about the impact of programmes directed towards intervention to stop the spread of the virus. Particularly, various forms of media communication have been used to help fight the transmission of the HIV epidemic on AYA.

Communication manifests in various forms namely verbal, non-verbal, listening, visual, and written. Media communication has been an approach that communication scholars have relied upon to inform the general population about HIV as far back as the virus emerged. Media communication have had to play a major role in informing most populations on various messages on HIV prevention, safer sex and several others (Edgar, Noar and Freimuth (Eds) (2009). Media communication refers to the methods or tools in which information can be exchanged and communication can be facilitated. Examples include telephone, television, e-mail, Web sites, video conferencing, and instant messaging (Luhmann,1992).

Over the years, humans have depended on forms of media to communicate. Rosengren (2000) allude that media has been necessary to facilitate communication in as far back as the Stone Age era where people communicated using stones, fire, smoke, and wood paper and many other tools. Since then, media has been evolving and in recent times its been driven by technological advancement; an era of print, electronic and digital technologies.

Media and communication or media communication are rightly understood to have had effects on HIV programming relating to knowledge on HIV transmission and prevalence of risky sexual behaviour when

interventions are set. Media communication have been said to contribute to creating more awareness and knowledge about HIV. Studies have shown the effectiveness of media communication in creating awareness, increasing knowledge and others. Media communication does contribute to the increase in interpersonal dialogue among peers on social matters inclusive of HIV (Odimegwu, Adewoyin and Mutanda 2020). HIV media communication interventions have led to use of other practices such as peer education which has also been suitable to promote behaviour change when practices promoted relate to testing and counselling (Nary and Chikombero in Unicef, 2018). However, media communication is indirect as opposed to interpersonal that is direct.

Certainly, media communication has been used by humans in transmission of information to the intended audience . In this regard, media communication on HIV has played a role in various societies. Particularly, for an audience of AYA, HIV media communication has been critical to understand because this population continue to record increased HIV infection rates (Muthar et al 2020). The AYA population are critical to any society as their lives need to transit to adulthood with a desired condition of health or wellness and also to help reduce the medical burdens of a State (Naswa and Marfatia, 2010).

The AYA form part of a vulnerable group in most societies which raises concerns of how HIV based media communication interventions are effective to effect behavioural change. J. Li et al, (2012) noted that vulnerability of AYA had been found to be among those out of school. Others indicated to have had limited knowledge about HIV transmission when findings showed that there was high prevalences of unprotected sexual activities and most lacked access to health services. What was of interest to this group was that most information obtained in understanding them had been through media communication facilities such as Television, Radio and the internet. Media communication have enabled AYA to access information about HIV as such media tools tend to be handy to most that have access.

Another thing is that the vulnerability of AYA to HIV, have among other factors, shown higher infection levels towards females than males. Muthar et al (2020) assert that on the 290 000 of new HIV infections experienced in Eastern and Southern Africa included, two thirds of those AYA were females. The AYA females who represented the highly vulnerable indicated to have had early sexual debut, transactional sex, sexual violence and other things that led to HIV infection increases.

It has certaininly been critical to halting HIV infections by means that are effective when transmission levels continue to increase especially among AYA. HIV media communication usage has been based on designed messages regarding sexual health to inform populations about the understanding of HIV transmission risk factors such as risk behaviours and how to prevent its transmission. Sexual health information communicated has been beneficial to AYA who are on the stage of life development to adulthood (Abubakari et al, 2022). In media communication strategies designed to halt HIV infections, most have shown potential to safeguard human practices such as stigma, influencing people to seek health behaviours leading to testing for HIV and accepting available forms of anti retrieviral therapies in an event one is found reactive to the virus.

Media Communication has also been involved in commemorating dates in a yearly calander that have been enacted for creating HIV awareness such as the National HIV testing Day on 27th June and World AIDS Day, on 1st December. Such dates have been commemorated in form of HIV media communication messages using digital platforms on websites; social media applications such as facebook, twitter; services locator computer software application and personal experience stories sharing to targeted audiences or to the whole society. These messages have featured HIV information to encourage risk behaviour reduction, HIV stigma, adherence to treatment and many other strategies that stand in a way to help halt the epidemic.

In many other societies HIV media communication continue to be used for reaching out to AYA as a vulnerable population. A study was conducted at Solwezi training institute and Solwezi Youth Alive Zambia , non governmental organisation to identify forms of media communication facilities that AYA had related to in accessing HIV communication information.

1.1 Objective of the study

The study sought to investigate the effectiveness of HIV media communication in fighting the HIV epidemic among AYA at Solwezi training institute and Solwezi Youth Alive, Zabmia, a non-governmental organization.

2.Research methods

The method employed was descriptive for exploring the study of media communication by adopting a case study of AYA at Solwezi training Institute and Solwezi Youth Alive, Zambia, a non-governmental organization.

2.1 Study population and sample

The population consisted of AYA learners at Solwezi training Institute, representatives of Solwezi Youth Alive, Zambia, a non-governmental organization. The 94 AYA learners were sampled (Krejcie and Morgan, 1970) and two representatives from the non-governmental organization

2.2 Data collection

A semi-structured questionnaire, was used to collect data at Solwezi Training Institute from the 94 learner respondents. Instructions were indicated in the questionnaire for respondents to either accept or decline to answer by ticking were applicable. An interview guide for face to face interviews was also used to obtain data information from the two non-governmental organization representatives.

2.3 Data analysis

The data collected from questionnaires was captured using SPSS for generation of frequencies and percentages on responses from the learner respondents. Themes were also generated from text formed from collected data from interviews and open ended answered questions leading to interpretation and analysis to establish meaning and worthiness of information.

3. Results and Discussions

3.1 HIV communication and Social Media

The different modes of information sharing by means of using media tools did have great influence within the targeted population of this study; that is, learners at a training institute and a non-governmental organization representatives.

The findings presented in table 1 indicated that 64.9% of the respondents had accessed HIV messages through television, whereas 53.2% had accessed HIV messages through radio. The 30.9% respondents had indicated that they received HIV communication through different media within a period of two months and a significant number of respondents 77.7% indicated that they discussed HIV related issues with friends. These study findings revealed that the majority of adolescents and young adults accessed HIV communication by chatting to friends as they perceived the personalised communication and the open environment being an effective means of circulating private information about their everyday lives which are shared mostly to social media networks.

Social Media use has been mentioned with its nature on anonymity as platforms helping to decrease stigma, fear, and discrimination around HIV and allow participants to tell personal stories about their sexual orientation and HIV status in a manner they would not with friends, family members, or sexual partners offline (Conserve, D.F. et al, 2015). These findings support a 2009 survey; were 99% of South African university students accessed the Internet with the main purpose of accessing social media platforms (Student Village, 2009). High usage statistics have made a compelling case for the inclusion of social media as part of comprehensive interventions aimed at behavioural or social change relating to HIV media communication (Bennett & Glasgow, 2009; Young & Rice, 2011). Social media has indicated benefits when used as a media commucation tool. It has the ability to receive and share information including access to an alternative, non-traditional source of information about HIV prevention and testing as reported in several studies. These studies described users appreciating the ease and convenience of accessing information related to HIV care, treatment, and prevention through social media. One study explored how social media users interested in HIV research in India were able to share information with other local and global users engaged in the same issues (Desouza R, Jyoti DM. Global, 2008). In another study, it described how teens use their phones to find medical information and share information about HIV and other sexually transmitted infections on social media ((Divecha Z, Divney A, Ickovics J, Kershaw T, 2012).

In table 1, 17.4% of the respondents did indicate that they had experienced some form of inertia in discussing HIV issues with friends citing issues of privacy and confidentiality as inhibiting factors. Similar to this, is with one research found that teens were wary of learning about and sharing sexual health information via online platforms and prefer to learn about sexual health topics from healthcare professionals, family members, and friends (Bleakley, Hennessy, Fishbein, & Jordan, 2009; Divecha et al., 2012; Jones & Biddlecom, 2011). However, the now evolution of social media has made sharing personal information (e.g., photos, videos, birthdates, real names) online become increasingly normative (Boyd, 2014; Madden, Lenhar t, Duggan, Cortesi, & Gasser, 2013). Therefore, the inertia experienced in discussing HIV issues has been associated with disclosure of ones' HIV status among friends which is attributed to initial misinformation about severity of HIV causing premature death and others that were introduced into society and bred stigmatization among all either uninfected or affected(Kimera E, et al. 2020). On the contrary, there is also some documented evidence of inconsistent outcomes of mass media campaigns, (Asp G, Odberg Pettersson K, Sandberg J, *et al*. 2014) and some authors have argued that the effects observed are short term.(Meekers D, Van Rossem R, Silva M, *et al*. 2007) . In certain previous studies it was argued that the mass media by addressing general messages or exposing substantial amounts of sexual content can cause harmful influences on adolescents and even promote risky sexual behaviour among adolescents(Boyd D, 2014).In contrast, another set of papers found that mass media intervention such as awareness campaigns, because of their reach and effectiveness, can be used as efficient channels to promote sexual health among adolescents (Jones K, Eathington P, Baldwin K, Sipsma H 2014).

3.2 HIV communication and Radio

On the use of Radio in media communication, findings in table 1 showed that 83% of respondents used a radio imbedded into their Mobile phones, while 13.8% indicated they used portable radios and 3.3% were not sure. The choice of media gadgets implied convenience when it came to accessing HIV messages by recipients. These findings were also consistent with Keating et al. (2006) and Bessinger et al. (2004) who identified a relationship between radio messages and self-efficacy of HIV intevertions. Such findings showed that broadcast media helps in facilitating discussion on condom use and other HIV prevetion methods between partners which significantly reduces the risk of HIV infections.

Agha (2003) suggests that there was a very strong correlation between exposure to media messages transmitted through radio and behaviour change. The part of radio HIV messages influence the uptake of knowledge as it appeals to its audience as entertainment but affecting behavior change gradually. A study was conducted on an HIV radio drama, investigating the response rate from respondents. The study was experimental using a placebo-controlled approach. The drama, after two weeks of a follow-up to listeners' reaction, showed a statistically significant effect to listeners preferences to forms of HIV behaviour practices towards ending HIV transmission (Green,Groves and Manda, 2021).

The 53.2% respondents indicated in table 1 findings revealed that they were able to access HIV communication through radio as it was viewed as a convenient means of accessing HIV communication. Those communicated to, allude to a radio's interactive nature which allowed for continuous dialogue and discussion even after the broadcast. The respondents revealed that they relied on the radio for current news because they considered reading newspapers and journals which are not academic as time wasting.

Bago and Lompo (2019) did confirm that listening to radio at least once in week had an effect on the likelihood of adolescents to test for HIV with a probability of 5.79 percentage over print media which had 4.88 percentage. The findings are consistent with the study findings of adolescents recommending listening to radio on their cellphone devices to be the best mode to accessing HIV information.

A representative from Solwezi Youth Alive Zambia (SYAZR1), said at an interview, *'The radio in this community is very cheap and affordable by most youths than a television. As an organization, we use radio as one of our HIV media programmes interventions than Television'* . However, 41.5% of respondents as indicated in table 1 showed that they did not obtain HIV communication through radio as they preferred to use radio for obtaining academic information and other news items only. On the other hand, 5.3% of the respondents were not sure about using radio as a means for accessing HIV communication.

In another finding in Table 2, HIV media communication through radio had more respondents who accessed a radio inbuilt in a mobile phone. A mobile phone which has an inbuilt radio is seemingly more effective for transmitting HIV media communication as it has more features as opposed to an ordinary radio.A mobile phone is accessed by billions of people globally regardlesss of their backgrounds. A study by Nam aidsmap, (2009) targeted use of mobile phones to disseminate HIV messages such as bulk text messages on HIV prevention, positive living, adherence to treatment and many other behaivoural change practices. Therefore, a preference to accessing radio on a mobile phone is way beyond the need for radio use only but to include other many use involving HIV prevention strategies. The many features associated with a mobile phone have increased options into use of digital media communication by organizations dealing with HIV related matters regarding HIV prevention.

3.3 HIV communication and other media

Several studies suggest that media communication, in print, digital and electronic, does have a profound impact on HIV education and prevention; and that there is a strong correlation or association between exposure to the media and the ability to acquire HIV knowledge which can help an individual avoid risk of HIV infection (Agha, 2003; Keating et al, 2006; Taggart et al, 2015; Obono,2011). The findings in Table 1 revealed that 64.9% of AYA accessed HIV communication by watching television. Television is a media tool that has been part of creating awareness about HIV on broadcast media and can help reduce the spread of HIV by bringing to attention sexual behaviours, attitudes, and traditions driving the pandemic' (South African Broadcasting Corporation Report (SABC), 2007: 12*)*. The programme Coordinator at Solwezi Youth Alive Zambia indicated that they relied on the use of print media such as Information Education Communication Materials (IEC), Fliers and Newsletters to disseminate information about HIV to their target population, the AYA.

In table 1, findings revealed that 30.9% of respondents had viewed HIV communication using various media within a period of two months, while, 24.5% indicated that they had not and 44.7% were not sure. Social media is among the many media platforms were AYA view or reads about HIV information since it has become more than a platform for social interaction and attracts about 93% of AYA's access in search of information(Rideout & Fox 2018). For instance Facebook has become a media tool beyond individual interactions but open to any acceptable nature of information. The social media platforms to a large extent are determined by how individuals connect through both collaborative and participative online information (Boyd &

Ellison, 2008; Kaplan & Haenlein, 2010). In several studies, social media users (Conserve et.al., 2015) including adolescents, noted that social media services such as SMS text messaging and Facebook allowed them to communicate about topics that they felt uncomfortable discussing in-person, such as condom use and HIV testing. In another study (Kvasny L, Igwe C, 2008), a group of black American bloggers reported that the use of social media, specifically blogging, opened channels for communication about HIV. In two other studies it was reported that the anonymity of the website allowed adolescent users to seek HIV prevention information (Yamauchi, E. 2010) and for participants to successfully engage in the intervention (Rhodes, S.D. 2004). The discussions were consistent with previous studies which described videophone (Skrajner, M.J, et al, 2009) or webcams (León A, et al, 2018) as components of the social media platform used for engagement into interventions.

Media communcation thrives in the digital era as Chou et al.(2009) Wiid, Cant & Nell, 2013) assert that it brngs a singular advantage of social media, its ability to diffuse through the population regardless of age, education, race or ethnicity or geographic space or time. In this context, the opinions, experiences and perspectives of online communities are increasingly becoming important to AYA social media users, as they refer to these digital networks as reference for their own lives (Universal McCann, 2009). However, in comparison to traditional forms of media (e.g., television, movies, and music), youth report much less sexual content being depicted on the websites they visit (Ybarra et al., 2014).

Consequently, a research conducted after the surge in social media uptake suggests that the school setting remains an important source of HIV information as youth with lower intentions to have sex report greater exposure to HIV/STD prevention messages in schools. The limited access to sexual and reproductive health (SRH) information, especially among adolescents, undermines efforts to bring healthcare services closer to the people which further negatively affects progress towards universal health coverage (Sserwanja Q, Mukunya D, Nabachenje P, *et al,* 2022). Despite Zambia having registered an increase in the use of mass media among the young population through initiatives such as information communication technology (ICT) clubs in schools and the integration of ICTs into the education curriculum (UNZA Repository,2018), there are still challenges of low access HIV information across populations.

4. Conclusion

The increasing rate of HIV infections among AYA has had to seek redress on the many interventions on HIV programming and projects. This does not leave out investigating the effectiveness of HIV media communications among AYA due to concerns with regard high number of HIV infections in the most parts of Sub-Saharan Africa. HIV media communication does have an impact on AYA as demonstrated from the study findings which indicate that mass media programmes can influence HIV-related results amongest AYA, even though not on all campaigns. This suggests that more SRH programmes may need to take advantage of social media platforms to deliver more HIV-related messages so as to strengthen traditional mass media (print media, radio and television), and enhance the levels of HIV testing and HIV-related knowledge among AYA. Campaigns that include television require the highest threshold of evidence, yet they also yield the strongest evidence of effects. This suggests that the rate of exposure to mass media increases both AYAs' likelihood to get tested for HIV and increase their HIV-related awareness score.

Media communication is a tool that has helped drive HIV communication to a level where it is now and as long as AYA are influenced by media communications, it is to be regarded and recommended strongly for increased HIV media communication interventions in order to achieve the fight to end HIV among AYA by 2030. It is certain that HIV media communication do have a measure of effectiveness, however, most HIV media communication intervention programmes are not sustainable due to lack of financial resources. The fact is that most HIV media communication programming are relevant and need to be utilized to help fight the HIV epidemic among AYA and they all need a component of financial investment.

There is therefore need for SRH programme planners to stay informed about the media usage of AYA, considering that the platforms which the youth communicate with online are ever evolving hence the need to be flexible and incorporate developing technologies into various HIV and sexual reproduction programmes. Only then will programme planners be able to fully leverage the effectiveness of these platforms to successfully and efficiently spread sexual health information to AYA. The findings in this study demonstrate that AYA use social media to find and distribute sexual risk-reduction information which highlight the need for further investigation into these practices. It is therefore recommended that more localized approaches are designed to maintaining HIV media communication programmes for sustaining and keeping AYA informed all the time.

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Table 1: Respondents accessing forms of media communication tools for HIV information

Parameter	**Total respondents**	**% who said 'YES'**	**% who said "NO"**	**% who were not sure**	**% had other options**
Access to Television	94	64.9	31.9	3.2	**0**
Access to Radio	94	53.2	41.5	5.3	**0**
Seen HIV Communication on any type of media within two months period	94	30.9	24.5	44.7	**0**
Talked about HIV matters to friends	94	77.7	17.4	5.3	**0**

Table 2: Types of Radio for accessing HIV communication

Parameter	**Total Respondents**	**% Mobile Cell phone Radio**	**% Portable Radio**	**% Who were not sure**	**% had other options**
Forms of Radio Gadgets to access HIV Communication	94	83.0	13.8	3.2	0