Chapter 8

Communicating HIV/AIDS Biomedical Prevention Strategies Amongst Young Urban Women: Use of Pre-Exposure Prophylaxis (PrEP) in Kenya and Uganda

Denish Otieno

Abstract

In sub-Saharan Africa, the HIV epidemic continues to affect females aged between 15 and 49 years disproportionately more than males. The overall objective of the study was to establish how communication about PrEP influences HIV/AIDS preventative behaviour amongst young women, specifically to establish sources and the framing of PrEP information for young women. The health belief model underpinned the study as well as the two-step flow theory. The study used a qualitative research approach. Convenience sampling was used. Data was analysed thematically and presented in the form of narratives. The study determined that communication on PrEP influences young urban women to accept PrEP. Health facilities act as key sources of information on PrEP. Radio, television and newspapers were found to be reinforcers of PrEP information. Young urban women with multiple sex partners were found to have deeper social and peer-based networks that help to create PrEP awareness. The research findings will likely inform HIV/AIDS advocacy organisations on the importance of communication within social networks in strengthening PrEP discourse.

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Research Operational Terms and Abbreviations

AIDS: Acquired Immunodeficiency Syndrome

Community: A collection of households that share common interests, usually made up of at least 5,000 people (or 100 households) living in the same geographical area, and normally sharing similar culture, social practices, beliefs, norms and value systems (KNBS, 2024).

HIV: Human Immunodeficiency Virus

KK: Kisumu, Kenya study participant

KU: Kampala, Uganda study participant

NACC: National AIDS Control Council

NASCOP: National AIDS and STI Control Programme

Introduction

In Kenya and Uganda, past human immunodeficiency virus (HIV) / acquired immunodeficiency syndrome (AIDS) biomedical preventive mechanisms have attracted extensive media attention. The prominence of health prevention vaccines in mass communication channels have the potential to impact public perceptions of disease-preventive measures. In addition, in recent times, vaccines represent one of the greatest scientific achievements not only in Kenya and Uganda but worldwide in terms of improving life quality and expectancy. However, the public is not always aware of the important role of vaccines such as pre-exposure prophylaxis (PrEP) in preventing HIV/AIDS. Pre-exposure prophylaxis (PrEP) is an oral HIV medicine taken by people at high risk of contracting HIV so as to lower their chances of becoming infected (WHO, 2015). This underscores the knowledge gap in HIV/AIDS amongst the vulnerable population in Uganda in comparison with the vulnerable population in Kenya.

In Kenya and Uganda alike, the introduction of PrEP amongst vulnerable populations (those at higher risk of contracting HIV/AIDS) has been received with mixed reactions. Vulnerable populations, in the context of this study, are groups of people (in this case, young women) whose risk of contracting HIV is situational or contextual. In a radio interview discussing PrEP

efficacy, a female listener asked why a young woman would resort to the use of PrEP, while other callers asked why use PrEP when there are condoms? (DREAMS, 2016).

This chapter therefore highlights how communication of PrEP influences action amongst urban young women regarding HIV/AIDS prevention. In addition, it reveals key sources of PrEP information and how PrEP messages are framed. While there are many types of communication, this chapter discusses interpersonal communication and mass media channels of communication as key in determining how communication on PrEP occurs amongst populations at risk of contracting HIV/AIDS. In this context, the type of communication channel has the potential to generate rich information on PrEP amongst the target population. Information richness is defined as the ability of information to change understanding within a time interval (Humphries et al., 2013). The types of communication used vary in their capacity to process rich information, where richness indicates the capacity for immediate feedback, the number of cues and channels used, personalisation and language.

Literature Review

The important role of interpersonal communication for health

Wood (2010) defines interpersonal communication as a distinct type of interaction between people that is selective, systematic, unique and processual. It allows people to reflect and build personal knowledge of one another and create shared meanings. Wood (2010) goes on to argue that although it is said that interpersonal communication involves two or three people, the point of focus should be on what happens between people and not where they are or how many are present. Beebe et al. (1996) define interpersonal communication as a written or oral communication that occurs in a one-on-one or group setting. Therefore, it involves people relating in different situations and emotionally connecting. Interpersonal communication has the ability for sustained interactions amongst individuals and groups, unlike mass media campaigns that are typically of limited duration

(Hanan, 2009). In addition, interpersonal communication can be of a delicate and private nature, such as that involved in human sexuality.

Despite the effectiveness of interpersonal communication, there are some weaknesses with this approach. Firstly, interpersonal communication reaches fewer people than mass media. Secondly, interpersonal communication results in behaviour change that cannot be evaluated as easily as creating and maintaining awareness through mass media. Therefore, to overcome the weaknesses in interpersonal communication, mass media communication plays a vital role in behaviour change. Media campaigns can play an effective role in reinforcing interpersonal communication by, for example, focusing on gender roles in the family and community. This has encouraged men to engage in dialogue on HIV/AIDS prevention, rather than placing all the burden of decision-making on women. The importance of families for men and their protective roles in their families and community can be reinforced by mass media, especially in the rural and uneducated communities of Asia and Africa. Additionally, mass media plays a vital role in the dissemination of information to large publics with diverse demographic profiles (Hanan, 2009).

To sum up, media campaigns and interpersonal communication complement each other in the development of communication interventions for HIV/AIDS prevention and care. Mass media can convey information effectively and thereby provides effective support for face-to-face communication. Therefore, as members of a network or community continue to discuss PrEP as an HIV/AIDS biomedical prevention mechanism, its acceptability increases with time. Although it occurs on a small scale, a network of PrEP gatekeepers has the potential to continue to increase over time. Rich communication media enable people to interpret and reach agreement about unanalysable, difficult and complex issues, while lean media are appropriate for communicating routine activities. The effectiveness of how PrEP is communicated and framed, and which sources of information are used remain the primary concern of this paper.

Using PrEP in sub-Saharan African contexts

Pre-exposure prophylaxis (PrEP) is an oral / injectable HIV medicine taken by people at high risk of contracting HIV so as to lower their chances of becoming infected. The Centers for Disease Control (CDC) through its 'HIV Risk Reduction Tool', notes that daily PrEP reduces the risk of contracting HIV from sex by more than 90%. A person's risk of contracting HIV from sex can be even lower if PrEP is combined with condoms and other prevention methods. Despite the evidence of PrEP efficacy and years of programmes to provide it, there is still limited awareness of PrEP amongst the population that is at high risk of contracting HIV in sub-Saharan Africa (Irungu & Baeten, 2020). A number of HIV prevention interventions (biomedical, behavioural, and structural) have mitigated the spread of HIV (Hosek & Pettifor, 2019), but the number of new cases amongst adolescent girls and young women remains unacceptably high (Ajayi et al., 2019).

In 2015, the World Health Organization (WHO) recommended the use of tenofovir-based PrEP in individuals at substantial risk of HIV as part of a combination prevention approach. PrEP can be used discreetly and not at the time of sex – a characteristic that may make it especially important for women, including young women, adolescent girls, and all those who are concerned about acquiring HIV in the context of a stable relationship (UNAIDS, 2015).

Young women and adolescent girls are particularly vulnerable to HIV, and the use of oral PrEP is likely to have a positive impact in reducing HIV incidence rates (NASCOP, 2017; Ministry of Health, 2017). Continuous and intense dialogues about PrEP will lead to an increase in knowledge and awareness amongst adolescent girls and young women, thereby increasing its uptake. This therefore underpins interpersonal communication as key in creating PrEP awareness.

In 2018, of the three million people worldwide at substantial risk of contracting HIV, only 381,580 people were taking oral-PrEP. Of these, only 27% were from sub-Saharan Africa, with the majority of users being adolescent girls and young women (NAM, 2018). According to the AIDS vaccine advocacy coalition PrEP

Watch (2020), by July 2020, an estimated 31,000 to 32,000 people were using PrEP in Uganda, which was lower than the Ministry of Health target of 90,000 at-risk people. Raising awareness of oral or injectable PrEP is a necessary step to increase its use. Lunkuse et al. (2022) posit that knowledge of PrEP is still limited amongst adolescent girls and young women in Uganda.

In Kenya, research indicates that more than half (57%) of all new infections come from eight high-burden cities or regions – namely, Kisumu, Nairobi, Siaya, Homa Bay, Migori, Nakuru, Mombasa and Kisii County (NSDCC, 2021). In 2020, the National AIDS and STIs Control Programme (NASCOP) data revealed that Kisumu had recorded 4,661 new infections, while youths aged between 15 and 24 accounted for most of the new cases. However, according to a study by Ochieng in 2021, there has been a steady fall of HIV cases in Kisumu, Kenya, due to increased usage of PrEP. In Uganda and Kenya, awareness of PrEP is uneven amongst vulnerable populations, and there is also a dearth of literature on how communication influences the attitudes of young women towards PrEP use. This study therefore strives to fill this gap by establishing the sources of PrEP information and their framing.

The overall objective of the study was to establish how communication on PrEP influences the actions amongst young urban women in Kisumu (Kenya) and Kampala (Uganda) regarding HIV/AIDS prevention. The specific objective of the study was to establish the sources of PrEP information for young women and the framing of PrEP information.

Theory

The Health Belief Model

First developed by the psychologists Hochbaum, Rosenstock and Kegels, the health belief model attempts to explain and predict health behaviours by focusing on the attitudes and beliefs of individuals. The theory is premised on the understanding that a person will take a health-related action if they feel that a negative health condition can be avoided. The theory has four constructs representing the perceived threats and benefits:

perceived susceptibility, perceived severity, perceived benefits and perceived barriers. In this study the health belief model was used to explain and predict how information on PrEP influences the actions of young urban women - that is, if PrEP reduces the chance of contracting HIV/AIDS, is the high-risk population taking health-related actions to use it so as to avoid any negative health condition?

The formulators of the **two-step flow theory**, Katz and Lazarsfeld, posited that information flows in two distinct stages: first, individuals (opinion leaders), who pay close attention to mass media and its messages, perform their own interpretation in addition to actual media content. They then influence the wider population. The effect of a message on an individual depends more on their interpersonal relations to significant others in their networks of family and friends than on their direct exposure to mass-mediated messages. The theory therefore helped in understanding the complexities of how PrEP information reaches and influences certain audiences.

Methods

A qualitative research approach was used, and this informed the philosophical assumptions, data collection methods, analysis and interpretation. The research used the social constructivist / interpretivist paradigm, which holds that individuals develop subjective meanings of their experiences which are varied and multiple, leading the researcher to look for the complexity of views and rely as much as possible on the participants' views of the situation being studied (Creswell, 2014). Data was collected from young urban women in Kisumu from their natural settings. However, data from urban young women in Kampala, Uganda, was collected via communication with key informants through WhatsApp and Facebook Chart - hence the use of narrative technique in data generation.

The researcher followed the participants' leads and listened to their stories without any interruptions. Multiple data sources from key informants, journals and informal conversations were used to validate the accuracy of the stories.

Study Population and Sample

The study targeted women aged between 22 years to 35 years old and living in the cities of Kisumu (Kenya) and Kampala (Uganda). In Kampala, data was collected from six study participants, while in Kisumu, data was collected from 15 study participants. In addition, data was collected from two key informants. This therefore puts the total actual study participants at 20. Convenience sampling was used. Serem et al. (2013) note that this approach involves using whichever individual (elements) are available to the researcher on a first come, first served basis.

Data Collection

Data was collected through open-ended interviews via the WhatsApp platform and Facebook Chart for Kampala, and face-to-face for Kisumu. Desktop research was conducted throughout pre-field, data collection, research analysis and compilation.

Thematic analysis as a qualitative data analysis strategy was used, resulting in an inductive approach where themes emerged from the data. Thematic analysis is the search for themes of relevance to the research topic under which reasonably large amounts of data from different sources, such as interviews and documents can be organised (Hammersley et al., 2001). During data analysis, the following stages were followed: transcribing data, re-familiarising with the data, first phase coding, second phase coding, third phase coding and product report. Data was presented in the form of narratives.

Even though key informant interviews have been noted to have a limited scope and tend to produce bias either in the selection of respondents or respondents' views, they have advantages, including the opportunity to tap into the deep knowledge of respondents (Mwita et al., 2021). This advantage was relevant to this study, since it wanted a deeper understanding of how PrEP is communicated amongst young urban women and what its influence is. Two key informant interviews were conducted to seek more information on how PrEP is communicated amongst young urban women. One key informant was from Kampala, while

the other was from Kisumu. Both worked for HIV/AIDS advocacy organisations. Convenience sampling was used to gain access to them.

Chapter findings

How PrEP is Communicated Amongst Young Urban Women

In Kampala, PrEP messages were communicated in English, Kiswahili and Luganda. Most messaging was in the form of flyers (promotional materials) which were available in health centres; messages were also disseminated on radio and newspaper platforms. PrEP messages were however not translated into other local dialects to provide information richness to diverse groups of people. Message content across the platforms include adherence to PrEP, the efficacy of PrEP in reducing the risk of HIV/AIDS infection, forms of PrEP (oral and injectable), and guidelines for usage. Information on PrEP was only prominent in health facilities in the form of flyers, and not through radio, newspaper and television media.

In Kisumu, PrEP messages were communicated mainly in English and Kiswahili, and not in local languages (e.g. Luo), even though Kisumu is a cosmopolitan city. This gap is likely to be the reason why PrEP discourse is not popular amongst diverse groups who may have difficulty in understanding English or Kiswahili. Message content is the same as in Uganda. PrEP information is more available in health centres than on radio and television or in newspapers as popular channels of communication.

Sources of PrEP Information

The study participants revealed that they get to know more about PrEP only when they visit health facilities, where there are information leaflets on PrEP. Participants said that personal networks (friends) and community networks are where they get most updates on PrEP. The information is passed down by those who have visited health centres, because of the fear of having contracted HIV/AIDS from their partners after having unprotected

sex. The danger of this is the possibility of misinterpretation of PrEP information by those who have visited health centres.

> "*How the message is interpreted can encourage or discourage the uptake of PrEP. More effort should be put to come up with Information Education Communication Materials on PrEP that are written in local languages so that we create rich information base in the community … this will also reduce the current stigma that exist in the society … sex education is very important and it is high time PrEP debate to feature prominently in sex education talks in schools, churches etc.*" (Key Informant A)

Young urban women fear stigma when visiting clinics to seek information on PrEP, which means that the network depends on a few of their members to pass on the information. The stigma is more prevalent in Kampala; in Kisumu, young women reported increased visits to health facilities for PrEP information.

In both Kenya and Uganda, radio, television and newspaper platforms were not the main sources of PrEP information. Health facilities and personal networks were regarded as the main sources of PrEP information, and hence acted as a rich medium for PrEP information, while radio, television and newspapers acted as a lean medium for communicating routine activities, which is contrary to the power of mass communication channels.

How Access to PrEP Information Influences Actions

How does PrEP information influence the actions of young urban women?

In both Kampala and Kisumu, the study participants posited that they are more receptive to information on PrEP when the information passed on by those within their networks and health workers, since there is an element of trust from information sources, unlike when transmitted through radio, television and newspapers, since they believe that these types of media are just in business and broadcast the messages because the broadcast airtime has been paid.

Study participants said that they shared PrEP information discreetly for fear of being accused of having multiple sex partners. Information on PrEP, particularly its efficacy in reducing the risk of contracting HIV/AIDS, has led to a change in attitude, and belief in the HIV/AIDS biomedical prevention method amongst young urban women is therefore increasing in its uptake. However, the study ascertained that young urban women who have multiple sex partners were more aware of PrEP because they frequently visit health facilities. It was also established that there is a high likelihood that those with multiple sex partners have deeper social and peer-based networks, hence act as spreaders of PrEP information. The prevalence of PrEP awareness was also higher amongst non-condom users.

> "*I only talk about PrEP with my trusted friends, because any time people hear PrEP they think of you as having several multiple sex partners. I also discreetly visit the clinics especially when I am sure there are few people at the health facility*". (KU1 – Kampala, Uganda)

> "*We talk about PrEP when we go for women group meetings. This is because if you discuss with your husband he might think you have several partners. While it is them – men – who have more sex partners. So any of us in the group who doubts the health status of the husband is always encouraged to discreetly take PrEP ... yes my husband doesn't know I use it but I do because I know he has many sex partners*". (KU2 – Kampala, Uganda)

> "*It is true that most young urban women who have multiple sex partners are the ones who frequently visit health facilities for PrEP services ... in fact I am one of them and other women rely on us for PrEP information ... such as how it works ... reaction with the body ... because they fear visiting health centres to seek advice on PrEP*". (KK1 – Kisumu, Kenya)

> "*Me I don't understand what is written in PrEP posters, because they are either in English / Kiswahili and me I don't understand the languages. They should translate to us in Luo language. When we go for our weekly Merry Go Round, then my friends who understand English / Kiswahili always do help me to*

> *understand the information in the flyers … it is difficult to talk about PrEP in the house, even in church people don't want to talk about PrEP because of fear for being labelled a prostitute … even going with the flyers to the house is difficult, I have to hide them … I have a daughter who should know about PrEP but I fear to talk about it with her because it will be seen as I am encouraging her to have unprotected sex which can lead to pregnancy*". (KK 2– Kisumu, Kenya)

It was revealed that while a positive attitude towards PrEP use is steadily building, there is fear of the drug being misused by some reckless young urban women who might take advantage to have unprotected sex with multiple partners. This might reverse gains so far achieved in reducing new HIV infections amongst young urban women.

Another challenge is that as the number of women using PrEP increases, a high lapse rate might occur. This inconsistency in use might compromise its efficacy.

> "*Yes I use PrEP, but sometimes I forget or just get tired of swallowing it. I used it for only 2 days then I got tired … though when I go to our Merry Go Round then I hear my friends talk about their continuous use of PrEP, this encourages me to continue with it again*". (KK3 – Kisumu, Kenya)

Discussion

In accordance with the precepts of the health belief model, communication on PrEP in the study areas indeed occurs mostly through personal networks and from health facilities, and this influences young urban women's attitudes and beliefs towards PrEP acceptance. The perceived benefits of PrEP in reducing the risk of HIV infection helps young urban women in choosing positive health behaviour.

Young urban women who frequently visit health facilities for PrEP services act as gatekeepers and opinion leaders of PrEP information within their peer-based networks, which are mostly women with multiple sex partners; they infiltrate the complex

interpersonal relations in their circle of friends and families to communicate PrEP information. Success of information flow was attributed to strong interpersonal communication within the networks. In Uganda and Kenya, media outlets, radio, television and newspaper are not the main sources of PrEP information for young urban women but rather act as agents reinforcing the PrEP information already circulating within the interpersonal networks. This evidence supports the tenets of the two-step flow theory. Radio, television and newspapers should improve their messaging on PrEP and contextualise the content in local languages so as to simplify information to the audience; this will further help to reinforce interpersonal communication on PrEP.

Conclusion

This chapter investigated the attitudes of young urban women as part of the population at risk of contracting HIV. However, there are other sectors of the population at risk: adolescent girls, commercial sex workers, and men who have sex with men. These sectors should be studied too. The study also concentrated on the urban population, while rural areas also experience the burden of HIV/AIDS. The study found that peer-based networks supported by strong interpersonal communication that happens in the networks has proved to be a rich source of information on PrEP. However, how the information is interpreted can likely encourage or discourage uptake. Simpler messaging on PrEP translated into local languages should be produced to fill the misinformation and disinformation gap that exists. There is a high level of stigma surrounding PrEP; hence rich information should be created by the media to step up their messaging on PrEP in order to curb the current stigmatisation.

References

Aidsmap (NAM). 2018. *National AIDS manual: 380,000 People on PrEP globally, mostly in the USA and Africa*. [online]. Available from: https://www.aidsmap.com/news/oct-2018/380000-people-prep-globally-mostly-usa-and-africa-updated.

Ajayi, A.I., Mudef, E., Yusuf, M.S., Adeniyi, O.V., Rala, N. & Goon, D.T. 2019. Low awareness and use of pre-exposure prophylaxis among adolescents and young adults in high HIV and sexual violence prevalence settings. *Medicine (Baltimore)*, 98(43):e17716. DOI: https://doi.org/10.1097/md.0000000000017716. [Accessed on 2 October 2022].

Beebe, S.A., Beebe, S.J. & Redmon, M. 1996*. Interpersonal communication*. Thousand Oaks, CA: SAGE Publications.

Creswell, J. 2014. *Research design; Qualitative, quantitative and mixed methods approaches.* 4th edition. Thousand Oaks, CA: SAGE Publications.

Determined, Resilient, Empowered, AIDS-free, Mentored and Safe (DREAMS). 2016. *A radio interview to educate and inform about PrEP*. Radio Jambo, 97.5 FM. Kenya, JSI Research & Training Institute, INC.

Hammersley, M., Gomm, R. & Woods, P. 2001. *Research methods in education*: *Handbook.* Milton Keynes: Open University.

Hanan, M.A. 2009. HIV/AIDS prevention campaigns: A critical analysis. *Canadian Journal of Media Studies*, 5(1):129-158. Available from: https://bit.ly/481wGRo

Hosek, S. & Pettifor, A. 2019. HIV prevention interventions for adolescents. *Current HIV/AIDS Reports*, 16(1):120-128. DOI: https://doi.org/10.1007/s11904-019-00431-y

Humphries, S., Roger, D. & Flabouris, M. 2013. Understanding the role of medium in the control and flows of information in health communication. *Asia Pacific Media Educator*, 23(2):291–307. DOI: https://doi.org/10.1177/1326365X13517188

Irungu, E.M. & Baeten, J.M. 2020. PrEP rollout in Africa: Status and opportunity. *Nature Medicine*, 26(5):655-664. DOI: https://doi.org/10.1038/s41591-020-0872-x. [Accessed: 1 October 2022].

Kenya National Bureau of Statistics (KNBS). 2024. *The Kenya National Bureau of Statistics: Quality statistics for better lives*. [online]. Available from: https://www.knbs.or.ke/

Lunkuse, J., Kamacooko, O., Muturi-Kioi, V., Chinyenze, K,, Kuteesa, M., Price, M. & Mayanja, Y. 2022. Low awareness of oral and injectable PrEP among high-risk adolescent girls & young women in Kamapal, Uganda. *BMC Infectious Diseases*, 22(1):467. DOI: https://doi.org/10.1186/s12879-022-07398-z. [Accessed on 1 October 2022].

Mwita, C., Abraham, M., & Joy, C. 2021. *The Kenya Media Assessment*. Available from: https://internews.org/resource/kenya-media-assessment-2021/ [Accessed on 3 October 2022].

National AIDS & STI Control Programme (NASCOP). 2017. *Framework for the implementation of pre-exposure prophylaxis of HIV in Kenya*. NASCOP Kenya. Ministry of Health, Nairobi. [online]. Available from: https://www.prepwatch.org/wp-content/uploads/2017/05/Kenya_PrEP_Implementation_Framework.pdf

National Syndemic Diseases Control Council (NSDCC). 2021. *Kenya World AIDS Day; Progress Report 2013-2021*. [online]. Available from: https://nsdcc.go.ke/wp-content/uploads/2022/02/WAD2021Report.pdf. [Retrieved on 28 July 2022].

Ochieng, A. 2021. *Study links falling HIV cases in Kisumu to PrEP uptake*. The Nation. [Online]. Available from: https://nation.africa/kenya/counties/kisumu/study-links-falling-hiv-cases-in-kisumu-to-prep-uptake--3544238

PrEPWatch. 2020. *Creating demand for PrEP among adolescent girls & young women*. [online]. Available from: https://www.prepwatch.org/resources/creating-demand-for-prep-among-adolescent-girls-young-women/

Serem, D.K., Boit, J.M. & Wanyama, M.N 2013. *Understanding research; A simplified form*. Eldoret, Kenya; Utafiti Academic Press.

United Nations Programme on HIV/AIDS (UNAIDS). 2015. *Empower young women and adolescent girls: Fast-tracking the end of the AIDS epidemic in Africa*. [online]. Available at: https://www.unaids.org/sites/default/files/media_asset/JC2746_en.pdf

Wood, T.J. 2010. *Interpersonal communications*: *Everyday encounters.* 6th edition. Boston. USA: Wadsworth CENGAGE Learning.

World Health Organization (WHO). 2015. *Pre-exposure prophylaxis (PrEP).* [online]. Available from: https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv/prevention/pre-exposure-prophylaxis