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Contextualizing Wilson's Information Behavior model in seeking Indigenous Information for HIV prevention among Adolescents in Secondary schools, Uganda

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Abstract

Effective communication of quality health information in emergency situations is critical in curbing the spread of diseases. Health programs promoting both biomedical and indigenous representations in HIV prevention have been found to be more effective than those that ignore lay representations. Nonetheless, there is still limited documentation on indigenous information supporting health choices among adolescents in secondary schools in Uganda. Besides, the information sources from where adolescents seek this information are not clear. This paper presents Wilson's Information Behavior model as the theoretical anchor used to understand how utilization of Indigenous information can be enhanced among adolescents for improved health choices on HIV prevention. The model was used as part of a doctoral study project to study the problem and propose a research design. The key constructs of the model adopted for the study include; context of information need, person in context, activating mechanism, and information search behavior, information processing and use. These served as the blueprints for enhancing access and use of indigenous information for HIV prevention in a school setting.

Keywords: Medical informatics, Information seeking, Adolescents, Indigenous information, HIV prevention, Uganda, Wilson's Information Behavior Model , Health information, Health literacy

Introduction

There is wide acknowledgement that besides, children born with HIV, cross generational sex, early sexual debut, multiple sexual partners, gender based sexual violence and sharing sharp unsterilized objects (Uganda AIDS Commission, 2017; UNAIDS, 2015; Weiler, 2013) adolescents in Uganda are getting infected with HIV because they lack comprehensive HIV prevention information to support healthy choices (Ministry of Education and Sports, 2011; UNAIDS, 2016; UNESCO, 2014; Vu et al., 2017; World Health Organization, 2016). Librarians and other information providers in schools have an obligation to ensure that adolescents are empowered with relevant, comprehensive and timely information to make right health choices, amidst increasing HIV infections among this cohort in Uganda. It has also been observed that HIV prevention programs that combine the use of both biomedical and indigenous representations on HIV prevention are more successful in facilitating meaningful communication

of health information than those that ignore these representations (Meyer-Weitz et al., 1998; Uganda AIDS Commission, 2015, 2017; UNAIDS, 2015). However, little is known about where adolescents in secondary schools in Uganda seek for indigenous information for HIV prevention and the reasons why the information sources are sought after. Understanding the information sources adolescents consult regarding HIV prevention information is critical in enhancing health interventions to curb HIV infection due to misinformation. Thus, appreciating information seeking of adolescent in relation to indigenous information for HIV prevention is important in mapping out information sources critical in providing this information to adolescents in a school setting.

Information seeking refers to a conscious effort to acquire information in response to a need or gap in one's knowledge (Johnson & Case, 2012). It also entails an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating and development (Igwe, 2012). Appreciating user information seeking behavior and needs is critical in ensuring that appropriate user centered systems and relevant information is provided to address user needs (Baheiraei, Khoori, Foroushani, Ahmadi & Ybarra, 2014; Rafiq & Ameen, 2009; Wilson, 2000). Indigenous information for HIV prevention in this study was defined as local knowledge in people's minds that was communicated orally from generation to generation by the different ethnic groups of Uganda on HIV/AIDS disease representations and HIV prevention.

This paper reports on Wilson's Information Behavior Model as an anchor that was used to explore what motivates secondary school adolescents in seeking for indigenous information in the context of HIV prevention. The paper highlights concepts critical in enhancing access and use of indigenous information in schools.

1. **Why Wilson's 1996 model was adopted in the study**

In 1981 Wilson advanced an information seeking model that specifically explains the processes a user undergoes to satisfy an information need. However, the model did not explain other factors related to information seeking behavior and use that the study was interested in exploring. Thus, Wilson's (1996) model was instead adopted. This is a revised version of his earlier 1981 information seeking model. It was selected also because it is a diverse model of general information behavior that incorporates three models of information seeking namely; Ellis's behavior model (Ellis, 1989), Kuhlthau's model (Kuhlthau, 1994) and Dervin's model (Dervin, 1989) all nested in Wilson's (1996) information behavior model. It is a general model of information behavior that is trans disciplinary based on studies conducted on information behavior from various disciplines(Wilson,1999).The disciplines include; decision making, psychology, innovation, and health communication and consumer research. The model was more comprehensive covering both seeking, use and health communication. Hence, the model was considered well suited for this study to explore adolescents information seeking and use on indigenous information for HIV prevention.

2. **Key tenets of Wilson's Information Behavior Model (IBM)**

The IBM is based on five propositions namely; context of information need, person in context, activating mechanism, and information search behaviors and information processing and use. The model deals with the reasons why some information seekers seek for information appropriately and some do not and why a specific information source is sought after than others.

Regarding the concept of *person in context* and *context of information need*, Wilson explains that information needs are the starting point to information seeking and information needs are unique to a given context. He illustrates the uniqueness of information needs based on context such as information needs related to roles to ones work, environment (technological, political and economic), and physiological, cognitive and emotional needs and how these may influence the specific information that a person seeks for. Thus, the information needs are influenced by the contexts unique to the individual seekers. The model emphasizes that the person in context is at the center of the information needs.

Another concept *activating mechanism* refers to motivations for information seeking. He explains that information seekers must have motivations that compel them to seek for information apart from the information needs. This is because not all information needs result in information seeking. He further illustrated this view by saying that people may be compelled to seek information because they need to cope with a stressful situations and anxiety. He goes on to note that without strong motivation they cannot seek information because not all information needs result into information seeking.

In addition, the model advances that there are other factors that may facilitate or hinder information seeking including, demographics of people, unique source characteristics that an information provider may have, factors that are psychological, role related to one's occupation, and environmental factors. Wilson argues that complementary activating mechanisms(motivation) may also include, risks associated with not seeking for the information or rewards accruing and self-efficacy entailing abilities and skills that support seeking for information.

However, the rewards may also have risks like financial costs associated with seeking and psychological needs that may affect information seeking. Social learning is another proposition highlighted it emphasizes that self-efficacy influences the success of achieving an information goal. Thus, those with information skills are better information seekers and vice versa.

Equally the model explains that information seekers have different information seeking behavior including, passive attention that involves acquiring information without seeking for it. Related to this is passive search where the seeker accidentally acquires relevant information. Active search entails the seeker actively seeking for information. Also, ongoing search is where the seeker continues with the active search process then the already acquired information is expanded, modified and updated through better information processing.

Finally, the last proposition is information processing and use. Wilson argued that information must be processed for it to be utilized. Information, needs to be made usable by making it relevant to the users' information needs. This is because users evaluate the information for its effectiveness. Wilson's 1996 information behavior model is presented in figure 1.2.

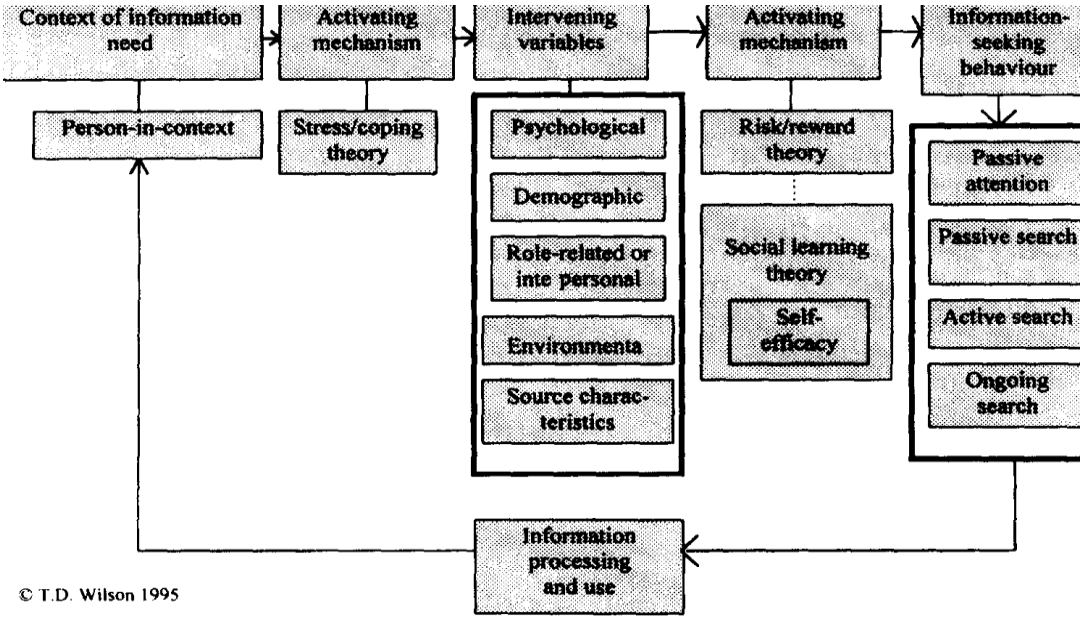

Figure 1.1: Wilson's model of Information behavior

3. Operationalization of Wilson's Information Behavior Model(IBM) in adolescents' seeking for Indigenous information in HIV prevention

The model highlights critical concerns that must be considered in order to make indigenous information for HIV prevention usable in school contexts in Uganda. The specific concepts that were identified as relevant to this study include; *person in context*, *information needs*, *source characteristics and information processing and use*.

The IBM makes a great contribution by highlighting that individuals in different contexts have unique *information needs* using the concept of *person in context*. The concept fits well with the study in pointing out how indigenous information can be used in a school context. It is made clear that adolescents in a school context have unique information needs in the context of HIV prevention. Thus, the ways adolescents seek for this information needs to be understood by information providers to ensure that it is accessed and utilized for HIV prevention.

The *concept of person in context* is extensive and spans to appreciating the wider school environment in influencing seeking of indigenous information for HIV prevention. This includes policies and guidelines related to IK and HIV/AIDS management in the schools. Also, appreciating the multilingual nature of schools with unique IK informing the health choices of adolescents on HIV prevention. Indigenous knowledge is transmitted through local stories, proverbs, and riddles as media for communicating this health information. Thus, this highlights the challenge of ensuring that indigenous information sought after by adolescents for HIV prevention is identified, can be understood and used by all adolescents in the school who are multilingual. After identifying the information needs a related concept advanced is *characteristics of information sources* as another factor influencing how individuals seek for information. In relation to this study this concept implies that in the context of enhancing use of the information in schools, sources from which the adolescents seek for this information needs to be identified and their characteristics to enhance utilization of indigenous information for HIV prevention. This is another

strategy that will contribute towards making the information accessible from rare information sources as well as identify sources critical in providing this information to adolescents. Demographic characteristics of adolescents that seek for the information from specific information sources also needs to be captured. This would enable information providers to provide selective information dissemination to enhance use of indigenous information for HIV prevention. This is by appreciating the specific attributes of adolescents that consult information sources. This aspect adds to understanding the information needs of the adolescents in relation to this information. Besides, the adolescents must be asked why they seek this information from the identified information sources, documenting such motivators can be used to enhance use because information providers will understand why such information sources are sought after. This is another avenue through which indigenous information for HIV prevention can be identified.

Last but not the least, the concept of *information processing and use*, is presented as another strategy to improve use of indigenous information by adolescents for HIV prevention. Wilson, advances that users evaluate information for its usefulness and quality , this factor influences whether the information is usable or not. Thus, indigenous information must be processed to make it relevant, comprehensive and accurate to suit adolescents' information needs. Given that indigenous knowledge is rarely documented (Grenier, 1998) it is in people's minds and usually orally communicated from generation to generation, this information needs to be captured, organized and analyzed to ensure that it is relevant to adolescents in schools. The information needs to be comprehensive to cover their needs and support health choices.

Information processing will entail ensuring that the information is accurate for HIV prevention by highlighting any misinformation in the information collected such that the adolescents are made more knowledgeable to make healthy choices. Information processing will also entail ensuring that the indigenous information collected from the different ethnic groups is made usable to fit in school settings that are multilingual. This involves translating this in formation in a common language to minimize language barrier. Information processing will also entail identifying preferred media and dissemination techniques that adolescents 'desire. This should be used to repackage the information such that it can be utilized by the adolescents for HIV prevention. This is because information needs are unique to people in different contexts. Depending on media preferred by the adolescents, various stakeholders should provide the adolescents with the necessary information, support and skills on how to access the information. This brings into perspective the need to strengthen information systems in schools to provide timely information to improve on access and utilization of indigenous information among adolescents in secondary schools in Uganda.

Thus, indigenous information will be effectively utilized for HIV prevention in schools if information sources providing the information are identified, their unique attributes documented. The information they provide is identified, documented and processed so that it is accurate, comprehensive and relevant to the information needs of the adolescents. Then the information be repackaged in suitable media and communicated to the adolescents in a timely manner. These strategies contextualized from Wilson's IBM would enhance access and use of indigenous information for HIV prevention in secondary schools in Uganda. The strategies are expounded upon in a conceptual framework that illustrates the different concepts, their relationship and how they interact to enhance provision of quality HIV prevention in school settings.

4. Conceptual Model of Information seeking and use of indigenous information by Adolescents for HIV prevention

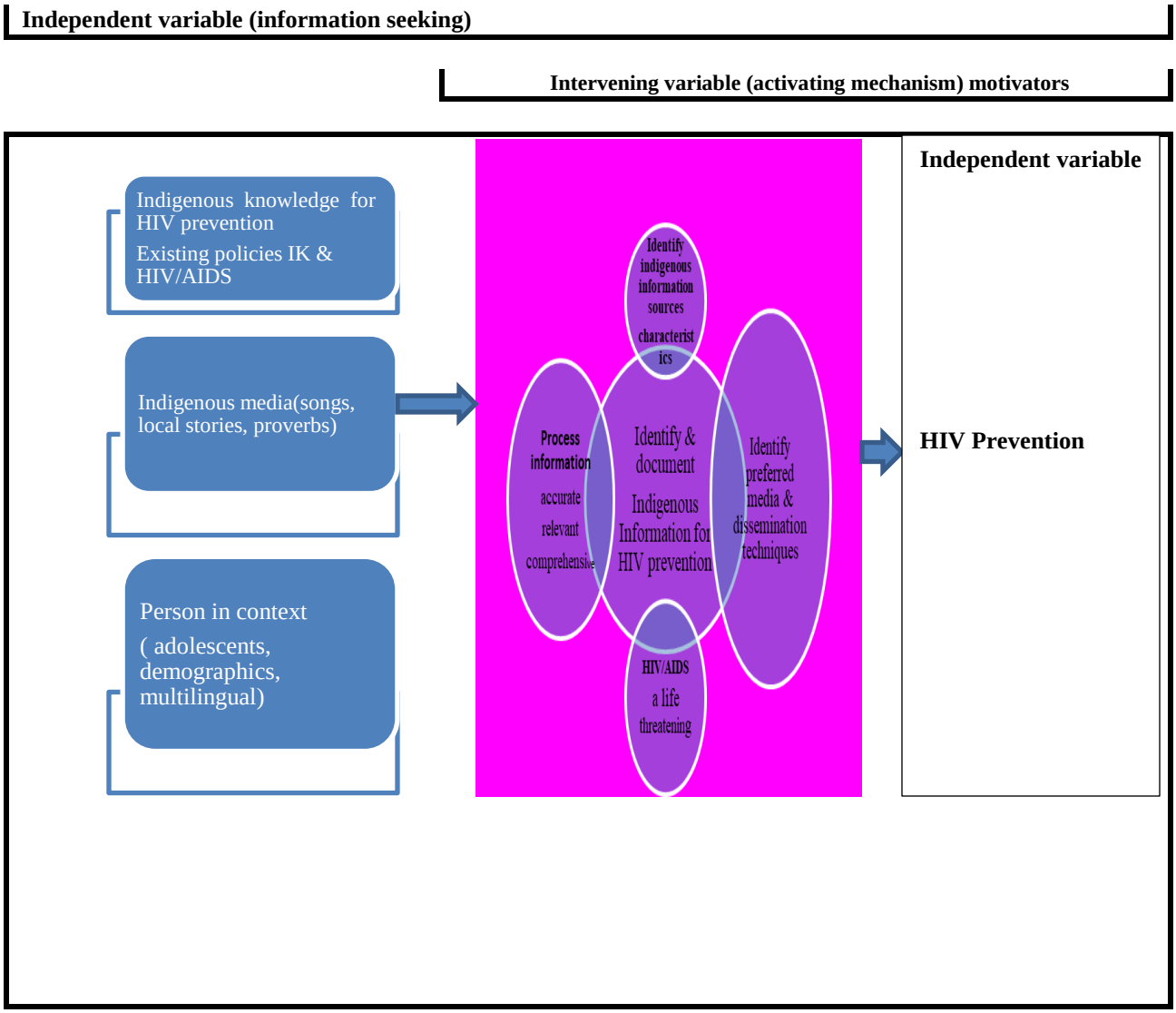

Figure 1.3: **Conceptual model of Information seeking and use of indigenous information by Adolescents for HIV prevention**

The conceptual framework presented in this paper is a synthesis of Wilson's IBM model and how this underpinned the study's understanding on strategies for enhancing use of IK for HIV prevention, in secondary schools in Kampala District.

In this study information seeking is the independent variable while HIV prevention, the dependent variable. Under the independent variable, various factors explain seeking on indigenous information for HIV prevention in the school environment. Among them are the adolescents (*person in context*) who are targeted to use this information in a multilingual school environment. This information is also influenced by media in this case indigenous media through which the information is communicated through local stories, proverbs and local stories. This

information can be accessed through interacting with adolescents and other information sources providing it at school. However, given that indigenous knowledge is context specific and unique to different ethnic groups of Uganda. This information can only be understood by those from the same ethnic groups. Access to this information is also influenced by school policies and guidelines on indigenous knowledge and HIV prevention that facilitate use of this information. Consequently, in order to ensure that access and use of this information in the school context is improved for HIV prevention, there is need for deliberate interventions referred to as motivators or strategies (activating mechanism) to ensure that the information is well utilized.

The motivators to enhance use include identifying the information sources, their characteristics and the resources why adolescents seek the information from the sources as one of the strategies. This would enable the information providers to effectively facilitate access and use of the information among adolescents. The same strategy would contribute to understanding the information needs of the adolescent in the context of HIV prevention.

However, given that indigenous knowledge for HIV prevention is rarely documented and is not readily available for use and communicated through indigenous media (e.g. proverbs, local stories and songs) as the tools used for knowledge transfer. This knowledge needs to be identified, documented and made usable so that it can be beneficial to adolescents in a school context that is multilingual. Information processing is thus another important strategy for making this information usable. Information processing will also entail ensuring that the information captured is accurate, relevant to the information needs of the adolescents in school and comprehensive. Besides, information processing would also entail translating indigenous information in official language in order to eradicate language barrier that is a hindrance to effective use in a multilingual school context. Information processing would also entail identifying media and dissemination techniques that adolescents desire that this information is repackaged in. When these are identified and used for communicating the information use of indigenous information for HIV prevention would be enhanced. Librarians and information providers of HIV prevention information in schools should go ahead and offer support to the adolescents on how this information can be accessed. Information seekers with skills to search and access information are effective information seekers than their counterparts who lack this skill. These strategies coupled with disseminating information on HIV/AIDS as a life threating disease would enhance HIV prevention (dependent variable) through use of comprehensive, relevant and timely information for HIV prevention.

Conclusion

The existing strategies can be employed to improve the gaps highlighted by the model regarding use of indigenous information for HIV prevention in a school setting. Thus, making indigenous information for HIV prevention readily available, by identifying and documenting it, processing it for relevance, comprehensiveness and accuracy. Information sources need to be identified and their characteristics as well as identifying preferred media and dissemination techniques. Thus, by implementing these deliberate strategies access and use of indigenous knowledge for HIV prevention would be improved in schools. As a result adolescents would be able to access more relevant, comprehensive, accurate and timely information for HIV prevention.

Recommendation

The strategies derived from Wilson's information model provide relevant approaches on how use of indigenous information can be enhanced in schools for HIV prevention. The strategies proposed also suggest that a mixed methods approach is suitable in addressing the research problem.

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