

Evolving Factors for HIV Prevention

Andi Bailey

Department of Kinesiology

KINE 4359: Public Health Cumulative Experience

Dr. Green, Brandie

February 1, 2023

Introduction

Human Immunodeficiency Virus also known as HIV has been a constant public health concern not only in the United States but on a global scale as well. Further research has brought a better understanding of the disease which includes characteristics of the disease, transmission, prevention, and treatment. However, significant challenges remain to end the epidemic that is actively occurring within the country. This raises the question of whether current prevention strategies have proven to be successful in HIV prevention, and if there is a need for improvements to end the HIV epidemic in the United States. Through analysis of five journal articles, the research that has been done brings insight to understand HIV prevention and existing challenges better. The journal articles discussed provide needed answers through three common themes 1) structural factors which directly affect HIV vulnerability and risk 2) solutions that have been implemented by existing programs for HIV prevention 3) further improvements that can be done to existing programs.

Structural Factors

To begin, the first theme shared between the different journal articles is structural factors that directly affect HIV vulnerability and risk. In the first article, “HIV Prevention 4: Structural Approaches to HIV Prevention”, the authors discuss the different structural factors that are important in relation to HIV, these include economic, political, social, and environmental factors (Gupta et al., 2008). Within these factors research has shown that addressing the factors that shape an individual’s behavior reduces risk, these factors can include an individual’s socioeconomic status, gender, age, power, and/or policy. The author emphasizes the importance of having knowledge of these factors in order to implement structural approaches, this will aid in seeking change at the root level for an individual (Gupta et al., 2008). This is important

information to gain in order to learn more about the individual and how organizations or programs can provide proper care. Having programs that can provide equal and accessible care to all individuals is crucial in order to reduce the risk of HIV transmission and the development of new cases.

In addition, the article titled, “HIV Prevention 6: Coming to Terms with Complexity: a Call to Action for HIV Prevention”, further discusses the importance of successful approaches and program implementers having the proper knowledge in doing implement these approaches (Piot et al., 2008). The author supports the importance of knowing the underlying factors for HIV in individuals in order to effectively address prevention. The author explains how knowledge and context combined form strategic information as well as the basis of action. Having the proper knowledge and context about a concept in this case HIV prevention allows the assessment of the effectiveness and what improvements can be done if necessary. This provides important information on the steps needed to be taken in order to successfully approach a concept like HIV prevention. In correlation to the information provided by the author, it is agreeable that having the proper knowledge and context is a great first step in order to develop an effective program to address prevention.

Existing Solutions

The second theme shared between the different journal articles is solutions that have been implemented by existing programs for HIV prevention. Throughout the years, there has been remarkable progress against HIV by implementing programs and agencies to raise awareness and provide care for diagnosed individuals. Existing programs aim to promote education and provide equal care for individuals with HIV. The article titled, “Implementation Science and the Health Resources and Services Administration’s Ryan White HIV/AIDS Program’s Work Towards

Ending the HIV Epidemic in the United States”, discusses current strategies to prevent virus transmission and link and retain individuals with HIV in care (Psihopaidas et al., 2020). The main strategy that the author discusses is the Health Resources and Services Administration’s Ryan White HIV/AIDS Program which provides direct support services and medical care to individuals with HIV. The strengths the author shared about the program are it is a federal program and through grants to states, cities, and communities the program is able to reach many individuals. Their focus is to reach low-income individuals with HIV in order to coordinate and deliver HIV care, treatment, and support to those who are in vulnerable populations (Psihopaidas et al., 2020). This program symbolizes a crucial resource to all individuals in order to provide care for those who are diagnosed with HIV and those who may only be seeking further education about the virus in order to protect themselves.

Furthermore, the article titled, “Human Immunodeficiency Virus in the States of Texas of the United States: Past Reflections, Present Shortcomings, and Future Needs of the Public Health Response”, discusses several aspects of HIV and successful solutions that are being implemented (Abbas et al., 2020). The author discusses what is being provided by various HIV programs in the state of Texas as well as throughout the country. These programs are providing individuals with health education, counseling, public information, and community-based support. Education and awareness consist of building knowledge of what the disease is, how to protect oneself from it, how to reduce transmission, and teaching those who have the disease how to live a full life with it (Abbas et al., 2020). The article also goes into detail about the Ryan White HIV/AIDS Program as well and how it revolutionized HIV care. The program was able to provide a nationwide support and source to individuals diagnosed with HIV.

Further Improvements

The third theme is further improvements that can be done to existing programs. As stated previously existing programs like the Ryan White HIV/AIDS Program are on the right track and play a pivotal role in the implementation of intervention strategies to help individuals with HIV. However, the authors discuss that there are existing barriers to ending the HIV epidemic. In the article, “Implementation Science and the Health Resources and Services Administration’s Ryan White HIV/AIDS Program’s Work Towards Ending the HIV Epidemic in the United States”, the author discusses remaining barriers despite the improvement of the program’s client outcomes (Psihopaidas et al., 2020). There are still barriers to individuals having knowledge of their HIV status, achieving and maintaining viral suppression, and continual reporting of new HIV cases. Further improvement the author shares is utilizing the concept of implementation science. The use of this concept is in an effort to create frameworks to address the complexities of implementing the effective tools needed for HIV and directing them toward federal agencies, researchers, medical care, providers, and all individuals with HIV.

In addition, the article, “Opportunities and Challenges of Generic Pre-Exposure Prophylaxis Drugs for HIV”, discusses the positive outcomes of individuals taking the drug Prophylaxis in order to reduce the risk of HIV (Ballreich et al., 2022). The author emphasizes that the effective tools that are essential to reach the end of the HIV epidemic are providing access to daily medication and antiretroviral drugs which are pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP). Maintaining daily medication for viral suppression has shown no risk of sexually transmitting the virus and antiviral drugs have been shown to be effective against HIV transmission (Ballreich et al., 2022). This is crucial information to provide

to individuals who are diagnosed with HIV, by being able to suppress the virus individuals are able to reduce the risk and transmission of it.

Challenges

Despite the remarkable progress made throughout the years against the HIV epidemic, the annual number of new HIV diagnoses within the United States has remained steady for over a decade. There are remaining challenges that are causing a stagnant pace in the progress that has been made. Each of the articles discussed provides more detail about these challenges and why all individuals need to be aware. Health disparities are a crucial challenge in regard to HIV prevention, amongst vulnerable populations, some are more greatly affected by HIV than others (Abbas et al., 2020). This requires tailored interventions in order to help communities that have vulnerable populations. An additional challenge that exists for HIV prevention is the concepts of stigma, discrimination, and bias that exist within populations as well as the health care system. Promoting health education and HIV awareness can aid to dissipate existing stigma.

Furthermore, an additional existing challenge is the lack of access to HIV prevention care and support, populations experience barriers to accessing quality care and education in order to learn more about HIV and how individuals can protect themselves (Abbas et al., 2020). Lastly, the development of implementation science also has existing challenges, in the translation of findings and adapting methods in order for real-world implementation it has shown to be a challenge (Psihopaidas et al., 2020). It has shown to need for the use of standard terminology, consistent concepts, and abstract findings throughout studies in order to create frameworks for HIV research. Further practice and use of implementation have shown to be beneficial in order to diminish these challenges.

Conclusion

HIV has been a constant public health concern on a worldwide scale, further research has brought a better understanding of the disease which includes characteristics of the disease, transmission, prevention, and treatment. Despite the remarkable progress made throughout the years against the HIV epidemic, significant challenges remain to end the epidemic that is actively occurring within the country. This raises the question of whether current prevention strategies have proven to be successful in HIV prevention, and if there is a need for improvements to end the HIV epidemic in the United States. Derived from the referenced journal articles, there are three common themes which are 1) structural factors that directly affect HIV vulnerability and risk 2) solutions that have been implemented by existing programs for HIV prevention 3) further improvements that can be done to existing programs. Further discussion into these themes has shown that current prevention strategies are seen to be successful in HIV Prevention but there is also room for improvements in order to take a step further to end the HIV epidemic. There are remaining challenges that currently exist which are causing a stagnant pace in the progress that has been made. These challenges include health disparities, stigma, discrimination, accessible HIV care and support, and barriers to implementation science. Despite these existing challenges, with continued support and funding for existing HIV prevention and care programs progress will be continued to be made.

References:

- Abbas, U. L., Hallmark, C. J., McNeese, M., Hemmige, V., Gathe, J., Williams, V., Wolf, B., & Rodriguez-Barradas, M. C. (2020). Human Immunodeficiency Virus in the State of Texas of the United States: Past Reflections, Present Shortcomings, and Future Needs of the Public Health Response. *Open forum infectious diseases*, 7(10), ofaa348.
<https://doi.org/10.1093/ofid/ofaa348>
- Ballreich, J., Levengood, T., & Conti, R. (2022). Opportunities and Challenges of Generic Pre-Exposure Prophylaxis Drugs for HIV. *Journal of Law, Medicine & Ethics*, 50(S1), 32-39. doi:10.1017/jme.2022.33
- Gupta, G. R., Parkhurst, J. O., Ogden, J. A., Aggleton, P., & Mahal, A. (2008). HIV Prevention 4: Structural approaches to HIV prevention. *The Lancet*, 372(9640), 764-75.
<https://login.ezproxy.uta.edu/login?url=https://www.proquest.com/scholarly-journals/hiv-prevention-4-structural-approaches/docview/199026569/se-2>
- Piot, P., Bartos, M., Larson, H., Zewdie, D., & Mane, P. (2008). HIV Prevention 6: Coming to terms with complexity: a call to action for HIV prevention. *The Lancet*, 372(9641), 845-59.
<https://login.ezproxy.uta.edu/login?url=https://www.proquest.com/scholarly-journals/hiv-prevention-6-coming-terms-with-complexity/docview/199030615/se-2>
- Psihopaidas, D., Cohen, S. M., West, T., Avery, L., Dempsey, A., Brown, K., Heath, C., Cajina, A., Phillips, H., Young, S., Stubbs-Smith, A., & Cheever, L. W. (2020). Implementation science and the Health Resources and Services Administration's Ryan White HIV/AIDS Program's work towards ending the HIV epidemic in the United States. *PLoS medicine*, 17(11), e1003128. <https://doi.org/10.1371/journal.pmed.1003128>