INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 13, Issue 12, (2023) E-ISSN: 2222-6990

A Conceptual Analysis of Systematic Barriers for Women Living with HIV/AIDS (WLHA)

Azahah Abu Hassan Shaari, Siti Marziah Zakaria, Surendran Rajaratnam, Nasrudin Subhi, Mohammad Ajib Abd Razak & Nor Azzatunnisak Mohd Khatib

Centre for Research in Psychology and Human Well-Being, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, Malaysia

Corresponding Author's Email: azahah@ukm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v13-i12/19771 DOI:10.6007/IJARBSS/v13-i12/19771

Published Date: 02 December 2023

Abstract

Women living with HIV/AIDS (WLWHA) encounter substantial systemic barriers that hinder their well-being and access to necessary services. These hindrances encompass gender disparities, limited healthcare availability, and societal stigma. Using Keynesian economic theory as a framework, this conceptual paper explores the impediments WLWHA face in accessing comprehensive HIV treatment services. Between January and June 2023, the authors conducted a comprehensive review of 100 scholarly articles to gain an understanding of the systemic barriers limiting access to essential HIV treatment and care for WLWHA. These barriers include gender-based violence, economic constraints, and healthcare system deficiencies. To address these challenges, a multi-faceted approach is needed, involving healthcare system reforms, economic empowerment, and educational initiatives. Keynesian economic theory, emphasizing government intervention to promote economic growth, offers valuable insights into addressing the systemic inequities faced by WLWHA. Improvement in healthcare access, education, and economic opportunities can create a more equitable society where everyone can access vital resources regardless of their health status. This paper underscores the urgency of tackling these systemic barriers and provides practical recommendations for policymakers and stakeholders to enhance the availability of crucial pharmaceuticals for WLWHA, thereby advancing health equity and social justice.

Keywords: AIDS, Barriers, Gender, HIV, Women

Introduction

The *Human Immunodeficiency Virus* (HIV) is a pandemic that causes Acquired Immune Deficiency Syndrome (AIDS). Around the globe, HIV-related cases have been one of the leading causes of deaths for women in the age range of 15–49 years old and sexual intercourse remains the leading route of HIV transmission among women (Bispo et al., 2017). The United States Centres for Disease Control and Prevention (CDC) in 2021 reported that the

number of new HIV infections decreased by 12%, from approximately 36,500 infections to approximately 32,100 from 2017 to 2021 (Kawwass et al., 2022). In the Asia-Pacific area, there were an anticipated 6 million people living with HIV/AIDS (PLHIV), 260,000 new HIV cases reported, and 140,000 AIDS-related deaths in 2021 (Ganesh, 2022). While significant strides have been made in HIV prevention, a recent survey conducted by the World Health Organisation (WHO) revealed that only 59% of adults and 54% of children living with HIV worldwide were receiving lifelong antiretroviral therapy (ART) as of the end of 2020 (Kawwass et al., 2022). This data underscore the reality that, despite progress in reducing new HIV infections, many PLHIV are not receiving the essential treatment they require. As important as prevention is, there is an equally crucial need to focus on providing comprehensive services to those already living with HIV. The goal of comprehensive HIV services is not limited to medical treatment. Instead, mental health support, counselling, and destigmatization campaigns are also essential.

In Malaysia, the incidence rate of HIV cases in 2020 decreased by 70%, from 28.5 cases per 100,000 people in 2002 to 8.5 cases per 100,000 people in 2020. In a similar year, 125,878 cumulative number of HIV cases were reported, with 81,924 total PLHIV in 2022 (Ministry of Health Malaysia, 2023). The Malaysia National Strategic Plan for Ending AIDS 2016–2030 aims to reach the "Three Zeros: Zero new infections, Zero discrimination, and Zero AIDS-related deaths." This goal is in accordance with the Sustainable Development Goals (SDG) 3, to ensure healthy life. The strategic plan also outlined the Ministry of Health's goal to achieve the 90-90 targets between 2016 and 2020: 90% of important populations tested positive for HIV and were informed of their results; 90% of HIV-positive individuals started on antiretroviral therapy (ART); and 90% of them adhered to treatment with reduced viral loads. In addition, out of 87 percent of 92,063 PLHIV in the country who are aware of their status, only 58 percent of reported PLHIVs received antiretroviral therapy (Ministry of Health Malaysia, 2023).

Despite the substantial number of individuals aware of their HIV status and the availability of antiretroviral therapy, living with HIV frequently involves grappling with stigma, social exclusion, and mental health challenges such as depression and anxiety (Feyissa et al., 2019). Thus, the focus of comprehensive HIV services should encompass not only physical health but also social and mental health in order to provide holistic approaches. In addition, economic support for those living with HIV should be part of this comprehensive care. According to Kerrigan et al (2019) many PLHIV, particularly in developing countries, are unable to work full-time due to the physical toll of the disease. This leads to economic hardship that only compounds the challenges they face. A holistic approach to comprehensive HIV services, which includes addressing social and mental health aspects and providing economic support for individuals living with HIV, is crucial for improving their overall well-being and quality of life.

Objective

Using Keynesian theory, the purpose of this conceptual study is to examine the systemic barriers that impede the availability of comprehensive HIV treatment services for women living with HIV/AIDS (WLWHA).

Aim

1. To understand the systemic barriers preventing WLWHA from accessing essential HIV treatment services.
2. To identify the systemic obstacles that hinder the availability of comprehensive HIV treatment services for WLWHA using Keynesian theory

Systematic barriers to WLHWA

Considerable advancements have been made on a global scale in the endeavour to address the HIV/AIDS pandemic, resulting in notable improvements in the accessibility of treatment and care services. For example, both Malaysia and the United States have implemented HIV prevention efforts, such as introducing preventative measures like PrEP (pre-exposure prophylaxis) to reduce HIV transmission from sex or intravenous drug use (IDUs). Studies by Ayieko et al (2022); Johnson et al (2022) reported that PrEP, if taken consistently, can prevent 92% of HIV infections. The "Let's Stop HIV Together" (Together) campaign, led by the Centre for Disease Control and Prevention (CDC), is the flagship national initiative of "Ending the HIV Epidemic in the United States (Fauci et al., 2023). The primary goal of this evidence-based campaign is to empower communities, partners, and healthcare providers to combat HIV stigma while advocating for HIV testing, prevention, and treatment. However, WLWHA continues to face numerous systematic barriers that hinder their ability to obtain necessary HIV treatment services (Colasanti et al., 2017; Gesesew et al., 2017). The presence of these obstacles, which are frequently interrelated and mutually reinforcing, poses significant hurdles to the acquisition of essential HIV treatment and care.

Gender-based violence

Gender-based violence serves as a structural barrier that perpetuates inequality and makes it difficult for women to access resources and services that they need, especially for those who are HIV/AIDS affected. A study by Shahar et al (2020) reported intimate partner violence (IPV) prevalence in Malaysia has a wide range between 4.94 and 35.9%. Emotional or psychological abuse were the two common of IPV reported by women in Malaysia. Studies reported that IPV increases the risk of HIV infection, primarily through non-consensual sex and reduced control over safe sex practices (Anderson et al., 2018). Consequently, IPV is more common among WLWHA, which has a detrimental effect on their mental health and makes it more difficult for them to interact with healthcare systems. Yonga et al (2022) reported that women may be discouraged from telling partners they are HIV positive due to fear of violent consequences, which would further impede their course of treatment. Research from Qiao et al (2018); Girum et al (2018); Meinck (2019); Rigby and Johnson (2017) showed a significant relationship between the incidence of HIV among women and intimate partner violence (IPV). A study by Gibbs et al (2018) found that women who experienced IPV had higher risks of HIV infection than women who did not. These instances highlight the widespread and harmful impacts that gender-based violence has on women who are HIV-positive.

In regions such as Africa, women account for over half of the total number of people living with AIDS and nearly half of those who were newly infected with HIV and died last year (Maughan-Brown & Venkataramani, 2018). These women's relationships with men, as well as those within their families, communities, and countries, all have an impact on their economic situation. Discrimination based on race, ethnicity, and gender is prevalent among these

women, who also disproportionately suffer from poverty, low health literacy, and limited access to high-quality HIV care.

The extensive ramifications of gender-based violence extend beyond injury to the body and emotional distress. It also makes WLWHA more economically vulnerable, which makes it harder for them to follow treatment plans and obtain necessary medical care (Girum et al., 2018). For WLHWA, the complex nature of IPV—which encompasses economic violence—adds to their burden (Logie et al., 2018). It also makes it more difficult for them to find work or have a steady income, which feeds a cycle of dependency and makes it more difficult for them to be independent and get care. Bhatia et al (2017) have reported the prevalence of gender-based violence, which highlights the urgent need for comprehensive interventions that address not only the psychological and physical components of violence but also its economic ramifications in order to offer WLWHA holistic support.

Economic Constraints

Another major obstacle to receiving HIV treatment, particularly for women, is financial hardship. According to a study conducted in South Africa by Gibbs et al (2018), women's healthcare-seeking behaviours were significantly influenced by their economic dependence on male partners. When women were not in charge of the home budget, they frequently lacked the resources to pay for transportation or other related expenses (Girum et al., 2018). As a result, WLWHA is experiencing challenges getting access to healthcare services, including HIV treatment. Furthermore, there is often a correlation between women's economic dependency and other cultural and societal conventions. For example, in specific cultural contexts, there exists a prevailing pattern where men tend to exercise authority over property and assets, whereas women's ownership rights are notably restricted (Qiao et al., 2018). In these situations, women will need to rely on their partners for financial security, making them reluctant to disclose their HIV status to avoid potential consequences such as partner abandonment and restrictions on property or inheritance rights due to their HIV status.

At the same time, women's reliance on men for financial stability in patriarchal countries may limit their freedom to seek medical attention. As reported by the Chirwa (2019), the insufficient integration of HIV services into the public health infrastructure exacerbates the affordability issue. A lack of integration frequently results in higher out-of-pocket costs, which can discourage people from obtaining care, especially those with a lack of financial resources. According to Gebremichael et al (2018); Valdelamar-Jiménez et al (2023), although free antiretroviral medicine was available, women seeking treatment faced significant obstacles due to the indirect costs of accessing these treatments, such as missed income and transportation. Financial limitations not only make it difficult for women living with HIV to receive early healthcare, but they also add to the continual financial burden they place on WLWHA.

Healthcare System

There are gaps in healthcare systems to appropriately address the unique requirements of WLWHA. According to the Aaron et al (2018), the limited number of female healthcare personnel presents a significant concern. In some cases, WLWHA may have a preference to discuss their health and sexual behaviour with female healthcare workers, driven by cultural or personal factors that contribute to their comfort levels (Darlington & Hutson, 2017).

Furthermore, it is frequently seen that health services exhibit a lack of integration across several dimensions of women's health, including reproductive and maternal health and the provision of HIV treatment. WLWHA often has reproductive health needs, including contraception options and support for safe pregnancies. However, in some regions, the healthcare system is still failing to offer comprehensive family planning services alongside HIV treatment (O'Brien et al., 2017). According to a study conducted in Indonesia by Fauk et al (2021), the absence of female healthcare professionals was identified as a notable obstacle for women in accessing healthcare, especially HIV-related services. The female participants in the study showed a preference for engaging in conversations regarding their health and sexual behaviour with female healthcare providers. This inclination can be attributed to cultural norms and personal comfort, a pattern that is observed in various different settings worldwide. Furthermore, there is often a deficiency in the incorporation of many dimensions of women's health within the context of HIV treatment. According to a comprehensive study conducted by (Geter et al., 2018). the integration of HIV care with reproductive and maternal health services has the potential to greatly enhance women's accessibility to and utilisation of these services. Nevertheless, the analysis also revealed that the incorporation of such integration was comparatively infrequent, resulting in overlooked prospects for comprehensive treatment.

Insufficient representation of female healthcare practitioners and the failure to adequately address the distinctive healthcare requirements of WLWHA leads to unsatisfactory healthcare experiences. The existing disparity in healthcare provision highlights the significance of not only augmenting the quantity of female healthcare professionals but also guaranteeing that healthcare services are tailored to be gender-sensitive and all-encompassing (Geter et al., 2018; Rice et al., 2019). The implementation of these changes is of utmost importance in order to ensure fair and efficient healthcare services for women who are affected by HIV. Consequently, this will contribute to enhancing their overall state of well-being and achieving positive health results. Gender-based violence, economics, and limited access to healthcare systems are among the significant obstacles that continue to hinder efforts towards improving the quality of life for WLWHA. The next section will explore how Keynesian economic theory can inform a comprehensive understanding of the systemic barriers preventing WLWHA from accessing essential HIV treatment services.

Keynesian Theory
John Maynard Keynes established the Keynesian economic theory, a paradigm of thought that has significantly altered economic thinking and policymaking over time. This theory was developed based on David Hume's problem of induction philosophical ideas, which offer insights into how people deal with economic uncertainty through traditions and customs (Palley, 2017). Furthermore, Keynesian theory emphasises the role of supply and demand, especially during times of economic downturn, where economic anxiety prompts individuals to save rather than spend, disrupting the economic growth cycle (Baqaee & Farhi, 2022). There are two important tenets in Keynesian theory; uncertainty and state intervene. Keynesian theory can also be used to discuss the essential concept of state intervention in the economy, illustrating how state intervention is necessary to stimulate growth.

Uncertainty

The capitalist system is a system that gives priority to the accumulation and endless accumulation of profit in the capital market. Given this vision of the capitalist system, Keynes believes that knowledge of the economic future is generally inadequate, changing, and obscure (Palley, 2017). For Keynes, an outcome is uncertain, and people do not have the relevant knowledge to calculate a probability for a future event. As a result, people might act irrationally when they are faced with an uncertain future. Eventually, uncertainty will affect the market, especially during the economic recession. People are saving more because they are afraid and not confident about the market and future (Baqaee & Farhi, 2022). They fear they will lose their jobs and try to save rather than spend. Keynes believes that this will affect the supply and demand chain of economic growth because there will be no money to stimulate the economy when people have a propensity to hold on and not consume things.

State Intervene/Involvement

Keynes believed that economic recessions are not necessarily self-correcting by means of the free market. As such, government intervention is needed to stimulate economic growth by offsetting the shortfall of private investment and consumption spending (Hadziahmetovic et al., 2018). Keynes believes that injecting large amounts of new government spending is the most effective way to stimulate declining economies and prompt a recovery and fuller employment (Sadeh, et al., 2020). If government spending increases, for example, and all other components of spending remain constant, then output will increase. Keynesians' belief in aggressive government action to stabilise the economy is based on value judgements and on the beliefs that (a) macroeconomic fluctuations significantly reduce economic well-being and (b) the government is knowledgeable and capable enough to improve on the free market (Djuraskovic et al., 2018). Keynes' observations of how people behave in the face of uncertain economic conditions shed light on the customs and practices people use to deal with economic unpredictability.

Keynesian theory and women living with HIV/AIDS

Keynesianism offers unique views on economic systems and the complex relationship between government policy and market forces. It covers the complex area of uncertainty and the strong case for government involvement (Palley, 2017). Around the world, WLWHA encounter substantial systemic barriers that hinder their well-being and access to necessary services. These hindrances encompass gender disparities, limited healthcare availability, and societal stigma. Addressing these structural barriers requires a combination of healthcare system reforms, such as decentralisation of services and flexible operating hours, and innovative approaches to healthcare delivery, including the use of community health workers. By doing so, HIV treatment will be more accessible to all women, regardless of their location. Figure 1 will explain more about the utilisation of Keynesian economic theory in relation to addressing systematic barriers among WLWHA.

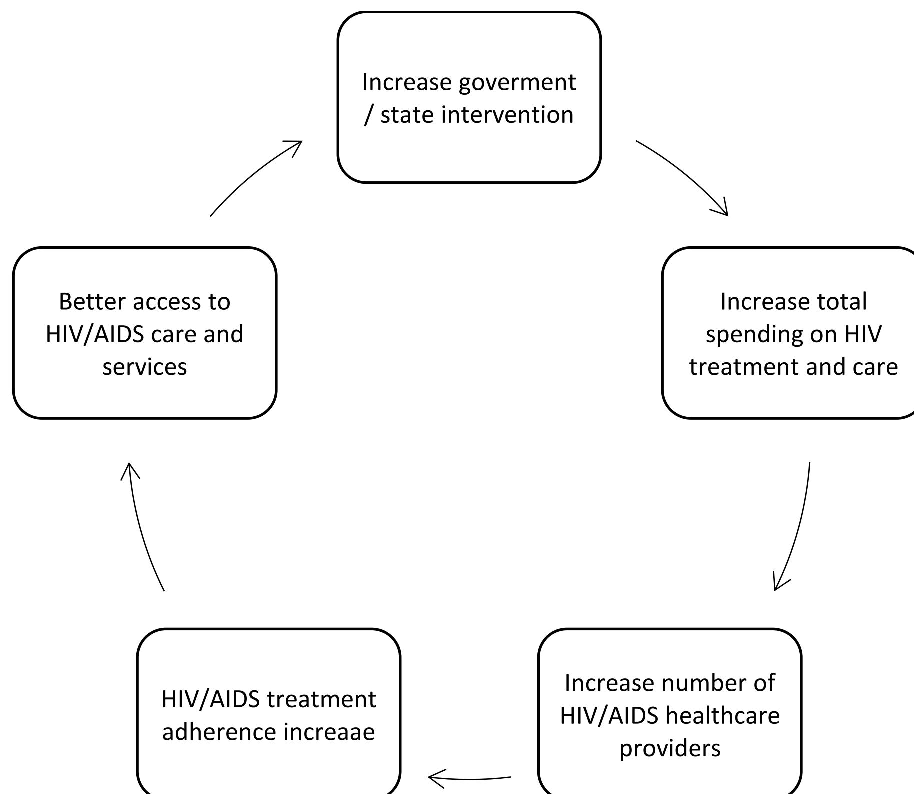

Figure 1: Keynesian Theory and Women Living with HIV/AIDS

Uncertainties surround insurance and healthcare demands

WLWHA encounters significant challenges in accessing comprehensive HIV treatment due to systemic barriers. Gebremichael et al (2018) described that women with HIV facing stigmatisation from their families, the professional community, and their wider societal context. In addition, governments in certain nations demonstrate reluctance in distributing resources among different sectors of communities on account of institutional barriers, including prejudice against marginalised groups such as sex workers and transwomen (Somia et al., 2018). However, despite these institutional barriers, Nnko et al (2020) identified several of the determinants that can enhanced access to healthcare services. For example, a provision of facilitator, which will allows PLHIV to visit healthcare clinics located at a considerable distance from their homes or workplaces. The presence of trained outreach workers was recognised as critical in promoting positive health outcomes among WLWHA, as they will be able to provide transport services, advice and support throughout the process of pursuing HIV treatment and care in hospitals, Furthermore, peer-support referral networks function as a valuable information resource for patients concerning available treatment options and provide emotional support to individuals. However, notwithstanding the facilitative factors underscored by Nnko et al (2020), the procurement of sufficient medical care is still hindered by a multitude of challenges. The challenges predominantly stem from socioeconomic inequalities that impede ease of access, in addition to the limited availability of resources within communities (O'Brien et al., 2017). A comprehensive analysis of these obstacles may initiate efforts to rectify the fundamental inequities that sustain them, thereby guaranteeing PLHIV equal access to life-saving interventions.

State Intervention

To alleviate these widespread problems faced by WLWHA, Keynesian theory offers valuable insights into government intervention through social programmes aimed at reducing inequalities related to resource accessibility, such as healthcare, education, or employment opportunities. One way that Keynesian economics can solve this problem is through increased government participation in accessible healthcare systems designed explicitly for those affected by illnesses such as AIDS and HIV, especially women from marginalised backgrounds (Adimora et al., 2021). For example, in Malaysia, all Malaysians living with HIV are eligible for free first-line antiretroviral medication (ART) from the Ministry of Health (MOH). However, Dolutegravir, a medicine that can reduce the amount of HIV in the blood and boost the number of immune cells in HIV patients, is now predicted to be 17 times more expensive in Malaysia than in adjacent Thailand (Zainuddin, 2023). By providing free or low-cost medical care tailored towards those most impacted by the disease, regardless of their socioeconomic status or geographic location, we could help bridge the terrible health outcomes experienced by different societal groups.

On top of investing in healthcare policies targeting specific demographics affected by diseases like AIDS and HIV, governments must also concentrate on educating people about these issues while simultaneously fostering economic growth measures across all social ranks (Ojikutu et al., 2020; Subedar et al., 2018). Educational programmes focused primarily on previously marginalised groups due to structural inequality caused by poverty or gender-based discrimination will provide them with long-term economic tools while improving their general health outcomes. Lastly, social safety net programmes like unemployment insurance or child care subsidies should be provided to families facing financial difficulties associated with ailments like AIDS or HIV easily; hence, they don't slide further into impoverishment due to lost income from illness-related costs during caregiving responsibilities. As proposed by Keynesian theory, the establishment of effective social policies could reduce systemic afflictions experienced mainly by marginalised populations, including PLHIV. By concentrating on healthcare systems, educational and training programmes, and social safety nets targeting specific groups affected by the disease, governments can foster a more equitable society where everyone is entitled to necessary resources regardless of their backgrounds or health status.

Conclusion

It is imperative to overcome systematic barriers to address the unique needs of PLHIV, specifically women. This involves increasing the representation of female healthcare workers and integrating various facets of women's health, including reproductive and maternal health, into the realm of HIV services. These transformative measures are essential for the establishment of a healthcare system that can effectively cater to the needs of WLHIV. In addition, economic constraints, amplified by the dependency of women on their male counterparts and the substantial out-of-pocket costs associated with HIV services, impose severe obstacles to accessing HIV treatment. As a result, interventions aimed at alleviating these constraints should prioritise the economic empowerment of women and the seamless integration of HIV services into the broader public health infrastructure. Finally, tackling informational barriers entails not only expanding the provision of accurate information on HIV and its treatment but also actively dispelling myths and misconceptions surrounding the disease. Ensuring that women have the requisite knowledge to comprehend and manage

their condition represents a pivotal step towards enhancing their access to HIV treatment. The Keynesian principle provides a valuable structure for comprehending the systematic obstructions that confront WLHIV. The role of governmental intervention in tackling these barriers cannot be overemphasized. By enacting policies centred on enhancing access to healthcare, education, and economic opportunities, we can set into motion ameliorations towards addressing fundamental social determinants that perpetuate gender inequality.

References

Aaron, E., Blum, C., Seidman, D., Hoyt, M. J., Simone, J., Sullivan, M., and Smith, D. K. (2018). Optimizing delivery of HIV preexposure prophylaxis for women in the United States. *AIDS Patient Care and STDs,* 32(1), 16-23. https://doi.org/10.1089/apc.2017.0201

Adimora, A. A., Ramirez, C., Poteat, T., Archin, N. M., Averitt, D., Auerbach, J. D., Agwu, A. L., Currier, J., and Gandhi, M. (2021). HIV and women in the USA: What we know and where to go from here. *The Lancet,* 397(10279), 1107-1115. https://doi.org/10.1016/S0140-6736(21)00396-2

Anderson, J. C., Campbell, J. C., Glass, N. E., Decker, M. R., Perrin, N., & Farley, J. (2018). Impact of intimate partner violence on clinic attendance, viral suppression and CD4 cell count of women living with HIV in an urban clinic setting. AIDS care, 30(4), 399-408. https://doi.org/10.1080/09540121.2018.1428725

Ayieko, J., Petersen, M. L., Kamya, M. R., & Havlir, D. V. (2022). PEP for HIV prevention: are we missing opportunities to reduce new infections?. *Journal of the International AIDS Society,* 25(5), e25942. https://doi.org/10.1002/jia2.25942

Baqaee, D., & Farhi, E. (2022). Supply and demand in disaggregated Keynesian economies with an application to the Covid-19 crisis. *American Economic Review,* 112(5), 1397-1436. https://doi.org/10.1257/aer.20201229

Bhatia, D. S., Harrison, A. D., Kubeka, M., Milford, C., Kaida, A., Bajunirwe, F., Wilson, I. B., Psaros, C., Safren, S. A., Bangsberg, D. R., and Smit, J. A. (2017). The role of relationship dynamics and gender inequalities as barriers to HIV-serostatus disclosure: qualitative study among women and men living with HIV in Durban, South Africa. *Frontiers in Public Health*, 5, 188 https://doi.org/10.3389/fpubh.2017.00188

Bispo, S., Chikhungu, L., Rollins, N., Siegfried, N., & Newell, M. L. (2017). Postnatal HIV transmission in breastfed infants of HIV-infected women on ART: A systematic review and meta-analysis. *Journal of the International AIDS Society*, 20(1), 21251. https://doi.org/10.7448/IAS.20.1.21251

Chirwa, G. C. (2019). Socio-economic inequality in comprehensive knowledge about HIV in Malawi. *Malawi Medical Journal,* 31(2), 104-111. https://doi.org/10.4314/mmj.v31i2.1

Colasanti, J., Stahl, N., Farber, E. W., Del Rio, C., & Armstrong, W. S. (2017). An exploratory study to assess individual and structural level barriers associated with poor retention and re-engagement in care among persons living with HIV/AIDS. *Journal of Acquired Immune Deficiency Syndromes* (1999), 74(Suppl 2), S113. https://doi.org/10.1097/QAI.0000000000001242

Darlington, C. K., & Hutson, S. P. (2017). Understanding HIV-related stigma among women in the Southern United States: A literature review. *AIDS and Behavior,* 21, 12-26. https://doi.org/10.1007/s10461-016-1504-9

Djuraskovic, J., Radovic, M., & Konatar, M. R. (2018.) The controversies of modern macroeconomic theory in the context of the global economic crisis. *Journal of Central Banking Theory and Practice*, 7(2), 49-72. https://doi.org/10.2478/jcbtp-2018-0012

Fauci, A. S., Redfield, R. R., Sigounas, G., Weahkee, M. D., & Giroir, B. P. (2019). Ending the HIV epidemic: A plan for the United States. *The Journal of the American Medical Association*, 321(9), 844-845. https://doi.org/10.1001/jama.2019.1343

Fauk, N. K., Ward, P. R., Hawke, K., & Mwanri, L. (2021). HIV stigma and discrimination: perspectives and personal experiences of healthcare providers in Yogyakarta and Belu, Indonesia. *Frontiers in Medicine,* 8, 625787. https://doi.org/10.3389/fmed.2021.625787

Feyissa, G. T., Lockwood, C., Woldie, M., & Munn, Z. (2019). Reducing HIV-related stigma and discrimination in healthcare settings: A systematic review of quantitative evidence. *PloS one*, 14(1), e0211298. https://doi.org/10.1371/journal.pone.0211298

Ganesh, S. (2022). *Ministry urged to address prevalence of HIV cases among tertiary students in Malaysia [Review of Ministry urged to address prevalence of HIV cases among tertiary students in Malaysia].* New Straits Times. https://www.nst.com.my/news/nation/2022/09/832052/ministry-urged-address-prevalence-hiv-cases-among-tertiary-students

Gebremichael, D. Y., Hadush, K. T., Kebede, E. M., & Zegeye, R. T. (2018). Gender difference in health related quality of life and associated factors among people living with HIV/AIDS attending anti-retroviral therapy at public health facilities, western Ethiopia: comparative cross sectional study. *BMC Public Health,* 18(1), 1-11. https://doi.org/10.1186/s12889-018-5474-x

Gesesew, H. A., Tesfay Gebremedhin, A., Demissie, T. D., Kerie, M. W., Sudhakar, M., & Mwanri, L. (2017). Significant association between perceived HIV related stigma and late presentation for HIV/AIDS care in low and middle-income countries: a systematic review and meta-analysis. *PLoS One,* 12(3), e0173928. https://doi.org/10.1371/journal.pone.0173928

Geter, A., Sutton, M. Y., & Hubbard McCree, D. (2018). Social and structural determinants of HIV treatment and care among black women living with HIV infection: A systematic review: 2005–2016. *AIDS Care,* 30(4), 409-416. https://doi.org/10.1080/09540121.2018.1426827

Gibbs, A., Washington, L., Willan, S., Ntini, N., Khumalo, T., Mbatha, N., Sikweyiya, Y., Shai, N., Chirwa, E., Strauss, M., & Ferrari, G. (2017). The Stepping Stones and Creating Futures intervention to prevent intimate partner violence and HIV-risk behaviours in Durban, South Africa: Study protocol for a cluster randomized control trial, and baseline characteristics. *BMC Public Health,* 17(1), pp.1-15. https://doi.org/10.1186/s12889-017-4223-x

Girum, T., Wasie, A., Lentiro, K., Muktar, E., Shumbej, T., Difer, M., Shegaze, M., & Worku, A. (2018). Gender disparity in epidemiological trend of HIV/AIDS infection and treatment in Ethiopia. *Archives of Public Health,* 76, 1-10. https://doi.org/10.1186/s13690-018-0299-8

Hadziahmetovic, A., Halebic, J., & Colakovic-Prguda, N. (2018). Economic crisis: Challenge for economic theory and policy. *Eurasian Journal of Economics and Finance,* 6(4), 48-55.

HIV/STI/Hepatitis C Section of Ministry of Health Malaysia (2023). *2022 Global AIDS Monitoring - Country Progress Report Malaysia.* Ministry of Health Malaysia.

https://www.moh.gov.my/moh/resources/Penerbitan/Laporan/Umum/MYS_country_report_2021.pdf

Johnson, K. A., Hessol, N. A., Kohn, R., Nguyen, T. Q., Mara, E. S., Hsu, L., Scheer, S., & Cohen, S. E. (2019). HIV seroconversion in the era of pharmacologic prevention: A case–control study at a San Francisco STD clinic. *JAIDS Journal of Acquired Immune Deficiency Syndromes,* 82(2), 159-165. https://doi.org/10.1097/QAI.0000 000000002107

Shahar, K. H., Jafri, F., Zulkefli, M. N. A., & Ahmad, N. (2020). Prevalence of intimate partner violence in Malaysia and its associated factors: a systematic review. BMC public health, 20, 1-9. https://doi.org/10.1186/s12889-020-09587-4

Kawwass, J. F., Smith, D. K., Kissin, D. M., Haddad, L. B., Boulet, S. L., Sunderam, S., & Jamieson, D. J. (2017). Strategies for preventing HIV infection among HIV-uninfected women attempting conception with HIV-infected men—United States. *Morbidity and Mortality Weekly Report*, 66(21), 554. https://doi.org/10.15585/mmwr.mm6621a2

Kerrigan, D., Vazzano, A., Bertoni, N., Malta, M., & Bastos, F. I. (2017). Stigma, discrimination and HIV outcomes among people living with HIV in Rio de Janeiro, Brazil: the intersection of multiple social inequalities. *Global Public Health,* 12(2), 185-199. https://doi.org/10.1080/17441692.2015.1064459

Qiao, S., Zhang, Y., Li, X., & Menon, J. A. (2018). Facilitators and barriers for HIV-testing in Zambia: A systematic review of multi-level factors. *PloS one,* 13(2), e0192327. https://doi.org/10.1371/journal.pone.0192327

Logie, C. H., Wang, Y., Lacombe-Duncan, A., Wagner, A. C., Kaida, A., Conway, T., Webster, K., de Pokomandy, A., & Loutfy, M. R. (2018). HIV-related stigma, racial discrimination, and gender discrimination: Pathways to physical and mental health-related quality of life among a national cohort of women living with HIV. *Preventive Medicine,* 107, 36-44. https://doi.org/10.1016/j.ypmed.2017.12.018

Maughan-Brown, B., & Venkataramani, A. S. (2018). Accuracy and determinants of perceived HIV risk among young women in South Africa. *BMC Public Health,* 18, 1-9. https://doi.org/10.1186/s12889-017-4593-0

Meinck, F., Pantelic, M., Spreckelsen, T. F., Orza, L., Little, M. T., Nittas, V., Picker, V., Bustamam, A. A., Romero, R. H., Mella, E. P. D., & Stockl, H. (2019). Interventions to reduce gender-based violence among young people living with or affected by HIV/AIDS in low-income and middle-income countries. *AIDS,* 33(14), 2219-2236. https://doi.org/10.1097/QAD.0000000000002337

O'Brien, N., Greene, S., Carter, A., Lewis, J., Nicholson, V., Kwaramba, G., Ménard, B., Kaufman, E., Ennabil, N., Andersson, N. & Loutfy, M., (2017). Envisioning women-centered HIV care: perspectives from women living with HIV in Canada. *Women's Health Issues,* 27(6), 721-730. https://doi.org/10.1016/j.whi.2017.08.001

Palley, T. (2017). The general theory at 80: Reflections on the history and enduring relevance of Keynes' economics. *Investigacion economica,* 76(301), 87-101.

Rice, W. S., Turan, B., Fletcher, F. E., Napoles, T.M., Walcott, M., Batchelder, A., Kempf, M. C., Konkle-Parker, D. J., Wilson, T. E., Tien, P. C., & Wingood, G. M. (2019). A mixed methods study of anticipated and experienced stigma in health care settings among women living with HIV in the United States. *AIDS patient care and STDs,* 33(4), 184-195. https://doi.org/10.1089/apc.2018.0282

Rigby, S. W., & Johnson, L. F. (2017). The relationship between intimate partner violence and HIV: A model-based evaluation. *Infectious Disease Modelling,* 2(1), 71-89. https://doi.org/10.1016/j.idm.2017.02.002

Sadeh, A., Radu, C. F., Feniser, C., & Borsa, A. (2020). Governmental intervention and its impact on growth, economic development, and technology in OECD countries. *Sustainability,* 13(1), 166. https://doi.org/10.3390/su13010166

Somia, I. K. A., Teeratakulpisarn, N., Jeo, W. S., Yee, I. A., Pankam, T., Nonenoy, S., Trachuntong, D., Mingkwanrungrueng, P., Sukmawati, M.D.D., Ramautarsing, R. & Nilasari, H. (2018). Prevalence of and risk factors for anal high-risk HPV among HIV-negative and HIV-positive MSM and transgender women in three countries at South-East Asia. *Medicine,* 97(10), p.e9898. https://doi.org/10.1097/MD.000 0000000009898

Subedar, H., Barnett, S., Chaka, T., Dladla, S., Hagerman, E., Jenkins, S., Matshimane, G., Mangold, K., Msimanga, B., Pooe, R., & Schultz, L. (2018). Tackling HIV by empowering adolescent girls and young women: A multisectoral, government led campaign in South Africa. *British Medical Journal,* 363. https://doi.org/10.1136 /bmj.k4585

Valdelamar-Jimenez, J.R., Narvaez Betancur, M. B., Brites, C., & Lins-Kusterer, L. (2023). Health-related quality of life: gender differences in people living with HIV/AIDS. *Current Psychology,* 1-11. https://doi.org/10.1007/s12144-023-04876-8

Watkins-Hayes, C. (2019). *Remaking a life: How women living with HIV/AIDS confront inequality*. University of California Press.

Yonga, A. M., Kiss, L., & Onarheim, K. H. (2022). A systematic review of the effects of intimate partner violence on HIV-positive pregnant women in sub-Saharan Africa. *BMC Public Health*, 22, 220. https://doi.org/10.1186/s12889-022-12619-w

Zainuddin, A. (2023). *Negotiation Could Reduce HIV Drug Costs in Malaysia, Say Experts.* Code Blue Health Is Human Right. https://codeblue.galencentre.org/ 2023/03/16/negotiation-could-reduce-hiv-drug-costs-in-malaysia-say-experts/