

STREET FOOD VENDORS AS AMBASSADORS FOR HIV AWARENESS: HARNESSING LOCAL NETWORKS FOR PUBLIC HEALTH ADVOCACY

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Article Received on
19 November 2024,

Revised on 09 Dec. 2024,
Accepted on 29 Dec. 2024

DOI: 10.20959/wjpr20251-35169



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ABSTRACT

Street food vendors, as integral figures in many urban communities, possess the potential to serve as powerful agents of change in public health, particularly in the realm of HIV awareness. These vendors interact daily with a wide range of individuals, including high-risk populations, providing a unique opportunity to disseminate critical information about HIV prevention, testing, and treatment. This review examines the role of street food vendors as ambassadors for HIV awareness, exploring how their trusted status within communities can be leveraged to reduce stigma and increase health literacy. The article highlights successful interventions that have utilized street vendors in HIV campaigns and outlines strategies for enhancing their involvement in health education efforts. Despite their potential, several challenges impede the effectiveness of street food vendors in HIV awareness campaigns. These barriers include a lack of formal health training,

resistance from vendors and customers to discussing sensitive topics, and logistical issues such as limited access to resources and infrastructure. Addressing these challenges requires tailored strategies that provide vendors with accurate, culturally relevant information and the tools needed to engage effectively with their communities. The review also emphasizes the importance of partnerships between local health organizations and street vendors to ensure that health resources are available and accessible in informal settings.

KEYWORDS: *HIV awareness, Street food vendors, Public health advocacy, Community engagement, Health education.*

INTRODUCTION

Street food vendors are ubiquitous in many urban and rural communities, particularly in low- and middle-income countries, where they serve as essential providers of affordable meals. These vendors often work in informal sectors and have daily, direct interactions with a wide range of individuals, from local residents to transient populations. The visibility and reach of street food vendors make them a potentially powerful resource in public health advocacy, particularly in raising awareness about critical health issues such as HIV. Despite their pivotal role in the community, street food vendors are often overlooked in health promotion initiatives, especially those aimed at tackling HIV prevention and education. This review seeks to explore the untapped potential of street food vendors as ambassadors for HIV awareness, assessing how their established relationships and trusted positions within communities can be leveraged to combat the HIV epidemic.^[1-2] HIV remains a major public health issue in many parts of the world, with high transmission rates in regions like sub-Saharan Africa, Southeast Asia, and parts of Latin America. While significant strides have been made in treatment and prevention, stigma, misinformation, and limited access to healthcare continue to impede progress. In many communities, particularly those that are underserved or marginalized, people are hesitant to engage with formal healthcare systems due to fear of discrimination or social stigma surrounding HIV. Street food vendors, as trusted and accessible figures, have the potential to bridge this gap, offering a more informal and approachable avenue for disseminating HIV prevention messages and encouraging engagement with HIV testing and treatment services.^[3] In contrast to traditional methods of health outreach that often rely on medical professionals or public health campaigns, street food vendors provide a localized and highly personalized approach to public health. Given their everyday interactions with community members, vendors are in a unique position to act as conduits of health information. By incorporating HIV prevention messages into their interactions with customers, they can foster a more open, ongoing dialogue about HIV, its prevention, and the importance of regular testing. This community-based model for HIV awareness could be especially effective in reaching at-risk populations who may avoid formal healthcare settings but frequent street food markets for everyday needs.^[4-5]

The potential of street food vendors to influence health outcomes extends beyond simply providing information. Due to their familiarity and regular interactions with local populations, they are well-placed to address social determinants of health that contribute to the spread of HIV. Many vendors already play a role in supporting their communities' social

fabric, whether through informal financial assistance, providing a gathering space, or fostering connections among local residents. This inherent trust within the community can be leveraged to reduce stigma around HIV, encourage safe behaviors, and promote acceptance of HIV testing and treatment services.^[6] Despite the promising role that street food vendors can play in HIV prevention, there are several challenges that must be addressed. Vendors often lack formal training in health education, which can lead to the spread of misinformation or incomplete messages. Additionally, cultural taboos and social stigma around HIV-related topics may deter both vendors and customers from engaging in meaningful conversations about the virus. Vendors may also face resistance to engaging with health-related initiatives, particularly if they perceive these efforts as intrusive or outside the scope of their work. Overcoming these barriers requires comprehensive training programs that equip vendors with the knowledge and skills needed to communicate effectively about HIV prevention, reduce stigma, and encourage healthier behaviors.^[7] Another critical challenge is the logistical support needed to ensure that HIV awareness campaigns through street vendors are successful. Street food vendors often operate in informal settings, making it difficult to coordinate health outreach activities. They may also have limited access to educational resources, such as HIV testing kits, condoms, or informational materials, which are essential to ensuring that health messages are both accurate and actionable. To address these challenges, public health organizations and governments must partner with vendors to provide the resources, training, and incentives needed to support their role as HIV ambassadors.^[8]

The role of street food vendors in community health

Street food vendors play a significant role in many communities, particularly in urban and rural areas where access to formal food establishments may be limited. Beyond their primary function of providing affordable and accessible food, they also serve as integral social and cultural hubs. These vendors are often familiar faces within their localities, and their interactions with customers create strong relationships built on trust and regular contact. This unique position allows street food vendors to serve as informal community health influencers, as they are regularly in contact with individuals from various socio-economic backgrounds, including at-risk populations who may not typically engage with formal healthcare systems.^[9] As central figures in many neighborhoods, street food vendors contribute to the social cohesion of the community, offering not just meals but also spaces for socialization, information exchange, and support. These vendors often become a point of reference for local

information, and their credibility within the community means that they can be powerful messengers when it comes to promoting health behaviors and awareness. Their close relationships with customers enable them to influence behaviors related to nutrition, hygiene, and health practices, which can have far-reaching implications for public health, including HIV awareness and prevention.^[10] In terms of HIV prevention, street food vendors have a unique advantage in reaching at-risk groups that may otherwise be difficult to engage. Many people who are hesitant to access formal health services due to stigma or fear of discrimination may feel more comfortable discussing health issues with familiar vendors. This trust can be harnessed to provide crucial HIV-related information, encourage HIV testing, and promote safer sexual practices. Given their widespread presence and everyday interactions with diverse individuals, street food vendors are well-positioned to play an essential role in community health initiatives, particularly those aimed at HIV awareness and prevention.^[11]

Successful interventions utilizing street food vendors

Successful interventions utilizing street food vendors have demonstrated their potential to significantly contribute to community health, particularly in the areas of HIV prevention and awareness. These interventions leverage the unique role that vendors play in their communities, using their trusted relationships and widespread visibility to disseminate health messages effectively. One key example of this is the implementation of HIV education campaigns that train street food vendors to provide information about HIV prevention, testing, and treatment options to their customers. These vendors, equipped with basic knowledge and materials, act as peer educators who help reduce stigma and encourage open discussions about HIV in environments that are more approachable and less formal than healthcare settings.^[12-13] One notable intervention comes from a project in several African countries, where street vendors were trained as community health ambassadors. These vendors received training on HIV transmission, prevention methods, and local healthcare services, enabling them to provide accurate information and encourage customers to seek HIV testing. The intervention was paired with the distribution of health resources such as condoms and educational pamphlets at food stalls, making it easy for individuals to access crucial preventive tools. The project also involved local health authorities and NGOs, which ensured that vendors had the necessary support and resources to disseminate information effectively. This approach has proven effective in reaching hard-to-reach populations, such as young people, migrant workers, and individuals with limited access to formal healthcare.^[14-15]

In Asia, a similar intervention focused on integrating street vendors into broader community health campaigns aimed at reducing HIV transmission. In this initiative, vendors were trained to recognize signs of HIV-related illness and encourage individuals to seek professional help. Vendors were also provided with HIV testing kits to distribute to customers, facilitating testing in locations where people may feel more comfortable. By combining peer education with the provision of testing services, the intervention was successful in increasing the number of individuals who got tested for HIV in the community. This type of model not only highlights the importance of street vendors in raising awareness but also demonstrates how they can directly contribute to the uptake of HIV testing and other preventive measures.^[16-17] Another successful model comes from Latin America, where street food vendors have been incorporated into community-level health promotion programs targeting the most vulnerable populations, including sex workers, men who have sex with men (MSM), and individuals in high-risk settings. Street vendors were trained to deliver HIV prevention information tailored to these groups, helping to create a more open environment for discussing HIV. This model emphasized cultural sensitivity and the importance of engaging with diverse community members, which in turn helped to normalize conversations about HIV and reduce the stigma associated with the disease. The intervention also involved local health workers who supported vendors with follow-up services and access to local health centers, ensuring that individuals who received information from the vendors were also encouraged to access further care.^[18-19] These successful interventions demonstrate that street food vendors, when trained and supported, can play a transformative role in HIV awareness and prevention. By tapping into the established trust vendors have with their communities and providing them with the resources to educate and inform, health organizations can expand their outreach to populations that may otherwise be difficult to engage. Moreover, these interventions have shown that community-based, peer-led health campaigns can be both cost-effective and sustainable, as they leverage existing social structures and local knowledge. Ultimately, the inclusion of street food vendors in public health campaigns represents a promising and innovative approach to tackling HIV and other health issues at the grassroots level.^[20]

Challenges and Barriers

While the involvement of street food vendors in HIV awareness and prevention efforts offers significant promise, several challenges and barriers need to be addressed to maximize their potential impact. One of the primary obstacles is the lack of formal health education among street food vendors. Many vendors may not have access to training programs that equip them

with the necessary knowledge to accurately share HIV-related information. This can lead to the spread of misinformation or incomplete messages, which could inadvertently harm the community's understanding of HIV prevention and treatment. Providing vendors with proper, ongoing education on HIV and related health issues is essential for ensuring the accuracy and effectiveness of their role as health ambassadors.^[21] Cultural taboos and stigma surrounding HIV are also significant barriers to engaging street food vendors in HIV-related initiatives. In many communities, discussions about HIV are still seen as taboo, and individuals may feel uncomfortable talking about the virus openly, even in informal settings like food stalls. Vendors themselves may harbor fears of being stigmatized for discussing HIV, which could affect their willingness to participate in public health campaigns. Overcoming this stigma requires addressing the cultural norms that prevent open dialogue about HIV and ensuring that vendors feel supported in their efforts to reduce stigma and encourage HIV testing and prevention. Moreover, local communities must be sensitized to the importance of discussing HIV and normalizing health-seeking behaviors to create an environment conducive to change.^[22-23] Logistical challenges also pose a significant barrier to the successful integration of street food vendors into HIV awareness campaigns. Street vendors often operate in informal settings without stable infrastructure or resources, making it difficult to implement large-scale health initiatives. Vendors may not have access to necessary tools, such as HIV testing kits, condoms, or educational materials, which are essential for providing tangible prevention resources to customers. Furthermore, reaching vendors with training and support can be difficult, particularly in rural or remote areas where access to healthcare services is already limited. Collaboration with local health authorities, NGOs, and community-based organizations is critical to ensuring that vendors are equipped with the tools and resources they need to be effective health advocates. Addressing these logistical challenges requires investment in infrastructure, resources, and partnerships to ensure the sustainability and success of street vendor-led health initiatives.^[24]

Another challenge lies in the varying levels of vendor engagement and interest in participating in HIV awareness campaigns. Some street food vendors may be hesitant to engage with public health initiatives, perceiving them as an unnecessary distraction from their business or as outside their professional scope. Vendors may also be concerned about the time commitment required for training and participation in campaigns, particularly if they feel that these efforts will not lead to immediate, tangible benefits. Overcoming this barrier requires building trust with vendors by clearly demonstrating the personal and community

benefits of HIV prevention efforts. Providing incentives such as financial compensation, marketing support, or recognition for their role in public health can motivate vendors to participate and remain engaged in these initiatives.^[25] Lastly, the diverse and transient nature of street food vendor populations presents another challenge. Many vendors work on the move, and some may not remain in the same location for extended periods, which makes consistent engagement difficult. This mobility can limit the continuity of training and education efforts and pose challenges in tracking the effectiveness of HIV awareness campaigns over time. To mitigate this, health organizations must develop flexible and adaptive strategies that can reach vendors wherever they operate and ensure that training and materials are portable and easily accessible. Additionally, a network of health professionals and community organizations can help facilitate the ongoing support and engagement of mobile street vendors.^[26-27]

Strategies for empowering street food vendors

Empowering street food vendors to serve as ambassadors for HIV awareness and prevention requires a comprehensive approach that combines education, support, and community engagement. Below are key strategies to empower these vendors, ensuring they can play a meaningful role in public health efforts.

1. Education and Training programs

One of the most critical strategies for empowering street food vendors is providing them with comprehensive education and training on HIV prevention, testing, and treatment options. Training programs should focus on equipping vendors with accurate and up-to-date information about HIV transmission, methods of prevention (Such as condom use and safe sexual practices), and local healthcare resources. These programs should be culturally sensitive, addressing local misconceptions and stigma surrounding HIV. Training should also include practical components, such as how to engage customers in conversations about HIV and how to distribute health resources (like condoms and educational pamphlets) in a non-stigmatizing manner. Offering refresher courses or follow-up sessions can ensure that vendors stay informed and continue to effectively share accurate information with their communities.^[28-30]

2. Providing health resources

To empower street food vendors in their role as HIV prevention ambassadors, providing them with the necessary tools and resources is essential. This includes distributing free HIV testing

kits, condoms, and informational materials that vendors can easily share with their customers. In addition to these resources, vendors can be supplied with referral materials, such as contact details for nearby clinics or healthcare facilities, where customers can access HIV testing or treatment services. It is important that these resources are not only made available to the vendors but also replenished regularly, ensuring a continuous and reliable supply of materials. Creating easy-to-understand, visually appealing materials can help ensure that the information is accessible to a wide range of customers, including those with low literacy levels.^[31-33]

3. Community Engagement and Support

Engaging the broader community is crucial for the success of any HIV awareness initiative involving street food vendors. Community leaders, local health organizations, and influencers should be involved in promoting the role of street food vendors in HIV prevention. Establishing partnerships between vendors and local health agencies or NGOs can provide vendors with ongoing support and credibility. These partnerships can help address any concerns vendors may have about their involvement in HIV prevention campaigns, such as fear of stigmatization or legal issues. Additionally, community engagement can ensure that the messages being shared by vendors resonate with local norms and values, making the information more likely to be accepted and acted upon. Encouraging customers to view vendors as trusted sources of health information can also contribute to greater awareness and behavior change within the community.^[34-36]

4. Incentive Programs and Recognition

Providing incentives and recognition for street food vendors who actively engage in HIV prevention efforts can significantly increase their motivation to participate. Incentives can be financial, such as offering small stipends or reimbursement for training-related costs, or non-financial, such as public recognition through certificates or local media coverage. Vendors who perform well in spreading HIV awareness can also be highlighted as role models in the community, which could boost their business by attracting more customers who appreciate their role in public health. Recognition could also include showcasing vendors at community health events or in public health campaigns, creating a sense of pride and ownership among vendors.^[37-40]

5. Building Peer Networks and Support Groups

Creating a network of street food vendors who are trained in HIV prevention can foster a sense of solidarity and shared responsibility. These peer networks allow vendors to exchange experiences, share successful strategies, and provide mutual support in addressing challenges they may face in discussing HIV with their customers. Regular meetings or online forums can serve as platforms for vendors to discuss what is working well and identify areas for improvement. Peer support groups can also help vendors build resilience against any stigma or backlash they may face and encourage them to continue their outreach efforts. These networks can be facilitated by local health organizations or community groups that provide ongoing training, support, and recognition for vendors' contributions to HIV awareness.^[41-43]

6. Leveraging Technology and Social Media

Incorporating technology and social media into empowerment strategies can enhance the reach and impact of HIV prevention efforts led by street food vendors. Vendors can be encouraged to use their social media platforms to share HIV prevention messages, success stories, or updates about local HIV testing campaigns. This allows vendors to reach a larger audience beyond their immediate customers and can help normalize HIV conversations in the digital space. Additionally, mobile apps and SMS-based health education services can be used to keep vendors updated on the latest HIV prevention strategies, resources, and local events, allowing them to stay informed and connected with the broader public health community.^[44-45]

7. Addressing the structural needs of street vendors

Empowering street food vendors goes beyond training and education—it also involves addressing their structural and operational needs. Many street vendors face challenges related to infrastructure, such as inadequate access to electricity, water, or sanitation. Addressing these structural challenges by providing better working conditions can increase vendors' willingness and ability to participate in public health campaigns. For instance, local authorities or NGOs could work with vendors to create safer, more hygienic spaces for food preparation and customer interaction, which may also enhance the credibility of their health-related messages. Additionally, providing street vendors with legal support or advocacy can help protect them from harassment or legal barriers that may hinder their participation in public health initiatives.^[46-47]

Policy Implications and Recommendations

To effectively engage street food vendors as ambassadors for HIV awareness and prevention, it is essential to consider several policy implications and recommendations that foster an environment conducive to their active participation. These policies should focus on education, resource allocation, legal frameworks, and community integration, ensuring that street vendors are equipped, supported, and encouraged to contribute to public health efforts. Below are key policy recommendations that can support the empowerment of street food vendors in HIV prevention:

1. Incorporating HIV Education into Vendor Training Programs

Government and public health agencies should establish policies that incorporate HIV prevention education into formal and informal training programs for street food vendors. These programs should be made accessible and practical, offering vendors the skills they need to educate their customers while providing information on HIV testing, treatment, and prevention. Policymakers should advocate for integrating these training sessions into existing vendor associations, local health initiatives, or community outreach programs. Ensuring that street food vendors have the opportunity to attend HIV-focused training can help ensure accurate and consistent information is shared in communities, helping to break down misconceptions about HIV.

2. Providing Financial Incentives and Support

To encourage the participation of street food vendors in HIV prevention campaigns, policies should include financial incentives such as subsidies for training, resources, or even direct stipends for their participation. Providing financial support to vendors not only compensates them for their time and efforts but also incentivizes continued involvement. Local governments and NGOs can collaborate to create grant programs or funding mechanisms that support vendor-led HIV awareness initiatives. This could include providing vendors with HIV testing kits, educational materials, and promotional tools to help spread awareness. Recognizing the economic challenges faced by vendors, policymakers should develop financial models that ensure the sustainability of these initiatives.

3. Creating legal protections for vendors

Street food vendors often operate in informal sectors and may face legal challenges, such as harassment or restrictions on their activities. Policymakers should create legal frameworks that support street vendors' participation in health-related campaigns without fear of

discrimination or legal repercussions. This could include protection from fines, harassment, or unjust regulations that hinder their ability to run their businesses while participating in HIV awareness efforts. Additionally, laws should encourage the inclusion of street food vendors in formal health education and community outreach programs. Governments should work toward integrating these vendors into the broader public health system, ensuring that their contributions to HIV awareness are recognized and protected.

4. Strengthening Partnerships Between Vendors and Health Organizations

Effective HIV prevention initiatives require collaboration between street food vendors, local health authorities, non-governmental organizations (NGOs), and community-based organizations. Policymakers should encourage the creation of formal partnerships between these stakeholders to streamline the distribution of resources, training, and support to vendors. Local health departments can collaborate with NGOs to ensure that vendors have access to HIV testing kits, condoms, and educational materials. Furthermore, public health campaigns should be designed to include street food vendors as partners, allowing them to be integrated into larger community health efforts. By supporting these partnerships, policymakers can ensure that HIV prevention messages reach a broader audience, particularly in underserved or marginalized communities.

5. Leveraging Technology and Digital Platforms

Policymakers should explore opportunities to incorporate technology and digital platforms into HIV awareness campaigns involving street food vendors. Digital tools, such as mobile apps, social media platforms, and text message-based health services, can significantly enhance the reach of HIV prevention initiatives. Policies should facilitate the development of mobile health programs that allow street food vendors to receive continuous updates on HIV prevention methods, testing services, and local health resources. Furthermore, health departments should consider creating digital platforms that allow vendors to share HIV prevention messages with their customers, increasing the effectiveness of these initiatives. Leveraging digital technologies can also help vendors stay connected with health professionals, reinforcing their role in HIV education and prevention.

6. Addressing Stigma Through Community-Based Policies

Policymakers must prioritize initiatives that reduce stigma and create supportive environments for discussing HIV openly in public spaces, including those where street food vendors operate. Policies should encourage local communities to engage in public health

campaigns that normalize HIV prevention, testing, and treatment. This could include launching anti-stigma campaigns that educate the public on the importance of HIV awareness and support for individuals living with HIV. Governments and health organizations should also promote the role of street food vendors in these campaigns, highlighting their essential role in changing public perceptions and reducing the stigma associated with HIV. These policies will help create an environment where HIV prevention efforts are more widely accepted and supported by the community.

7. Investing in Monitoring and Evaluation Systems

To ensure the long-term success and sustainability of HIV awareness campaigns led by street food vendors, policymakers must invest in monitoring and evaluation (M&E) systems. These systems should track the effectiveness of vendor-led initiatives, assess the impact on HIV knowledge and testing behaviors, and provide feedback to continuously improve outreach efforts. Policymakers can work with public health agencies to develop tools for measuring the reach and success of street food vendor involvement in HIV awareness campaigns. Monitoring and evaluation will also provide valuable data that can inform future policy decisions, making it easier to scale successful initiatives and ensure that resources are allocated to the most effective strategies.

8. Integrating street food vendors into national health strategies

Finally, policymakers should integrate street food vendors into national HIV prevention strategies. This includes recognizing them as valuable stakeholders in public health initiatives and designing policies that specifically address their needs and potential contributions. By integrating street food vendors into national health strategies, governments can expand the reach of HIV prevention messages, particularly in low-resource settings. This integration will also help ensure that HIV prevention efforts are inclusive and accessible to all members of society, including those who may not have access to traditional healthcare services.

CONCLUSION

Engaging street food vendors as ambassadors for HIV awareness offers a unique opportunity to extend the reach of HIV prevention messages to underserved communities, where traditional health outreach may not always be accessible. Street food vendors, with their direct access to large numbers of people in public spaces, are well-positioned to play a pivotal role in spreading knowledge about HIV prevention, testing, and treatment options. Through targeted education, empowering vendors with the right resources, and fostering supportive

partnerships, these vendors can become trusted sources of information and contribute to reducing stigma around HIV in their communities. However, to maximize the potential of street food vendors in HIV awareness campaigns, several challenges need to be addressed. These include the need for better training, financial incentives, legal protections, and overcoming barriers such as stigma and lack of access to health resources. Addressing these challenges through well-designed policies and community-driven initiatives will ensure that vendors are not only equipped to share accurate information but also motivated to actively participate in HIV prevention efforts.

REFERENCES

1. Obeagu EI, Obeagu GU. Harnessing B Cell Responses for Personalized Approaches in HIV Management. *Elite Journal of Immunology*, 2024; 2(2): 15-28.
2. Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. *Elite Journal of Public Health*, 2024; 2(1): 35-51.
3. Obeagu EI, Obeagu GU. Platelet Aberrations in HIV Patients: Assessing Impacts of ART. *Elite Journal of Haematology*, 2024; 2(3): 10-24.
4. Obeagu EI, Obeagu GU. Impact of Maternal Eosinophils on Neonatal Immunity in HIV-Exposed Infants: A Review. *Elite Journal of Immunology*, 2024; 2(3): 1-18.
5. Obeagu EI, Obeagu GU. Advancements in HIV Prevention: Africa's Trailblazing Initiatives and Breakthroughs. *Elite Journal of Public Health*, 2024; 2(1): 52-63.
6. Pederson A, Greaves L, Poole N. Gender-transformative health promotion for women: a framework for action. *Health promotion international*, 2014; 30(1): 140-150.
7. Turchik JA, Hebenstreit CL, Judson SS. An examination of the gender inclusiveness of current theories of sexual violence in adulthood: Recognizing male victims, female perpetrators, and same-sex violence. *Trauma, Violence, & Abuse*, 2016; 17(2): 133-148.
8. World Health Organization. Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. World Health Organization, 2022.
9. Dubé K, Kanazawa J, Campbell C, Boone CA, Maragh-Bass AC, Campbell DM, Agosto-Rosario M, Stockman JK, Diallo DD, Poteat T, Johnson M. Considerations for increasing racial, ethnic, gender, and sexual diversity in HIV cure-related research with analytical treatment interruptions: a qualitative inquiry. *AIDS research and human retroviruses*, 2022; 38(1): 50-63.

10. Reavis KM, Bisgaard N, Canlon B, Dubno JR, Frisina RD, Hertzano R, Humes LE, Mick P, Phillips NA, Pichora-Fuller MK, Shuster B. Sex-linked biology and gender-related research is essential to advancing hearing health. *Ear and hearing*, 2023; 44(1): 10-27.
11. Obeagu EI, Obeagu GU. Hematologic Considerations in Breast Cancer Patients with HIV: Insights into Blood Transfusion Strategies. *Elite Journal of Health Science*, 2024; 2(2): 20-35.
12. Obeagu EI, Obeagu GU. Understanding ART and Platelet Functionality: Implications for HIV Patients. *Elite Journal of HIV*, 2024; 2(2): 60-73.
13. Obeagu EI, Obeagu GU. Optimizing Blood Transfusion Protocols for Breast Cancer Patients Living with HIV: A Comprehensive Review. *Elite Journal of Nursing and Health Science*, 2024; 2(2): 1-17.
14. Obeagu EI, Obeagu GU. Immune Modulation in HIV-Positive Neonates: Insights and Implications for Clinical Management. *Elite Journal of Nursing and Health Science*, 2024; 2(3): 59-72.
15. Obeagu EI, Obeagu GU. Transfusion Therapy in HIV: Risk Mitigation and Benefits for Improved Patient Outcomes. *Asian Journal of Dental and Health Sciences*, 2024; 15, 4(1): 32-7.
16. Davies SE. Gender empowerment in the health aid sector: Locating best practice in the Australian context. *Australian Journal of International Affairs*, 2018; 72(6): 520-534.
17. Shetty S. Fostering Inclusive Development in Sub-Saharan Africa Through Gender Equality. *SAIS Review of International Affairs*, 2021; 41(1): 33-48.
18. Blankenship KM, Reinhard E, Sherman SG, El-Bassel N. Structural interventions for HIV prevention among women who use drugs: A global perspective. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 2015; 69: S140-155.
19. Tripathi S, Rajeev M. Gender-inclusive development through Fintech: Studying gender-based digital financial inclusion in a cross-country setting. *Sustainability*, 2023; 15(13): 10253.
20. May JF, Rotenberg S. A call for better integrated policies to accelerate the fertility decline in sub-Saharan Africa. *Studies in family planning*, 2020; 51(2): 193-204.
21. Obeagu EI, Obeagu GU, Okwuanaso CB. Optimizing Immune Health in HIV Patients through Nutrition: A Review. *Elite Journal of Immunology*, 2024; 2(1): 14-33.
22. Obeagu EI. Erythropoietin and the Immune System: Relevance in HIV Management. *Elite Journal of Health Science*, 2024; 2(3): 23-35.

23. Obeagu EI, Obeagu GU. Hematocrit Fluctuations in HIV Patients Co-infected with Malaria Parasites: A Comprehensive Review. *Int. J. Curr. Res. Med. Sci*, 2024; 10(1): 25-36.
24. Obeagu EI, Ubosi NI, Obeagu GU, Akram M. Early Infant Diagnosis: Key to Breaking the Chain of HIV Transmission. *Elite Journal of Public Health*, 2024; 2(1): 52-61.
25. Obeagu EI, Ubosi NI, Obeagu GU, Obeagu AA. Nutritional Strategies for Enhancing Immune Resilience in HIV: A Review. *Int. J. Curr. Res. Chem. Pharm. Sci*, 2024; 11(2): 41-51.
26. Rodrigo C, Rajapakse S. HIV, poverty and women. *International Health*, 2010; 2(1): 9-16.
27. Greener R, Sarkar S. Risk and vulnerability: do socioeconomic factors influence the risk of acquiring HIV in Asia?. *Aids*, 2010; 24: S3-11.
28. Amin A. Addressing gender inequalities to improve the sexual and reproductive health and wellbeing of women living with HIV. *Journal of the International AIDS Society*, 2015; 18: 20302.
29. Zierler S, Krieger N. Reframing Women's Risk: Social Inequalities and HIV Infection. *Women, Medicine, Ethics and the Law*, 2020; 401-436.
30. Berndt VK, Austin KF. Drought and disproportionate disease: an investigation of gendered vulnerabilities to HIV/AIDS in less-developed nations. *Population and Environment*, 2021; 42(3): 379-405.
31. Obeagu EI, Obeagu GU. Understanding Immune Cell Trafficking in Tuberculosis-HIV Coinfection: The Role of L-selectin Pathways. *Elite Journal of Immunology*, 2024; 2(2): 43-59.
32. Obeagu EI, Anyiam AF, Obeagu GU. Synergistic Effects of Blood Transfusion and HIV in Children Under 5 Years with Severe Malaria: A Review. *Elite Journal of HIV*, 2024; 2(1): 31-50.
33. Kim J, Pronyk P, Barnett T, Watts C. Exploring the role of economic empowerment in HIV prevention. *Aids*, 2008; 22: S57-71.
34. Chersich MF, Rees HV. Vulnerability of women in southern Africa to infection with HIV: biological determinants and priority health sector interventions. *Aids*, 2008; 22: S27-40.
35. Folayan MO, Arije O, Enemo A, Sunday A, Muhammad A, Nyako HY, Abdullah RM, Okiwu H, Undelikwo VA, Ogbozor PA, Amusan O. Factors associated with poor access to HIV and sexual and reproductive health services in Nigeria for women and girls living

- with HIV during the COVID-19 pandemic. *African Journal of AIDS Research*, 2022; 21(2): 171-182.
36. Armoon B, Higgs P, Fleury MJ, Bayat AH, Moghaddam LF, Bayani A, Fakhri Y. Socio-demographic, clinical and service use determinants associated with HIV related stigma among people living with HIV/AIDS: a systematic review and meta-analysis. *BMC health services research*, 2021; 21: 1-20.
37. Yah CS, Tambo E. Why is mother to child transmission (MTCT) of HIV a continual threat to new-borns in sub-Saharan Africa (SSA). *Journal of infection and public health*, 2019; 12(2): 213-223.
38. Wamoyi J, Mshana G, Mongi A, Neke N, Kapiga S, Changalucha J. A review of interventions addressing structural drivers of adolescents' sexual and reproductive health vulnerability in sub-Saharan Africa: implications for sexual health programming. *Reproductive health*, 2014; 11: 1-5.
39. Zachek CM, Coelho LE, Domingues RM, Clark JL, De Boni RB, Luz PM, Friedman RK, de Andrade ÂC, Veloso VG, Lake JE, Grinsztejn B. The intersection of HIV, social vulnerability, and reproductive health: analysis of women living with HIV in Rio de Janeiro, Brazil from 1996 to 2016. *AIDS and Behavior*, 2019; 23: 1541-1551.
40. Alemayehu BA. Gender inclusive training challenges in higher education institutions in Ethiopia: Implications for reforming training for gender equality. *International Journal of Didactical Studies*, 2020; 1(1): 16-21.
41. Gudhlanga E, Chirimuuta C, Bhukuvhani C. Towards a gender inclusive curriculum in Zimbabwe's education system: Opportunities and challenges. *Gender and behavior*, 2012; 10(1): 4533-4545.
42. Sevelius JM, Keatley J, Gutierrez-Mock L. HIV/AIDS programming in the United States: considerations affecting transgender women and girls. *Women's Health Issues*, 2011; 21(6): S278-282.
43. Sørensen H. Gender inclusive science education?: The influence of attitudes and values toward science. In *The re-emergence of values in science education*, 2007; 249-267. Brill.
44. Lowik AJ, Knight R. Toward gender-inclusive, nonjudgmental alcohol interventions for pregnant people: challenging assumptions in research and treatment. *Journal of Addiction Medicine*, 2019; 13(5): 335-337.
45. Restar A, Jin H, Operario D. Gender-inclusive and gender-specific approaches in trans health research. *Transgender Health*, 2021; 6(5): 235-239.

46. Keith RM. Gender and food security: cross cutting or crossed out? The challenge of implementing 'gender-just' food security solutions. In Handbook of Food Security and Society, 2023; 145-161. Edward Elgar Publishing.
47. Tordoff DM, Restar A, Minalga B, Fernandez A, Dimitrov D, Duerr A, Seattle Trans and Nonbinary Sexual Health (STARS) Advisory Board. Including transgender populations in mathematical models for HIV treatment and prevention: current barriers and policy implications. Journal of the International AIDS Society, 2024; 27(6): e26304.