

The Effect of HIV Drug Resistance on At-risk Populations: Focusing on Resource-limited Settings

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Introduction

HIV drug resistance impacts vulnerable populations in resource-limited settings, identify the factors contributing to this issue, and discuss potential strategies for mitigating the effects of HIVDR continues to be a major global health challenge, particularly in sub-Saharan Africa, Asia, and other regions with resource-limited healthcare systems. With the advent of antiretroviral therapy poses a significant threat to the effectiveness of ART, particularly in vulnerable populations in resource-limited settings. These populations often face multiple barriers to accessing healthcare, resulting in higher rates of treatment failure and complications, including the development of drug-resistant strains of HIV. In this article, we will explore how The breakdown of intestinal epithelial integrity also facilitates the translocation of larger macromolecules, such as proteins and peptides, into the bloodstream, which may further exacerbate immune dysfunction and increase the risk of co-morbidities in HIV-infected patients. One potential strategy is the use of agents that promote the repair of the intestinal epithelium [1,2].

Description

Vulnerable populations are particularly susceptible to the challenges posed by HIV drug resistance. These populations may include women, children, refugees, people living in poverty, and individuals with limited access to healthcare services. In resource-limited settings, the situation is compounded by a lack of adequate healthcare infrastructure, poor access to medical supplies, inadequate education on proper medication adherence, and the financial constraints that prevent many from accessing quality care. One of the most vulnerable groups in this context is the refugee population. Refugees often face disruption in their healthcare routines due to displacement, limited access to ART, and inadequate follow-up care. This disruption, coupled with high levels of stress and poor living conditions, increases the likelihood of ART non-adherence, making them more susceptible to HIV drug resistance. In many resource-limited settings, access to ART is limited by economic factors, infrastructure, and geographic barriers. Many people living with HIV may not be able to access ART consistently, and even when they do, interruptions in treatment are common. ART adherence is crucial to suppressing the virus, but in many resource-limited settings, patients often experience stockouts of essential medications, delays in supply chains, and irregular access to healthcare facilities. This lack of consistent treatment can increase the risk of drug resistance [3-5].

Conclusion

HIV drug resistance is a significant threat to the effectiveness of ART, particularly in resource-limited settings where vulnerable populations face

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multiple challenges in accessing care. These populations are at greater risk of treatment failure and the development of resistant strains of HIV due to factors such as limited access to ART, poor medication adherence, and inadequate healthcare infrastructure. Addressing the issue of HIV drug resistance requires a multifaceted approach that includes improving access to ART, enhancing adherence, expanding viral load monitoring, and strengthening healthcare systems. With concerted efforts, it is possible to reduce the impact of HIV drug resistance and ensure better health outcomes for people living with HIV in resource-limited settings.

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Conflict of Interest

None.

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