

Early detection of HIV infection in Africa: Role of community pharmacists

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Abstract

Acute Retroviral Syndrome (ARS) also called acute HIV infection is the earliest stage of HIV infection which typically occurs within fourteen to twenty-eight days after an individual becomes infected with HIV. However, patients in the acute stage of the disease rarely get tested or visit HIV clinics, which is a significant contributing factor to the frequently missed diagnosis of such patients. Also, the often-non-specific nature of the symptoms when isolated and the little time frame in which such symptoms are exhibited play a role. This article aims to provide ways of improving both responses to HIV and patient outcomes by ensuring early detection during the ARS stage through the help of community pharmacists.

Community pharmacists are often the most accessible and affordable health professionals that patients with simple ARS symptoms like flu come in contact with. Community pharmacists provide delicate sexual health counselling to patients, sell condoms, and dispense HIV tests and sexually transmitted illness medications. This puts them in a unique position to identify patients who will potentially benefit from Pre-Exposure Prophylaxis (PrEP), thereby reducing the risk of HIV infections. At the same time, they can also detect high-risk patients who have clocked out of their PrEP regimes as well as promote such individuals getting tested. Community pharmacists are thus well-placed to identify high-risk patients who experience symptoms of ARS and recommend them appropriately for HIV testing. Increased support of community pharmacists by various stakeholders and policymakers concerning more HIV detection strategies would be essential and impactful to HIV screening and detection.

Introduction

Acute Retroviral Syndrome (ARS) also called acute HIV infection is the earliest stage of HIV infection which typically occurs within fourteen to twenty-eight days after an individual becomes infected with HIV. Up to ninety percent of HIV patients experience symptoms of ARS ranging from flu-like symptoms such as fever, headache, swollen glands, a sore throat, oral ulcers or thrush, weight loss, tiredness, body aches, vomiting, and rash [1]. This very early stage of the infection represents a crucial time in terms of infectiousness and immune system harm, as the virus multiplies quickly and spreads inside the body. This

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Abbreviations: ARS: Acute Retroviral Syndrome; HIV: Human Immunodeficiency Virus; PrEP: Pre-exposure Prophylaxis; NAAT: Nucleic Acid Amplification Test.

early stage of infection can be confirmed by blood tests such as the Nucleic Acid Amplification Test (NAAT), which detects HIV in blood within ten to thirty days after contact/exposure/infection [2].

Given the very few emergency care facilities, up to 60% of people living in low- and middle-income countries are more than 8 kilometres away from the nearest hospital or health facility, which has been proven to harm patient outcomes [3]. The HIV response in sub-Saharan Africa has significant gaps, including low HIV testing, common understanding of status, inadequate treatment and preventive coverage among men and

young people within the 15–24 years range [4]. This article aims to provide ways of improving both responses to HIV and patient outcomes by ensuring early detection during the ARS stage through the help of community pharmacists.

Why is the early detection of HIV important?

Early detection of HIV infection results in earlier initiation of HIV care (ART), which can result in an earlier achievement of viral suppression in infected patients and has repeatedly been shown to be the easier and more resource-effective approach. Increasing diagnosis of HIV infection in ARS stages remains a pivotal standpoint for the first step in that process, the early detection of HIV infection. More progressed infection in patients increases the chances of more advanced immune suppression, opportunistic infections, co-morbidities, higher incidence of resistance and a general tendency for such individuals to fall out of HIV care, a more challenging, complicated and resource-intensive scenario.

However, patients in the acute stage of the infection rarely get tested at or visit HIV clinics, which is a major contributing factor to the frequently missed diagnosis of such patients. Also, the often-non-specific nature of the symptoms when isolated and the little time frame in which such symptoms are exhibited play a role. This situation is even worse in Africa. Two-thirds of the global HIV burden lies in the WHO Africa region [5]. The patients in Africa share approximately half of the global health workforce with the rest of the third-world countries [6]. Aside from the very huge burden of HIV infection, Africa's hospitals and healthcare facilities are incredibly overcrowded, with patient-to-doctor and specialist ratios that are far from ideal, further discouraging such patients and preventing them from getting tested. High medical expenses, which usually exceed the average household income in these regions, are another significant issue in Africa. The fact that the majority of people in these locations lack even the most basic health insurance intensifies their financial and health issues [7].

How can community pharmacists be instrumental in such regions?

In most African societies, community pharmacists are often the most accessible and affordable health professionals that patients with simple ARS symptoms like flu come in contact with. Non-status-aware patients/individuals who seek advice and care regarding their health status often consult their community pharmacists. Furthermore, in recent years, the community pharmacy practice sector has grown with more health responsibilities and less stringent rules, allowing community pharmacists to meet society's health demands and cure health problems. It is, therefore, essential that the inclusion of pharmacists in HIV testing and care is now taken more seriously. Pharmacists are among the most trusted healthcare practitioners. With a better-enlightened approach and orientation, pharmacists are well-placed to identify high-risk patients who experience symptoms of ARS and refer them appropriately for HIV testing within the pharmacies or self-administered NAAT tests at home if they

wish [8]. Community pharmacists provide delicate sexual health counselling to patients, sell condoms, and dispense HIV tests and sexually transmitted illness medications. This puts them in a unique position to identify patients who will potentially benefit from Pre-Exposure Prophylaxis (PrEP), thereby reducing the risk of HIV infections. At the same time, they can also detect high-risk patients who have clocked out of their PrEP regimes as well as promote such individuals getting tested [9].

Increased support of community pharmacists by various stakeholders and policymakers concerning more HIV detection strategies would be essential and impactful to HIV screening and detection. As we keep progressing towards achieving the UNAIDS objectives of 95-95-95, all over the world, early detection of HIV especially in ARS stages through the hands of community pharmacists remains a strategic approach, beneficial for the accelerated detection of HIV, initiation of care, sustenance of patients in therapy as well as a reduction in transmission rates, especially in the African region.

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