

How do HIV-positive elderly get infected by COVID-19 during the COVID-19 pandemic? A literature review

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Abstract

There is an evidence of a lower reported quality of life (QoL) among older persons living with human immunodeficiency viruses (HIV) compared with younger people with the infection; however, this has not been a consistent finding. The purpose of this research was to provide a thorough overview of some of the situations experienced by HIV-positive elderly during the COVID-19 epidemic.

A meta-analysis was conducted and reported in accordance with meta-analysis guidelines' recommended reporting items (PRISMA). The search was conducted between January, 2021 and March, 2022 using ScienceDirect, PsycINFO, Google Scholar, and Sabinet databases.

From 12 articles summarized, various themes on the conditions of HIV/acquired immunodeficiency syndrome (AIDS)-positive parents during the pandemic were found, including symptoms experienced by older HIV-positive people during the COVID-19 pandemic and throughout the COVID-19 era, improved quality of life of HIV-positive parents, overview of the elderly with HIV with emerging comorbidities, and mindfulness-based stress reduction (MBSR) in elderlies who suffer from HIV during the COVID-19 pandemic.

HIV/AIDS-positive older individuals during the pandemic have less symptoms compared to non-HIV/AIDS-positive elderly people. Moreover, throughout the COVID-19 era, the quality of life of HIV-positive parents has improved. It is also necessary to pay attention to HIV-positive elderly with comorbidities that arise. Also, MBSR for the older persons who suffer from HIV during the COVID-19 pandemic is also important.

HIV AIDS Rev 2023; 22, 4: 279-282

DOI: <https://doi.org/10.5114/hivar.2023.132510>

Key words: quality of life, COVID-19, pandemic, older.

Introduction

Human immunodeficiency viruses (HIV)-positive individuals, having access to efficient anti-viral medicines, are living longer and healthier life than before this treatment became

accessible in the mid-1990s, despite more people being infected with HIV at an older age. In England, there are currently more than 25,000 persons aged 50 and over living with HIV [1].

However, despite the improvements in health and many other aspects of life of people living with HIV show increase

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Article history:
Received: 29.04.2022
Received in revised form: 05.05.2022
Accepted: 05.06.2022
Available online: 07.11.2023



in survival rates, psychological and social effects of aging of people with HIV are complicated. Although, individual impact of increasing age with HIV can be positive, such as problems faced by parents with HIV include high levels of stigma, concerns about dependence on benefits, sustainable concerns about disclosure, uncertainty over aging, and HIV and its' treatment, affect health [2]. Gender, ethnicity, sexuality, and social support play a crucial impact on the style of parents living with HIV [3].

There is evidence of a lower reported quality of life (QoL) among older persons living with HIV compared with younger people with the infection; however, this has not been a consistent finding [4]. There is a lack of compilation of reviews on elders with HIV during the COVID-19 epidemic [5], in particular how do HIV-positive older individuals get infected with COVID-19 during the COVID-19 pandemic period. Therefore, the purpose of this study was to provide a thorough overview of various situations experienced by HIV-positive elderly during the COVID-19 epidemic.

Material and methods

A meta-analysis was conducted and reported in accordance with preferred reporting items for systematic reviews and meta-analyses (PRISMA). The search includes peer-reviewed publications and gray literature items available in electronic databases.

Search strategy

The search was conducted between January, 2021 and March, 2022 using ScienceDirect, PsycINFO, Google Scholar, and Sabinet databases. A total of 1,357 publications were discovered during the first phases of the search, of which 782 papers remained after filtering and deleting duplicates. The present systematic review assessed 782 publications, out of which 62 were suitable for full-text analysis. Finally, 12 publications were considered.

Results and discussion

The COVID-19 epidemic has deteriorated the health and quality of life of HIV-positive elderly. The discussion portion of this article reviewed many of the major themes identified during meta-analysis.

Symptoms encountered by older HIV-positive individuals during the COVID-19 pandemic

The impact of the COVID-19 pandemic resulted in mental disorders due to socio-economic issues concerning finances, HIV-related problems, such as job loss and unemployment for those with low education, and difficulties accessing HIV care or routine ART, which could result in depression and anxiety [6]. People living with HIV and AIDS

(PLWHA) are reported to be more likely to experience social isolation due to stigma and fear of rejection, especially as they age. As a result, it may have an effect on HIV self-management in the following ways: support for social isolation, sadness, anxiety, and stress symptoms in PLWHA [7]. Thus far, the COVID-19 pandemic has had various degrees of influence on all factors of HIV self-management, which may result in an decreased social support and isolation before and during the pandemic. While overall HIV self-management had improved before the pandemic, there was an increase in sadness, anxiety, and stress symptoms as a consequence of the pandemic [8]. Therefore, a complete attention must be paid to HIV health services in order to treat old HIV-positive persons independently throughout the COVID-19 era [9]. The government assists in providing access to mental healthcare for HIV-positive older. They believe they have a larger probability of contracting a severe COVID-19 infection if they get the virus, and hence are prepared to follow social distancing standards that demonstrate their seriousness, diligence, and commitment to healthcare. Elderly HIV-positive individuals believe the COVID-19 epidemic has made it more difficult to contact healthcare professionals and getting medicines from pharmacies. This disruption in HIV care regimen can result in an decreased viral suppression. Aspects of HIV self-management that are frequently complicated by the pandemic include the ability to eat a healthy diet, exercise, stress management, maintain social support networks, get adequate sleep, and manage affective symptoms, implying that HIV self-management factors, such as the ability to take HIV medication, have been determined to reach healthcare providers [8].

Throughout the COVID-19 era, the quality of life for elderly HIV-positive people has improved

Attention to the emotional and mental health needs of elderly HIV-positive individuals is also critical. HIV care providers should have a plan to support all aspects of HIV self-management during the pandemic, given their high level of concern about the potential impact of COVID-19 on high-risk COVID-19 complications [6]. The plan's implementation in the form of telemedicine consultations may take place online or over the phone, with HIV care coordinator facilitating the process of adjustment to social isolation and challenges relating to finances. The emergence of a social support structure has improved their loneliness to the point that weekly calls through tele-health are required [10] in order to assist older PLWHA in easing symptoms, such as social isolation, loneliness, etc. Thus, having that in mind, HIV care coordinators should reach out to PLWHA throughout the pandemic to provide information and determine any further help needed. Additionally, it aids in the development of HIV self-management skills in preparation for a pandemic or epidemic [11]. One approach is to ensure that a sufficient and steady supply of ART is accessible in healthcare facilities to ensure optimum adherence to ART. While ex-

tended ART refills assist continuous adherence to ART, they also lower the likelihood of clinical encounters with HIV healthcare professionals, including drug adherence, counseling, and viral load testing [6]. Around 50-60% of PLWHA contact their HIV primary care physician once every three months through telemedicine consultation, yet many continue to have trouble accessing telemedicine, and 18% have difficulty refilling their medications. Telemedicine implementation would be the optimum for PLWHA continuity of care, simplifying introduction and monitoring of ART. However, practical hurdles, such as inconsistent access to internet services and shortage of telemedicine equipment in clinics, make this a challenging reality to realize [6, 12]. Steady ART supply and distribution to patients as well as stable access to clinical care are crucial in preventing a rise in HIV multi-morbidity during a pandemic. Additional efforts are required to guarantee that PLWHA on ART may obtain their regular treatment without increasing COVID-19 exposure through expanded access to telemedicine and ART home delivery networks. Finally, an increase in reported anxiety, tension, and depression symptoms was seen among older HIV-positive individuals [13], highlighting the critical nature of strengthening mental health services and access through telemedicine in this vulnerable group of population [10].

Overview of HIV-positive elderly with comorbid appearance

Additionally, HIV-infected individuals make greater use of healthcare facilities, which increases the chance of early identification and adequate treatment of chronic infection [14]. Another research showed that the majority of HIV-1-infected individuals aged 50 years and older (90%) had at least one non-AIDS-related comorbidity (NARC) [15]. Hypercholesterolemia is the most prevalent NARC, and HIV has also been linked to an enhanced cardio-metabolic health. The proportion of those at high cardiovascular disease (CVD) risk was projected to grow with age. Significantly related characteristics with a high CVD risk showed that males with HIV were more at risk of CVD than HIV women, owing to men's smoking behaviors and alcohol intake, according to the results [16]. If risk factors are not consistently evaluated and adequately treated, the risk of CVD increases with age, and the risk of HIV-related CVD is longer lasting [17]. HIV-positive individuals are at an elevated risk of cardiovascular disease, especially those living with HIV and being on antiretroviral therapy (ART) for a longer period of time [14, 18]. In a regression analysis, there was no significant association between ART duration and hyperlipidemia. Other prevalent causes of NARC included arterial hypertension and depression/anxiety [19]. It is well-established that some antiretrovirals may cause hyperlipidemia and impaired glucose tolerance, which can raise the risk of CVD in HIV-positive individuals. It has been shown that abstaining from antiretroviral therapy increases the risk of metabolic problems and cardiovascular

disease [20]. Additionally, hypertension, dyslipidemia, and diabetes mellitus screening and therapy were performed to lower the total CVD burden in HIV-positive individuals [21]. Reduced CD4+ cell counts have also been linked to an increased risk of cardiovascular disease in HIV-positive individuals. Additionally, elevated triglycerides and reduced HDL cholesterol as significant risk factors for CVD in HIV-positive people were highlighted. Elderly HIV-negative individuals may have a greater risk of CVD than HIV-positive individuals. This is because HIV-positive individuals have a healthier lifestyle, and benefit from an improved healthcare usage and recovery as a result of HIV therapy. This may also be a sign of HIV-negative people's health being neglected in an HIV-focused health system. While living and aging with HIV presents unique circumstances, concerns, and experiences (e.g., the intersection of HIV-associated stigma and age), one possible explanation for this finding is that, despite a comorbid diagnosis, the patient's condition does not necessitate treatment (e.g., limited financial resources or attempting prophylactic measures, such as diet or exercise in patients with lipid disorders) [21]. Additionally, the inverse is true, with patients often self-prescribing drugs in the absence of a concurrent ailment (e.g., antidepressants). HIV's influence on CVD patients was shown to be highly related to the association between present pain and subsequent social interaction. Conclusions social interaction and pain frequency were bi-directional and negatively associated in HIV-positive older persons. Furthermore, recent social encounters have an effect on present discomfort by mitigating negative impacts [22]. Taken together, these findings emphasize the importance of social interaction in pain therapies for older persons living with HIV (Matthew S. Herbert, 2022). Older adults living with HIV who experience pain can benefit from social involvement, which includes frequent social contacts. By increasing social contacts, the pain experienced by elderly living with HIV is less severe. Additionally, recent social contacts affect current pain by attenuating negative influences [23]. Taken together, these findings emphasize the importance of social interaction in pain therapies for older persons living with HIV [24].

Mindfulness-based stress reduction for elders who suffer from HIV during the COVID-19 pandemic

Comorbidities develop prematurely. In this group, an effective technique for addressing neuro-psychological symptoms is required, especially mindfulness-based stress reduction (MBSR) [25]. MBSR has the ability to improve symptom load and enhance overall health status in older persons. Moreover, it has the potential to exacerbate public health requirements. Mindfulness may help to promote self-awareness, allowing for a more accurate identification of unpleasant emotions and cognitive patterns [26]. Mindfulness training may be used to combat depression in groups at risk [27]. By providing mindfulness-based stress management therapies, the beneficial impact of therapy is improved

as a result of greater self-regulation, self-exploration, and self-liberation. It demonstrates that mindfulness practices have a beneficial effect on the subject's condition, particularly on quality of life, based on many improvements in patients circumstances [28, 29]. As can be observed, the characteristics of PLWHA quality of life, in the form of physical and psychological dimensions, are improving [30].

Conclusions

Parents who are HIV/AIDS-positive during the pandemic have less symptoms compared to non-HIV/AIDS elderly people. Besides that throughout the COVID-19 era, the quality of life of HIV-positive parents has improved, it is also necessary to pay attention to the HIV-positive elderly with comorbidities that arise. MBSR for the elders who suffer from HIV during the COVID-19 pandemic is also very important.

Conflict of interest

The authors declare no conflict of interest.

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