



HIV Patients Lost to Follow-Up During the Covid 19 Pandemic

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Abstract

Introduction: The SARS COV 2 pandemic and related lockdown policy have led to an exceptional health crisis, with a potential impact on the care of chronically ill patients, including those living with HIV (PLHIV). **Objective:** To estimate the incidence of missing patients among PLHIV during the covid 19 pandemic and to identify the contributing factors and their impact on their medical follow-up. **Materials and methods:** Retrospective descriptive and analytical study of 30 PLHIV who interrupted their follow-up (lost to follow-up) at the ambulatory clinic of the infectious diseases department at the University Hospital Med VI Marrakech from June 2020 to December 2021. **Results:** The number of patients lost to follow-up was 30. The mean age was 39.25, ranging from 22 to 65 years. A male predominance was noticed, as 65% of the patients were men. Among the patients lost to follow-up: 60% were former patients, while 40% were newly diagnosed. The mean duration of follow-up was 15.35 months, from 6 months to 2 years. HIV stages were Stage A in 50% of cases, Stage B in 15% and Stage C in 35%. The mean CD4 count was 467 cells/mm³. As for viral load, it was only recorded in 60% of patients, with an average of 129605 copies/ml. Regarding treatment, 85% of patients were on triple therapy, while 15% were not yet on treatment. The identified causes for discontinuation were social causes in 40% of cases, psychological causes in 17% of cases, causes linked to the Covid 19 pandemic in 36% of cases, and other causes in 7% of cases. Follow-up was resumed by 54% of patients, while complications were recorded in 35% of cases. **Conclusion:** Our study demonstrates the deleterious impact of the COVID-19 pandemic on the management of HIV infection and underscores the necessity of developing and implementing new effective strategies to mitigate its negative effects on a vulnerable population, such as people living with HIV (PLHIV).

Keywords: HIV, Covid 19, Pandemic, CD4, lost to follow-up.

Introduction

SARS-CoV-2 had first emerged in China at the end of December 2019, to spread worldwide and to Morocco in 2020 [1]. To cope with this pandemic, national sanitary containment plans were launched, with a first lockdown from March to May 2020, a second from October to November 2020, and an extension of the preventive measures to March 2021. The SARS COV 2 pandemic and the containment measures have led to an exceptional health crisis, potentially impacting the follow-up of patients with chronic pathologies, including patients living with HIV (PLHIV), as well as their adherence to antiretroviral (ARV) therapy [2]. The objective of our work is to determine the incidence of lost to follow-up among PLHIV during the Covid 19 pandemic and to identify the associated factors and their impact on their medical management.

Materials and methods

A retrospective descriptive and analytical study concerning 30 PLWHIV who discontinued their follow-up (lost to follow-up) at the

outpatient unit of the Department of Infectious Diseases at the Mohamed VI University Hospital, Marrakech. For each patient, we filled out a survey form to collect the sociodemographic features of the patients, their immunovirological data (CD4 count, viral charge), therapeutic properties prior to the cessation of follow-up, causes of cessation and its consequences, as well as the outcome. Data analysis and input were carried out using Word Excel 2016 and SPSS software.

Results

The total number of patients lost to follow-up was 30, of whom 25 (83.3%) were treated at the Infectious Diseases Department of the Mohammed VI University Hospital Marrakech, and 5 patients (16.7%) were treated at the Infectious Diseases Department of the Ibn Zohr Provincial Hospital Marrakech. The mean age of the patients was 39.25 years, ranging from 22 to 65 years. There was a male predominance with 65% males and a sex ratio (male/female) of 1.7 (19/11). Among the patients lost to follow-up, 18 cases (60%) were former PLHIV, while 12 cases (40%) were newly diagnosed.

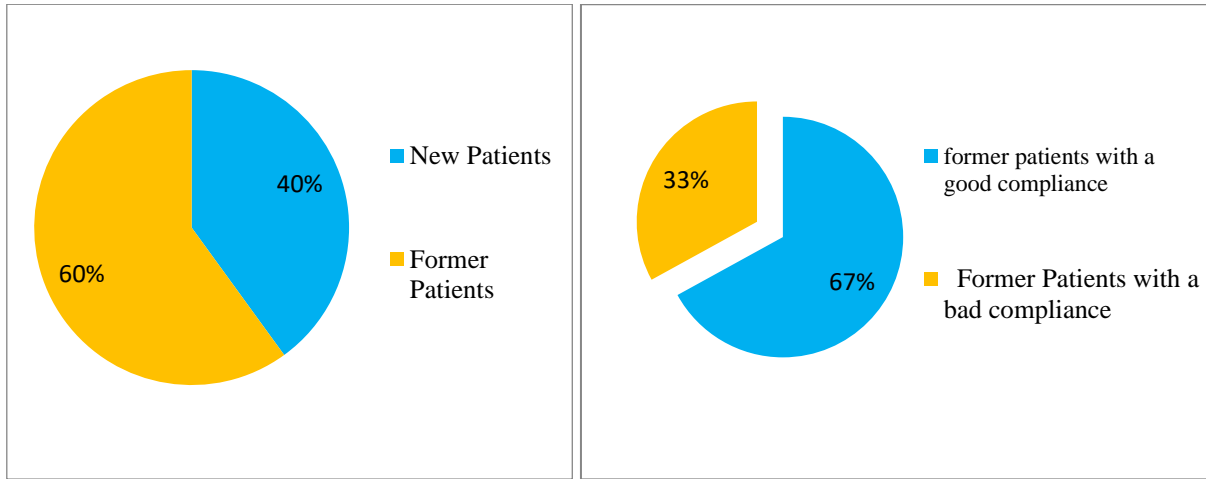


Figure 1 -2: Distribution of lost-of-sight patients by follow-up status

The mean duration of loss of sight was 15.35 months, ranging from 6 months to 2 years. Stages of HIV infection were stage A in 50% of cases, stage B in 15% and stage C in 35%. The mean CD4 count was 467 cells/mm³. Viral load was available in only 60% of patients, with a mean of 129605 copies/mL in new cases and 4500 copies/mL in previously registered patients. Regarding treatment, 25 (85%) patients were on ARV therapy, while 5 (15%) were not yet on

therapy. All patients were re-contacted during the post-Covid period. The identified reasons for discontinuation were social (financial problems, prison, having to care for a family member, work, transport) in 40% of cases, psychological (denial of the disease, anxiety, and depression) in 17% of cases, Covid19-related (travel problems, lockdown, fear of pandemic) in 36% of cases and unidentified in 7% of cases.

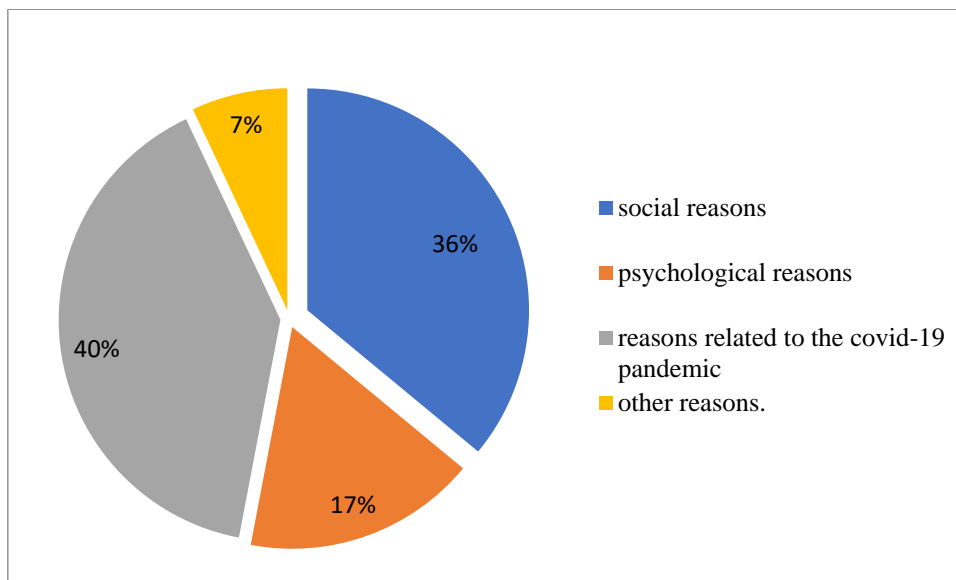


Figure 3: Common reasons for discontinuation of follow-up among patients lost to follow-up.

The course was characterized by the resumption of follow-up in 16 patients (54%), with complications recorded in 10 patients (35% of cases).

Discussion

Coronavirus disease (COVID19) is an infectious disease caused by the SARS-CoV-2 virus, which leads to severe acute respiratory syndrome (SARS-CoV-2). Its most serious complication is respiratory distress, often requiring admission to intensive care and mechanical ventilation [3]. Since its first appearance in Wuhan, China, in December 2019, CoV-19 has spread rapidly around the world, affecting more than 600 million people, and causing more than 6 million deaths [4]. This pandemic and associated containment measures have had a significant impact on health systems, including human immunodeficiency virus (HIV) screening and care for people living with HIV (PLHIV) worldwide, making access to preventive services and specific medical follow-up more difficult. This problem was first highlighted in China, prompting the World Health

Organization (WHO), the Joint United Nations Program on HIV/AIDS (UNAIDS) and the Global Network for PLHIV to work together to ensure the continuity of HIV-related services [5]. During the period of lockdown, our department set up a special consultation unit to monitor and provide ARV treatment to PLHIV living in the same city. For patients living outside Marrakech who had difficulty accessing health facilities, specific measures were taken to maintain continuity of care for them. These included the development of telemedicine options to ensure virtual and remote medical care during the pandemic, and collaboration with the various players in the AIDS association to ensure the delivery and administration of ARV treatment to patients with travel difficulties. Thus, maintaining face-to-face consultations with the implementation of public health protection measures and the development of a telemedicine system seem to be effective complementary approaches to guarantee continuity of care for PLHIV, which explains the low prevalence of patients lost to follow-up recorded in our department during the post-Covid period. Reassuringly, we observed a relatively low mean viral load (VL) in former patients lost to follow-up, with a mean CD4 T

cell count above 400 cells/mm³. We also observed a reduction in routine VL testing and blood CD4 T cell counts during the Covid 19 pandemic, making interpretation of these results difficult. Our study showed that, despite a significant reduction in day clinic visits, there was no short-term impact on HIV VL. In addition to being a global health crisis, the COVID-19 pandemic and associated restrictive measures had a negative impact on the mental health and psychological care of many patients, particularly PLHIV [6]. Indeed, several studies have reported that PLHIV experienced anxiety syndromes and other depressive symptoms leading to substance use to a greater extent than non- HIV-infected patients during the COVID-19 pandemic. The long-term consequences of these distressing problems are not yet known but could be devastating and need to be thoroughly investigated. Mental health status is a crucial factor to consider in the care of PLHIV, as it is a predictor of HIV-related health outcomes, including adherence to antiretroviral treatment. Implementing strategies to maintain the mental well-being of our patients is therefore a crucial necessity [7]. To address this need, it may be useful to reconsider the strategies used during the SARS-CoV epidemic in 2003, including the establishment of regional or national multidisciplinary mental health teams, the promotion of virtual visits and communication between patients and their families [8]. In our series, PLHIV discontinued their follow-up in health facilities during the coronavirus health crisis, mainly for reasons directly related to the COVID-19 pandemic (travel problems, confinement, fear of the pandemic), but also for social reasons (financial problems, transport, work obligations), which is consistent with data in the literature. The main strength of our study is that it was carried out during the post-COVID period of the second wave of the COVID-19 pandemic in Morocco, thus highlighting the consequences of the pandemic on the medical care of PLHIV. Despite these strengths, some limitations must be acknowledged. The first limitation is the nature of our study, which is retrospective and monocentric, allowing us to examine only a limited number of parameters in a limited number of patients. Secondly, the study focused mainly on the short-term consequences of the COVID-19 pandemic on the follow-up of PLHIV, while the long-term consequences are still unknown.

Conclusion

Our experience has highlighted the extent of the problem of lost to follow-up during the Covid 19 pandemic, as well as its determinants. These results should encourage all health professionals involved in the management of HIV infection to work together to take the necessary steps to alleviate the problem.

Declaration of interests

The authors declare that they have no conflicts of interest.

Authors' Contributions

All authors contributed to the conduct of this study. All authors have read and approved the final manuscript

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