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Editorial

COVID-19 and disruptions in HIV care: Assessment and future directions



COVID-19 y las interrupciones en la atención del VIH: evaluación y orientaciones para el futuro

Caring for people living with HIV (PLWH) is a complex process that requires comprehensive approaches, considering psychological, social and biological aspects. After the initial UNAIDS target of 90–90–90 by 2020 (90% of infected people knowing their HIV status; 90% of them on antiretroviral treatment; and 90% of them with an undetectable viral load), the proposal of 95–95–95 by 2030 emerged, with an eventual fourth 95 concerning quality of life. Achieving these targets demands improved system functioning and stricter implementation of all measures related to diagnosis, monitoring and therapy that have proven effective.¹

Before the COVID-19 pandemic, healthcare services for HIV patients were established and functioning and in recent years we have been observing a decrease in the incidence rate of new HIV cases in Spain. With the onset of the COVID-19 pandemic, there was a marked decline in the rate of new diagnoses in 2020, with a rate per 100,000 population of 5.85 and 2770 new diagnoses. This was followed by a rebound in 2022 (7.71 cases per 100,000, 2956 cases) due to a probable effect of diagnostic delay, although without reaching the levels of 2019 (8.11 cases per 100,000, 3819 cases).²

Globally, PLWH are particularly vulnerable to the effects of the COVID-19 pandemic on healthcare, given their higher rate of comorbidities and pre-existing health inequities.³ The concern is twofold: on the one hand, due to the lack of care of HIV infection (cancellation of appointments, delays, non-face-to-face consultations, less accessibility to treatment. . .) and, on the other hand, due to the worse adverse outcomes of COVID-19 in this group, which acts as an additional risk factor.³ These negative effects are manifested at the biological and socio-economic levels (low educational level, unemployment or precarious work, poverty, food insecurity, social isolation. . .), impacting a population that is already at a disadvantage. In this context, the recent hospital survey of HIV infected patients carried out by the Ministry of Health⁴ reveals worrying data: the proportion of PLWH living alone has increased significantly from 19.6% in 2008 to 29.9% in 2023 and the unemployment rate in this group is 15.2% in 2023, of whom 48.6% do not receive any social benefits.

Since the onset of the COVID-19 pandemic, requests for various strategies were made by UNAIDS to countries in order to miti-

gate part of its effects, resulting in the monitoring of country-level estimators. In 2020, the first year of the pandemic, there was a significant impact on several aspects related to HIV, such as the notification of new cases, data collection for key estimates such as 90–90–90, the decrease in diagnostic testing, the interruption of programmes targeting vulnerable populations (MSM, transgender people, vulnerable migrants, commercial sex workers, people who inject drugs), and the delay in the implementation of pre-exposure prophylaxis (PrEP).⁵

On the other hand, mainly thanks to the use of telemedicine and the home delivery of hospital medication to patients, treatment interruptions were avoided and this, together with all the support activities carried out by non-governmental organizations (NGOs), helped to reduce the effects of the pandemic.

The impact of the pandemic on the 95–95–95 targets is understandable from different perspectives: reduced testing rates affect detection, reduced medical visits hinder treatment initiation, and the reduced performance of key tests affects the determination of the third 95–95–95 target.⁶

UNAIDS documented these interruptions in HIV prevention systems in a 2021 report,⁷ highlighting problems in the provision of condoms, lubricants, antiretrovirals, male circumcisions, maternal and childcare visits and participation in HIV prevention programmes (PrEP, opioid substitution therapy and syringe distribution). Likewise, the added risk of key issues exists such as school closures and the detrimental effects of the lack of education, as well as increased rates of violence associated with exacerbated social exclusion.

Part of the expected impact of the COVID-19 pandemic is due to a higher rate of late diagnosis (where the initial CD4 count is <350). In this regard, the rate in Spain in 2022 was 48.6%² with higher percentages in women, heterosexuals and those of African and Latin American origin.

The impact of the pandemic on social exclusion has been particularly severe for PLWH. A study carried out in our country⁸ on a cohort with high baseline social exclusion (35.1% compared to 18% of the general population), found that the percentage increased during the second half of 2020. This increase was mainly due to greater material deprivation and was more pronounced in women than in men.

In this issue of Infectious Diseases and Clinical Microbiology, Pan et al.⁹ present an estimate of the impact of the pandemic

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2529-993X/© 2024 Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica. Published by Elsevier España, S.L.U. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

on the health care of people living with HIV (PLWH) in Catalonia. The authors conducted a retrospective population-based study within the 17,738-person PISCIS study cohort, analyzing care in HIV specialist consultations, primary care, hospitalization in non-HIV specialist units and emergency department visits between 1 January 2017 and 31 December 2020. As the main findings, during the pandemic, changes in medical contacts were noted, with non-significant decreases of 17.1% during quarantine, 8% in the de-escalation phase, and an increase of 8.6% in the post-pandemic situation. Significant declines were observed in HIV units, hospitals, and emergency departments during lockdown, although primary care visits remained stable. The number of annual visits per patient increased from 6.59 in 2017 to 8.16 in 2020. However, monitoring of key values such as CD4 count or viral load decreased significantly during the pandemic. The authors conclude that the study demonstrates how measures were implemented to ensure access to care, despite the restrictions imposed by the pandemic, such as telephone contact. Despite a gradual increase in medical visits after lockdown, levels of health service utilization did not return to pre-pandemic levels until December 2020.

The real impact of the COVID-19 pandemic on the epidemiological monitoring of HIV infection in Spain has been analyzed in a recent study by the National Epidemiology Center.¹⁰ During the period from 2013 to 2021, it was observed that diagnoses reported in 2022 for the year 2020 were 43.8% higher than those reported in 2021 for the same year, indicating a delay in reporting. This delay was most pronounced in the group of people who inject drugs (PID), again reflecting social exclusion. From March to May 2020, there was a decrease in unrecovered diagnoses when correcting for delay, possibly due to a decrease in diagnostic testing. In 2020, the diagnosis rate experienced a marked reduction of 37.4% compared to 2013, even surpassing the reductions observed in previous years such as 2019 (26.9%), 2018 (12.7%) or 2017 (10.1%). However, in 2021, a worrying 9.2% increase in late diagnosis was observed compared to the previous year, surpassing all data recorded since 2013. It is relevant to highlight the significant increase of 25.7% in PID, although this increase could be influenced by the low number of diagnoses in this group, being 62.9% lower than in 2013. These contradictory trends could indicate the existence of an underestimated degree of diagnosis. Despite this, the authors maintain an optimistic view and consider, as do several public bodies, that confinement measures, mobility restrictions, and the fear of COVID-19 infection may have contributed to reducing the actual infection rate. The increase in late diagnosis may be related to the period immediately before the pandemic, exacerbated later during the COVID-19 pandemic due to reduced medical care.¹⁰

Several studies have assessed this issue in other parts of the world. In British Columbia¹¹ the specific impact on a disadvantaged population such as black African and Caribbean women living with HIV was analyzed, reflecting impacts such as the dissolution of support groups, reduced participation in HIV programmes due to the fear of COVID-19 infection, and the forced transfer of all care contacts to virtual or missed appointments, which can lead to increased difficulty of access. Work in Zimbabwe¹² showed some of the causes, according to the patients themselves, of this reduction in contacts, highlighting quarantine restrictions, the fear of COVID-19 infection or the distance to HIV care centres.

In Europe, a study recently presented at the European AIDS Congress (EACS) analyzed the impact of the COVID-19 pandemic on the EuroAIDS cohort between 2016 and 2021.¹³ A reduction in the frequency of face-to-face medical appointments was observed during the pandemic, as well as slight decreases in viral load testing and CD4 cell counts, but no change in treatment adherence levels.

Experiences have also been published in Spain. A study by the Hospital Ramón y Cajal¹⁴ compared the pandemic (March 2020 to February 2021) with the pre-pandemic (March 2019 to Febru-

ary 2020) and post-pandemic (March to September 2021) periods, showing a reduction in the number of first-visit patients seen in the clinic and the viral load tests requested compared to pre- and post-pandemic periods. In contrast, drug collection, viral suppression numbers and admissions in the cohort remained stable. In another Catalan cohort¹⁵ a 25% reduction in PLWH outpatient visits, a 45% reduction in post-exposure prophylaxis visits and a 12% reduction in admissions from the previous year were estimated. There was also an estimated 28% decrease in new diagnoses, albeit with lower CD4 counts. Like the rest, there were no differences in the undetectable rate and no changes in viral load were observed in this cohort. Worryingly, however, there was an estimated 264% increase in mortality, primarily due to cardiac and COVID-19 causes, and worse health outcomes were observed in chronic conditions such as dyslipidemia.

In the United States, sufficient experiences have been gathered to be aggregated in systematic reviews. In one of them,¹⁶ as has been described in previous literature, a reduction in HIV consultation appointments, reduction in HIV programmes, cancellation of appointments, difficulties in drug prescription with missed doses, an essential role of telemedicine for the continuation of care and asymmetries in populations such as Hispanics and blacks have been observed. Only one study reported a higher rate of undetectability. Another recent systematic review¹⁷ shows that during the COVID-19 pandemic, decreases in treatment adherence, missed medical appointments, lower HIV testing, increased use of telemedicine, increased rates of mental illness, substance use and a decrease in the number of expected new diagnoses have been observed.

The COVID-19 pandemic has had profound implications for all aspects of health care, particularly for those with chronic medical conditions, such as people living with HIV. The intersection of the COVID-19 pandemic and HIV care pushed systems to their limits and led to the improvisation of care systems that could supplant traditional models.

The end of the pandemic does not mean the complete disappearance of cases of COVID-19¹⁸; the disease will continue towards endemicity. The change in pandemic categorization is due to the reduction of cases and mortality, as well as social and economic factors, with a pragmatic mentality that normalizes a certain level of morbidity and mortality within the expected levels in society. In this situation, it is likely that the most disadvantaged classes will continue to be the most affected, which could have a persistent impact on people living with HIV.

It is critical to address these challenges comprehensively and urgently. Care for HIV patients should not be compromised in favour of the response to the COVID-19 pandemic. Innovative measures are needed to ensure the continuity of care and the provision of quality services for people with HIV. The new systems developed during the pandemic to address the problems of monitoring are now becoming tools of change for the end of the HIV epidemic, with a patient-centred, accessible, collaborative and less bureaucratic approach.¹⁹ This includes the promotion of telemedicine and other forms of virtual care, telemedicine inter-consultation, alert systems, the implementation of home drug delivery strategies and the creation of safety protocols for face-to-face clinic visits. It is essential to leverage primary care systems as an essential, comprehensive, accessible and effective tool in the care of PLWH.¹ However, these systems still have room for improvement and require more resources to reach their full potential in terms of coverage and quality of care. In a recent study conducted in our country,²⁰ 33.6% of PLWH commented that their primary care teams did not know enough about their HIV status, with 24% having difficulty accessing medical care and 22.5% of respondents trying to avoid medical contact. If primary care teams have been the basic resource for trying to maintain the longitudinality of care, programmes that combat stigma and encourage the integration of

these groups are paramount for maximizing benefits such as those observed in the study by Pan et al.

In addition, strengthening collaboration between health systems, health care providers and community organizations are key to ensure a coordinated and effective response. The COVID-19 pandemic has highlighted the need for rigorous planning and preparedness for future public health emergencies. This includes establishing robust monitoring systems, reserving adequate medical resources and training health personnel in crisis management.

In conclusion, the COVID-19 pandemic has had a significant impact on health service utilization among people living with HIV. To address these challenges and prepare for future pandemics, it is essential to prioritize the continuum of HIV care, promote innovation in health service delivery and strengthen collaboration among all stakeholders. Only by means of a coordinated, patient-centred approach can we mitigate the adverse effects of an eventual pandemic and ensure equitable access to care for all people, regardless of their health or socio-economic status.

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