CHALLENGES AND ISSUES OF PATIENTS LIVING WITH HIV IN ALGERIA:

Current epidemiological situation

EPH40

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BACKGROUND

HIV remains a critical global health challenge, while the Middle East and North Africa (MENA) region boasts one of the lowest prevalence rates of People Living with HIV (PLHIV) globally, estimated at less than 0.1%[1]. However, there is unfortunately a lack of data and few studies on the situation prevailing in North Africa, in a context of an increase in cases of transmission in recent years[2]. Algeria, a country with over 47 million inhabitants, represents the low prevalence of PLVIH in the MENA region, maintaining a sustained rate below 0.1% in the general population[3]. However, beneath these low rates lies a complex landscape where PLHIV encounter substantial obstacles in accessing essential care and vaccination services, especially since healthcare infrastructure is heavily concentrated in the north of the country, leaving many vulnerable populations in the country with limited access.

OBJECTIVE

The aim of this work is to provide an update on the epidemiological perspective, highlighting the obstacles that PLHIV encounter in accessing care and vaccination.

METHODS

This comprehensive analysis involves pooling data from various sources, including WHO reports[4], national databases, scientific literature, ONUSIDA statistics[5,6,7], Multiple Indicator Cluster Surveys (MICS)[8], Integrated biological and behavioral assessment reports (IBBS)[9] and the national response report on HIV/AIDS of 2022.

TABLE 1: HIV and AIDS Estimates

	Analysis population
Adults and children living with HIV	**28 000 [26 000 - 30 000]**
- Adults aged 15 and over	27 000 [24 000 - 29 000]
- Women	13 000 [12 000 - 14 000]
- Men	14 000 [12 000 - 15 000]
- Children aged 0 to 14	1300 [1200 - 1400]

TABLE 2: HIV testing and treatment cascade

	Analysis population
People living with HIV (N)	**22 000**
People living with HIV who know their status: % [SD]	79 [73 - 85]
People living with HIV who are on ART (N)	18 000
People living with HIV who are on ART: % [SD]	63 [58 - 68]

TABLE 3: IBBS study referenced in the PNS 2020-2024

Key populations	**Sex workers (2019)**	**Men who have sex with men**	**Drug addicts**
HIV prevalence	7.21%	2.3%	2.2%

RESULTS

The number of PLHIV, aged > 15, is estimated at 28,000 in 2022 (sex ratio 1:1) and 1,300 children (table 1). Most of them (79%) know they are infected with HIV, and 63% are receiving antiretroviral therapy (ART) (table 2). Over the past five years, new infection cases increased from 1,200 to 2,200 annually (ref). Despite a low rate of prevalence (0.1%), MICS (2020) identified underreported higher rates among vulnerable groups due to stigma. IBBS (2019) reported that HIV rates were higher among sex workers (7.21%), homosexual men (2.3%), drug users (2.2%) and migrants (2.2%) emphasizing the need for adapted and better targeted interventions (table 3).

The COVID-19 pandemic has broad impacts, affecting health, economy, and societal well-being for patients. Access to care for PLHIV was very challenging in surgical specialties due to the risk of contamination and the medical care remains insufficient, hindered by the remoteness of the 15 HIV Care Reference Center (CDR) existing in Algeria. Additionally, inadequate vaccination rates remain a real challenge such as anti-pneumococcal and flu vaccines.

DISCUSSION

While significant progress has been made by governments and associations in raising awareness about HIV prevention and treatment, PLHIV in Algeria still face substantial challenges when it comes to accessing essential healthcare services, particularly vaccination.

From an epidemiological standpoint, the data indicates a concerning rise in new infection cases over the past five years, despite an overall low prevalence rate. This trend is particularly concerning when compared to neighboring countries with more stable or even declining HIV infection rates[10]. While Algeria's overall prevalence remains low, the rising number of new cases suggests a need for targeted and more effective prevention strategies. Furthermore, the prevalence of HIV among vulnerable groups such as sex workers, men who have sex with men, drug users, and migrants is notably higher, underscoring the need for adapted interventions and tailored healthcare approaches. This aligns with findings from other studies in the MENA region, highlighting the need for interventions that address the specific risks and challenges faced by these populations[2].

Additionally, one significant obstacle highlighted is the pervasive stigma surrounding HIV, which contributes to underreporting and impedes access to care for PLHIV in Algeria. The COVID-19 pandemic further exacerbated these challenges. While specific data for Algeria is lacking, a recent study conducted in the United States[11] examining healthcare utilization during the pandemic found a significant decrease (by 33%) – in outpatient medical encounters for PLHIV. This concerning trend highlights the potential impact of COVID-19 disruptions on healthcare access for PLHIV globally.

Furthermore, the insufficient vaccination coverage among PLHIV in Algeria, including limited access to key vaccines like anti-pneumococcal and flu vaccines, underscores the urgent need for systematic vaccination recommendations and the expansion of vaccination programs. With only 15 CDRs in the country, enhancing access to vaccination services for PLHIV is crucial for improving health outcomes and reducing the burden of vaccine-preventable diseases. Efforts to improve vaccination coverage among PLHIV in Algeria must prioritize continuous training for healthcare professionals, community engagement through awareness campaigns, and the establishment of accessible vaccination centers nationwide. Overcoming barriers such as vaccine cost, patient education, and logistical constraints requires a comprehensive approach involving stakeholders at all levels and tailored vaccination strategies integrated into routine patient care. By implementing these measures, Algeria can enhance vaccination access and uptake among PLHIV, ultimately improving health outcomes and reducing the burden of vaccine-preventable diseases.

CONCLUSION

Despite progress in HIV awareness, challenges persist, highlighting the need to provide a better framework for care and access to optimal care in addition to targeted and more effective prevention strategies, including systematic vaccination recommendations for PLHIV and strengthening vaccination programs for at high-risk patients. Ongoing efforts in awareness campaigns, early detection and increasing the number of CDR is crucial for advancing public health in Algeria.

REFERENCES:

[1] Semmani, Malika, Damien Costa, Nassima Achour, Meriem Cherchar, Hanifa Ziane, Abdelmounaim Mouhajir, Venceslas Villier, Haiet Adjmi Hamoudi, Loic Favennec, et Romy Razakandrainibe. 2023. « Occurrence and Molecular Characterization of Cryptosporidium Infection in HIV/Aids Patients in Algeria ». Viruses 15 (2): 362. https://doi.org/10.3390/v15020362..

[2] Karbasi, Arvin, Judy Fordjuoh, Mentalla Abbas, Chukwuemeka Iloegbu, John Patena, Deborah Adenikinju, Dorice Vieira, Joyce Gyamfi, et Emmanuel Peprah. 2023. « An Evolving HIV Epidemic in the Middle East and North Africa (MENA) Region: A Scoping Review ». International Journal of Environmental Research and Public Health 20 (5): 3844. [3] Algerian Ministry of Health, Hospitals and Population Reform, National Plan 2020-2024

[4] « Stratégie de Coopération de l'OMS avec l'Algérie 2016-2020 ». s. d. https://www.afro.who.int/sites/default/files/2017-06/ccs---alg%C3%A9rie-16-20.pdf.

[5] « Country factsheets Algeria 2022Change.pdf ». s. d. « DZA_narrative_report_2015 ». s. d. https://www.unaids.org/sites/default/files/country/documents/DZA_narrative_report_2015.pdf

[6] « Rapport Narratif de la Riposte au VIH/sida ». s. d. https://www.unaids.org/sites/default/files/country/documents/DZA_2017_countryreport.pdf

[7] « UNAIDS DATA 2020 ». s. d. https://www.unaids.org/en/resources/documents/2020/unaids-data.

[8] « Enquête par Grappes à Indicateurs Multiples (MICS6) 2019.pdf ». s. d. https://www.unicef.org/algeria/media/1441/file/Enqu%C3%AAte%20par%20Grappes%20%C3%A0%20Indicateurs%20Multiples%20(MICS6)%202019.pdf.

[9] « Country case studies — Joint evaluation of the UN Joint Programme on AIDS on preventing and responding to violence against women and girls ». s. d. https://www.unaids.org/en/resources/documents/2021/2021_joint-evaluation-preventing-responding-violence-women-girls.

[10] https://www.unaids.org/en/resources/documents/2022/in-danger-global-aids-update

[11] Norwood, Jamison, Asghar Kheshti, Bryan E. Shepherd, Peter F. Rebeiro, Aimalohi Ahonkhai, Sean Kelly, et Celestine Wanjalla. 2022. « The Impact of COVID-19 on the HIV Care Continuum in a Large Urban Southern Clinic ». AIDS and Behavior 26 (8): 2825-29. https://doi.org/10.1007/s10461-022-03615-7.

[12] Mohamed, Rahma, Trenton M. White, Jeffrey V. Lazarus, Amany Salem, Reham Kaki, Wafa Marrakchi, Sara G. M Kheir, et al. 2022. « COVID-19 vaccine acceptance and associated factors among people living with HIV in the Middle East and North Africa region ». Southern African Journal of HIV Medicine 23 (1). https://doi.org/10.4102/sajhivmed.v23i1.1391.

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