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Editorial

Is it time to start new HIV prevention strategies in Spain?☆



¿Es el momento de poner en marcha nuevas estrategias de prevención de la infección por VIH en España?

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The success of antiretroviral therapy has minimised the clinical complications of HIV infection and, as a result, has contributed to the perception that this disease is under control. However, this perception does not match the reality of the spread of the epidemic. In Spain, HIV infection continues to spread, despite the availability of effective treatments which are accessible to all affected people. Some figures may put this statement into perspective. Currently, the number of people infected with HIV in Spain is estimated at approximately 150,000. This represents a prevalence in the general population of 0.4% (95% CI: 0.4–0.5) and a prevalence of occult infection of 0.1%.¹ Furthermore, according to the Spanish System of Information on New Diagnoses of HIV Infection (SINIVIH), 3366 new diagnoses were recorded in 2014. This represents a rate of 7.25 per 100,000 inhabitants (9.34 per 100,000 inhabitants, adjusting for a reporting delay).¹ These figures are higher than those of neighbouring high-income countries.

Moreover, all Spanish national records of HIV infection reflect a significant epidemiological change. In recent years in Spain, unprotected sexual relations between men have represented the most significant risk practice for acquiring HIV infection (64%), followed by unprotected sexual relations between opposite-sex people (31%). Therefore, overall, transmission through unprotected sex is responsible for more than 95% of all new HIV infections in Spain.¹ Strategies that manage to control the sexual transmission of HIV could have a definitive impact on limiting the spread of the infection. Although the use of a condom and other barrier methods aid in achieving this goal, they are clearly insufficient. Additional strategies are required to reduce the number of new infections.

Among the strategies proposed, pre-exposure prophylaxis (PrEP) has been demonstrated to be effective in preventing HIV transmission. PrEP consists of administering antiretroviral drugs to people without HIV infection in order to reduce the likelihood

of acquiring the infection. The evidence on the efficacy and safety of this new HIV prevention strategy has been evaluated in various clinical trials, conducted in various groups, which have included men who have sex with men (MSM),^{2–4} heterosexual men and women,^{5–8} and parenteral drug users (PDUs).⁹ The high level of efficacy and safety of PrEP demonstrated in the majority of these studies has incited various international bodies such as the Centers for Disease Control and Prevention^{10,11} and the WHO¹² to approve its use as an HIV prevention strategy. In Spain, the AIDS Study Group (GESIDA) of the Spanish Society of Infectious Diseases and Clinical Microbiology has prepared some recommendations advising and standardising the use of PrEP as an HIV prevention strategy.¹³

The main problem faced in implementing a PrEP programme in Spain in any context is undoubtedly identifying the people who benefit most from receiving the drug, in order for them to render the strategy cost-effective. For this purpose, studies on sentinel populations are essential, as they help to identify both the risk of acquiring the infection in the group and the characteristics that help identify the people at highest risk. Hence, a study by Ayerdi-Aguirrebengoa et al.¹⁴ in this issue of *ENFERMEDADES INFECCIOSAS Y MICROBIOLOGÍA CLÍNICA* is particularly relevant. It evaluates the socio-demographic characteristics and behavioural habits of patients recently infected with HIV and cared for at a sexually transmitted infection clinic in Madrid. Some data provided are particularly telling. In a single year (2014), 307 patients were diagnosed with HIV infection at this clinic; among them, 61 (20%) had tested negative in the previous year. This means that this high number of patients were aware of the risk (they had previously sought HIV testing at the same clinic) and had not subsequently adopted the recommended preventive measures. Moreover, this population recently diagnosed with HIV infection had highly pronounced characteristics: it consisted of MSM (98%), who had used recreational drugs in the last year (88%), under whose effect they engaged in unprotected sexual practices, and who had engaged in anal intercourse without a condom with casual sexual partners (76%). Thus the authors sketched the profile of people with high-risk practices for acquiring HIV infection.

The data provided by Ayerdi-Aguirrebengoa may be added to those of other studies in Spain supporting the recommendations of adopting PrEP as a preventive strategy in addition to those already considered. Monitoring through a cohort of HIV-negative MSM

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yielded an incidence figure that directly reflected the situation in this group. The data obtained through the BCN Checkpoint Cohort enabled calculation of an overall incidence from 2009 to 2014 in MSM of 2.51% (95% CI: 2.25–2.81), which could range from 8.4% and 24.7% people per year when condoms were not always used, when the individual has been diagnosed with an STI and has had more than 10 sexual partners in the last 6 months regardless of their role in anal intercourse.¹⁵ The data were precise and consistent in the 2 studies and established rates of incidence higher than those considered cost-effective (2–3%, according to the agency) when the target population was suitably selected.

Given the current state of the HIV infection epidemic in Spain, it seems clear that, in addition to promoting the use of a condom and sex education, new strategies are required to reduce the rates of new HIV infections. There is no doubt that early diagnosis and treatment of all HIV-infected individuals is the most effective method to prevent transmission. In fact, in Spain, administration of antiretroviral therapy is recommended for all patients with HIV infection to prevent disease progression, decrease virus transmission and limit the harmful effect on potential concomitant morbidities by suppressing viral replication.¹⁶ However, while measures are being taken to diagnose all infected people and the objective of treating everybody is being achieved, PrEP constitutes a powerful weapon to be incorporated into control of transmission.

The data on incidence of HIV infection in people with high-risk practices in Spain and the efficacy of PrEP demonstrated in clinical trials and observational studies do not leave room for contemplation. Groups concerned about the course of the epidemic, both inside and outside of healthcare, cannot stand idly by and must insist on the need to develop comprehensive programmes that include PrEP to prevent the development of new cases of HIV infection. The health authorities responsible for making decisions should take this reality into account. Now is the time to implement new strategies to prevent HIV transmission in Spain.

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