

**How, when and whom, selective screening of HIV at the emergency department\*****Respondiendo el cómo, cuándo y a quién. Cribado selectivo del VIH en los servicios de urgencias**

Dear Editor,

In relation to the letter addressed to the editor by Argelich Ibáñez and Juan-Serra<sup>1</sup> referring to a study carried out by our research group<sup>2</sup> on HIV screening in an Accident and Emergency (A&E) department, we agree with the authors that it is necessary to more appropriately define the how, when and on whom the HIV screening is carried out in this department.

There are different approaches. On the one hand, there are those who propose carrying out universal HIV screening,<sup>3</sup> which requires lots of tests and taking into account the feasibility and effectiveness of this strategy,<sup>4,5</sup> particularly when the prevalence is low or is presumed to be low. In our context, according to our results and taking into account the limitations of the study, we consider that universal screening in A&E lands at the lower limit of cost-effectiveness (0.1%), firstly because there is no hidden epidemic in the “low-risk” population, and secondly because of the poor efficiency of universal screening in this department.<sup>6</sup>

On the other hand, there is the proposal for selective screening of the population with risk factors, a strategy that increases the likelihood of identifying undiagnosed infection, requiring fewer tests, improving the profitability of the test and increasing the cost-benefit ratio of the screening programme.<sup>7,8</sup> In fact, from the results reported in our study, this strategy would be the most appropriate to implement in our context, given the characteristics of the local epidemic. However, we have to bear in mind that because it is a strategy aimed at a specific population, it is possible that not all of the infected population will be diagnosed because they do not meet the selection criteria.<sup>6</sup> Therefore, it is essential that these criteria be selected beyond the conventional risk criteria, in order to increase the sensitivity of the programme; there have actually been reports of using scales that measure the risk of HIV infection in A&E users to improve the sensitivity.<sup>9</sup>

With respect to the feasibility of screening programmes in A&E, what has been described as more cost-effective is to create a screening programme with new personnel, especially nursing staff. This would avoid saturation of existing A&E staff, who already have a very high workload in terms of patient care, which would prevent them from giving continuity to a programme of these characteristics. Moreover, on the one hand, having personnel only in charge of the A&E screening programme gives the opportunity for a relatively immediate guided transition of the patient with a positive diagnosis to the specialist services,<sup>10</sup> and, on the other hand, it could help to gain patients' trust in the healthcare provider and in the system by providing support and direct introduction to comprehensive HIV care.<sup>10</sup> Despite these benefits, one of the main limitations of the implementation of a programme of these characteristics is that it requires multidisciplinary collaboration (A&E staff, HIV units and public health professionals), which involves resources and investment in infrastructure.

Therefore, in answer to the questions posed by Argelich Ibáñez and Juan-Serra,<sup>1</sup> in our context, HIV screening in A&E should be targeted at the population with risk factors (indicator conditions and high-risk behaviour) using appropriate criteria which increase

the sensitivity of the programme, through a programme established with nursing staff within A&E that guarantees: the selection of individuals; proper performing of the test; and the introduction of patients newly diagnosed with HIV to specialist care. Given the limited resources in our context, creating a programme with these characteristics would be quite complex. In the current context, therefore, without implementing a screening programme, we believe that HIV testing using rapid diagnostic techniques should be available in A&E, where HIV should be ruled out based on the indicator conditions and risk behaviour.

**References**

1. Argelich Ibáñez R, Juan-Serra N. Cribado del virus inmunodeficiencia humana: ¿es apropiado en los servicios de urgencias hospitalarios? *Enferm Infecc Microbiol Clin.* 2017.
2. Reyes-Urueña J, Fernández-López L, Force L, Daza M, Agustí C, Casabona J. Estudio del impacto a nivel de salud pública del cribado universal del virus de la inmunodeficiencia humana en un servicio de Urgencias. *Enferm Infecc Microbiol Clin.* 2017;35:434–7.
3. Lyons MS, Lindsell CJ, Ruffner AH, Wayne B, Hart KW, Sperling M, et al. Randomized comparison of universal and targeted HIV screening in the emergency department. *J Acquir Immune Defic Syndr.* 2013;64:315–23.
4. Irvin CB, Flagel BT, Fox JM. The emergency department is not the ideal place for routine HIV testing. *Ann Emerg Med.* 2007;49:722.
5. Kelen GD. Public health initiatives in the emergency department: not so good for the public health? *Acad Emerg Med.* 2008;15:194–7.
6. D'Almeida KW, Kierzek G, de Truchis P, Le Vu S, Pateron D, Renaud B, et al. Modest public health impact of nontargeted human immunodeficiency virus screening in 29 emergency departments. *Arch Intern Med.* 2012;172:12–20.
7. Kennedy LA, Gordin FM, Kan VL. Assessing targeted screening and low rates of HIV testing. *Am J Public Health.* 2010;100:1765–8.
8. Jenkins TC, Gardner EM, Thrun MW, Cohn DL, Burman WJ. Risk-based human immunodeficiency virus (HIV) testing fails to detect the majority of HIV-infected persons in medical care settings. *Sex Transm Dis.* 2006;33:329–33.
9. Haukoos JS, Hopkins E, Bender B, Sasson C, Al-Tayyib AA, Thrun MW. Comparison of enhanced targeted rapid HIV screening using the Denver HIV risk score to nontargeted rapid HIV screening in the emergency department. *Ann Emerg Med.* 2013;61:353–61.
10. Hempling M, Zielicka-Hardy A, Ellis J, Majewska W, Fida G. Routine HIV testing in the emergency department: feasible and acceptable? *Int J STD AIDS.* 2016;27:1267–74.

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