

## Insights into HIV treatment in Latin America and the Caribbean

In *The Lancet HIV*, Carina Cesar and colleagues<sup>1</sup> provide an overview of treatment failure and major regimen change in patients who started combination antiretroviral therapy (ART) between 2000 and 2014 at selected centres in six countries from Central and South America and in Haiti, all of which participate in the Caribbean, Central and South America Network for HIV Epidemiology (CCASAnet).

Analysis of multicountry cohort observational data, such as CCASAnet data, could provide useful insights into important factors related to treatment failure and regimen change in patients on ART, suggest targeted interventions to improve effectiveness of treatment, and generate new hypotheses for further investigation, therefore complementing strategic information routinely produced in each country.<sup>2</sup>

Nevertheless, extrapolation of the results to other countries, or to HIV care sites within the same countries, may have some limitations because selection of participating facilities in this study is based on convenience. Because many of the sites involved in the study are reference centres for HIV care and treatment, findings from these centres might not reflect HIV care and treatment delivered in non-specialised centres. Indeed, even though the investigators included more than 14 000 patients from the CCASAnet cohort, almost 46% of them were from Haiti, which differed from other countries in the analysis (eg, Haiti had no data for viral suppression). This discrepancy may be particularly relevant considering that HIV care and treatment is currently and gradually being decentralised to secondary hospitals or even primary care facilities in some countries.<sup>3,4</sup>

Because of the long period under study (2000–14) and the changes that occurred in HIV care and treatment during that period,<sup>5</sup> the investigators were able to show an association between virological failure and earlier calendar year of initiation of ART, suggesting that improved potency and user-friendliness of regimens introduced in later years might have had an effect on treatment outcomes. Likewise, the association between major regimen change and later calendar year of ART initiation might be a result of greater access and choice of antiretroviral drugs for regimen substitution or switch.

An association between the main outcomes and specific antiretroviral drugs and classes discussed in the study provides additional confirmation to the WHO public health approach and preferred ART regimen choice and to the process of treatment optimisation (eg, phasing out of stavudine and didanosine) that most countries have been adopting in recent years.<sup>6</sup>

Although predictable to some extent, the findings of the study also highlight that drug users and young people might need targeted interventions for improved care and adherence.<sup>7–9</sup> These results might not necessarily be generalisable to all countries in Latin America and the Caribbean, but they should encourage national HIV programmes to analyse local data to identify the more problematic groups and improve the sustained effectiveness of ART.

The analysis also shows some room for improvement in the quality of care and treatment regarding the timely switch to second-line regimens after virological failure, to avoid partial suppression and accumulation of resistance mutations, as well as the need for expanded coverage of viral load monitoring for the adequate switch to second-line regimens.

However, some of these conclusions might be affected by the lack of availability and completeness of data for retrospective analysis (eg, factors such as drug toxicity, the use of fixed-dose ART formulations, poor adherence, and suboptimal care).<sup>10–13</sup> The inclusion of such data in the analysis might have enabled a more extensive assessment of the factors affecting the main outcomes of the study.

Despite these limitations, the study provides interesting and relevant contributions and elements to be considered for the continuing process of expanding and improving effectiveness and sustainability of HIV programmes in Latin America and the Caribbean.<sup>14</sup>

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We declare no competing interests.

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See **Articles** page e492

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