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Regarding: Cardiovascular Risk-factor Knowledge and Risk Perception Among HIV-infected Adults

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To the Editor

Much research focuses on the increased rate of cardiovascular disease (CVD) among people living with HIV infection (PLWH). A great deal of this research aims to understand the mechanism of increased risk that leads to morbidity and early mortality in this population. The recent article by Cioe, Crawford, and Stein (2014), focusing on the knowledge of CVD risk factors and perceived and estimated risk, is timely and important for increasing awareness on the human aspects, as opposed to strictly biological mechanisms, that may be significant in understanding CVD in PLWH. However, several aspects of CVD risk were not addressed.

First, the authors estimated CVD risk by calculating a Framingham Risk Score (FRS), a score that underestimates risk for CVD in those with HIV. This underestimation is due to additional comorbidities prevalent in PLWH that are not accounted for in the FRS framework. I am left wondering why the authors did not use the Data Collection on Adverse Effects of Anti-HIV Drugs (D:A:D) risk equation, which was tailored for the HIV-infected population to assess CVD risk and has been used to produce a more accurate estimate compared to the FRS (Serrano-Villar et al., 2012).

Second, because diabetes is a well-documented risk factor for CVD that is not included in the FRS, the authors included it as a risk outside of the traditional factors. However, hepatitis C co-infection, known to increase inflammation and CVD (Bedimo et al., 2010) and present among nearly 50% of the sample, was not included.

Third, the established risk factors of depression and alcohol use should also have been included, as both are strong predictors of CVD (Freiberg et al., 2010; Goldston & Baillie, 2008). Depression affects as many as 47.8% of PLWH (Chander, Himelhoch, & Moore, 2006). Additionally, those with HIV have nearly twice the rate of heavy drinking compared to the general population (Galvan et al., 2002). It is time that these variables are included as independent risk factors in studies investigating the relationship between HIV and CVD.

Disclosures

The author reports no real or perceived vested interests that relate to this article that could be construed as a conflict of interest.

Lastly, a strategy of dissemination includes making the research participant aware of the study results. It seems particularly applicable here, as the authors suggested that risk-factor knowledge is an important construct in increasing accurate risk perception and reducing risk. I wonder if the authors used this teachable moment to let the participants know what risk factors they featured and to offer resources that might be useful in reducing or eliminating these risks.

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