Reviewer's report

Title: Estimation of the hospital-based HIV seroprevalence as a nationwide scale using a novel method: 2002-2008 in Korea

Version: 2 Date: 26 July 2010

Reviewer: Bernardo Galvao-Castro

Reviewer's report:

R- The strategy adopted in the present study could facilitate epidemiological surveillance, enhance national prevention strategies and to stimulate the development of studies in order to better understand the epidemiological profile of HIV infection in South Korea.

However, the authors should state the limitations of the study. Indeed, several studies have identified potential biases in inferring general population HIV prevalence from samples of selected groups such as prenatal clinic users, blood donors and hospital-based studies. Particularly, hospital-based studies are more likely to include a biased selection of patients with severe diseases. (Dourado I et al.. HIV-1 seroprevalence in the General Population of Salvador, Bahia State, Northeast Brazil.. Cadernos de Saúde Pública (FIOCRUZ), v. 23, p. 25-32, 2007; Changalucha J et al. Comparison of HIV prevalences in community-based and antenatal clinic survey in rural Mwanza, Tanzania. AIDS 2002;16:661-5; Crampin AC, , et al. Trends and measurement of HIV prevalence in northern Malawi. AIDS 2003; 17:1817-25; Glynn JR, et al. Factors influencing the difference in HIV prevalence between antenatal clinic and general population in sub-Saharan Africa.AIDS 2001; 15:1717-25; Kwesigabo G et al. Monitoring of HIV-1 infection prevalence and trends in the general population using pregnant women as a sentinel population: 9 years experience from Kagera region of Tanzania. JAcquir Immune Defic Syndr 2000; 23:410-7).

Methods.

R- Also the authors should clarify the algorithm used for HIV laboratory diagnosis in South Korea since standardization of algorithm as well as of assays could underestimate or overestimate the prevalence. (Hlela C Shepperd S, Khumalo NP, Taylor GP (2009) The Prevalence of Human T-Cell Lymphotropic Virus Type 1 in the General Population is Unknown AIDS Rev. 11:205-14)

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.