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## Epidemiological data for hepatitis D in Africa

The systematic review on the seroprevalence of hepatitis D virus in sub-Saharan Africa by Alexander Stockdale and colleagues<sup>1</sup> is a key contribution to the epidemiology of hepatitis D virus infection, and highlights the scarcity of reliable data from the African continent. Most of the studies included in this meta-analysis were based on convenience sampling, and less than half of these studies include a confirmation of hepatitis D virus infection by a molecular test. The Article concludes that there is a need for reliable epidemiological data that are representative of the general population, that there are localised clusters of hepatitis D virus endemicity, and that there is a need for reliable hepatitis D virus testing methods.

The first international assessment of external quality control for hepatitis D virus RNA quantification demonstrated the insufficient performances of several assays to detect viruses circulating in Africa (ie, genotypes 1 and 5–8).<sup>2</sup> Although new, improved assays have been developed,<sup>3</sup> implementation of PCR

to detect hepatitis D virus remains challenging in Africa. Collection of dried blood spot (DBS) samples is a promising way to facilitate access to nucleic acid testing. WHO has recently recommended serological and molecular testing on DBS specimens as an alternative to blood samples for the diagnosis of hepatitis B and hepatitis C and for large epidemiological surveillance studies in under-resourced regions and remote areas.<sup>4</sup> From our experience, DBS samples can also be used to detect hepatitis D virus antibodies and RNA in samples over 10 000 IU/mL.

In a study supported by the French National Agency for AIDS Research (ANRS 12270), DBS samples collected from more than 15 000 adult volunteers during the 2010 Demographic and Health Survey in Burkina Faso in west Africa were tested for hepatitis D virus infection. Among HBsAg carriers, the seroprevalence estimates of hepatitis D virus were 1.1% (95% CI 0.6–1.6) countrywide, 1.4% (0.7–2.0) in men, and 0.7% (0.1–1.4) in women. Heterogeneous geographical distribution of seroprevalence was observed, with estimates of 5.4% (2.2–8.6) in Cascades and 8.7% (2.5–15.0) in

Sud-Ouest regions, suggesting local clusters of endemicity (figure).

These results highlight that DBS specimens collected during Demographic and Health Surveys and having large samples could be useful for estimating the prevalence of diseases, allowing reliable country-wide and regional distribution of prevalence estimates. We suggest that such surveys might provide opportunities to fill the gaps in the knowledge of epidemic hepatitis infections and to guide national and regional infection control programmes.

We declare no competing interests.

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- 1 Stockdale AJ, Chavonda M, Beloukas A, et al. Prevalence of hepatitis D virus infection in sub-Saharan Africa: a systematic review and meta-analysis. *Lancet Glob Health* 2017; **5**: e992–1003.
- 2 Le Gal F, Briclher S, Sahli R, Chevret S, Gordien E. First international external quality assessment for hepatitis delta virus RNA quantification in plasma. *Hepatology* 2016; **64**: 1483–94.
- 3 Le Gal F, Dziri S, Gerber A, et al. Performance characteristics of a new consensus commercial kit for hepatitis D virus RNA viral load quantification. *J Clin Microbiol* 2017; **55**: 431–41.
- 4 WHO. WHO guidelines on hepatitis B and C testing. Geneva: World Health Organization, 2017.

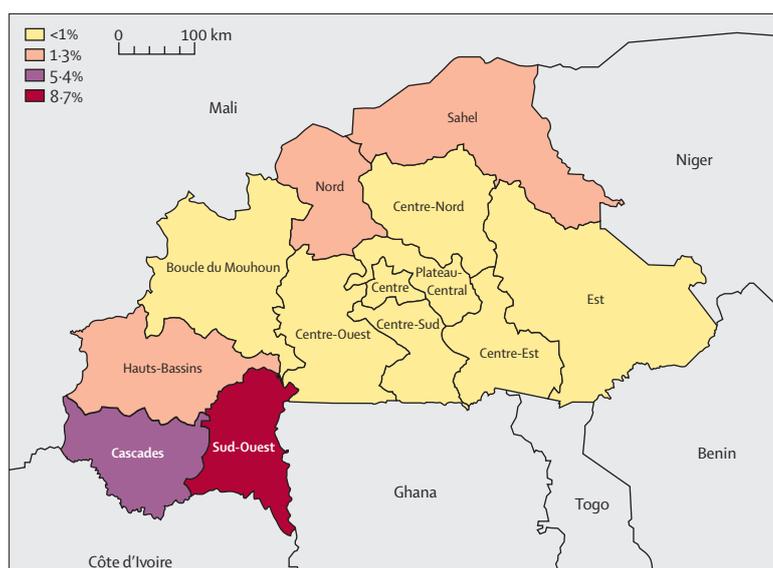


Figure: Countrywide prevalence of anti-hepatitis D virus antibodies in Burkina Faso among HBsAg carriers