# Review of: "Serological detection strategy and prevalence of HIV and Viral Hepatitis B and C in blood donors in Yaoundé Cameroon"

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Potential competing interests: No potential competing interests to declare.

The authors addressed a very important public health problem in LMIC. As blood transfusion safety is crucial to prevent TTIs. However, the challenge still exist in many African countries.

The following were not addressed by the authors

**Abstract**

The methods and materials did not describe how the data were collected. It lacks how were these data were analyzed and what statistical tests were used etc.

The results only consist of the descriptive analysis

The discussion says 7.8% is high. However, this should be assessed in terms of standard reporting classification. (Low, Intermediate Vs, High)

The main document

## Materials and Methods

This section lacks the details of the data collection procedure. How were the donors selected (basic criteria for selection), if there is any inclusion and exclusion criteria, and how data on associated factors were collected and what were the factors collected using questionnaire, and summary of the laboratory procedures were missing. Event though the the mentioned kits appears to be ELISA, readers may not able to understand the type of tests conducted. Furthermore, the sensitivity and specificity of the protocols should have been mentioned.

**Results**

The result part mentioned participants were “with known status”. What does this mean? Were the donors knew their status before? If so, how does this affect the prevalence report?

The result part did not present all the important findings of the study. The way the findings were presented on table was

not clear.

Why did the researchers collected limited demographic factors only?

**Discussion**

In the discussion part, the authors frequently mentioned about occult HBV infection (OBI).

Eg. 1“Then, the reduction of the prevalence of HBV can also lead to the reduction of OBI in blood donors.”

2. “This may be related to the vertical transmission and horizontal transmission before age five, resulting in frequent chronic infections which lead to occult infection.”

These sentences will not agree with definition and the concept of OBI. Because the authors did not conduct HBV DNA test among HBsAg negative (sero negative OBI) or anti-HBc only positive (sero-positive OBI) individuals.

Event though the authors have conducted and reported high prevalence of anti-HBc positive samples, they didn't say the importance/role anti-HBc screening in blood transfusion and HBV transmission.

**Conclusion**

In the conclusion, the authors recommend “At the national level, a screening algorithm should be developed for each TTI.” Most African countries follow the standard screening protocol by WHO. So, is it feasible to set algorithm for each TTI? What is the role of anti-HBc screening in blood transfusion? How do you assess its benefit/role in screening for transfusion?