

Review of: "Sero-prevalence of Viral Hepatitis B and C infection and associated factors among Pregnant Women in Southeast Ethiopia: Community-based crossectional study"

Pascal Pineau¹

¹ Pasteur Institute

Potential competing interests: No potential competing interests to declare.

In this study Nuruzelam and coworkers explored the seroprevalences of two markers HBsAg for hepatitis B and anti-HCV for hepatitis C that signed the chronic infection for the former and a probable chronic infection for the second one. The population investigated were 410 pregnant women from the city of Robe town (44,000 habitants) located in Oromia state of Ethiopia. The authors confirmed that the city has intermediate endemic levels (7.6% for B virus, 2.2% for C virus) for both infections according to the WHO criteria. Risk factors were searched in details and history of sexually transmitted infection and household contact were those associated with the highest relative risk for B and C viruses respectively.

The study is interesting for people in the field as it provides information about the situation of chronic hepatitis in a city of the most populated state of Ethiopia, Oromia, one of the most important countries in sub Saharan Africa.

The manuscript presents, however, some shortcomings.

Major

The first is the English that is not bad at all but still suboptimal for a medical publication.

The title is a bit redundant. A shorter version such as: "Seroprevalence of hepatitis B and C and associated factors among..." should be considered.

At least two maps of Ethiopia locating HBsAg and anti-HCV prevalence of this study and previous survey are necessary as an international readership is not competent to locate Robe town and other Ethiopian places mentioned throughout the manuscript.

Abstract: Mention Oromia state in the abstract. Mention the name and type of the Hospital recruiting the patients in the abstract.

Mention n=410 in the methods section of the abstract.

In the results section of the abstract, order the relative risk by decreasing order

The statistics description in the abstract is unnecessary.

A major issue of the paper is the notion of sexually transmitted disease. The nature of sexually transmitted disease is not mentioned. Hence, many STI are inapparent, and women are not aware of them. Elaborating of this point albeit it concerns only 27 women out of 410 (6.5%) is necessary.

A figure about the prevalence of the risk factors would be useful as well as some are frequent and although the RR is weaker they concern more women (eg hospital admission, 35%) and some are rare (the case of STI) although they are associated with a higher risk. In the end, the largest contingent of infected women is provided by hospital admission and not STI

There is a contradiction in the introduction. HBV carriage is estimated at 2.4% in one occasion and to range between 8 and 12% in another. Where is the truth?

Overall, the discussion is very long and often shallow using vague notions such as socio-demographical, socio-cultural differences as explanations of observed differences of prevalence

Minor:

Use HBsAg only and not HBsAgn.

Hepatitis A, B, C, D, E do not cause both acute and chronic forms but either a chronic or an acute.

The most common cause of chronic liver disease is currently MASLD not HBV.

Hepatitis of altering severity: what does it mean?

What is a fragmented response to hepatitis?

What is a “viral hepatitis interrupted infection”?

What are kebeles?

History of contact: what does it mean exactly? Familial contact? Something else? It is vague.

Discussion

Variations of prevalence due to differences of geographical areas: it is not an explication and it tend to be pleonastic. Please change

There is no increase of prevalence of HBsAg in the present study. But there is a lerve higher than expected.

Reasons explaining the differences of prevalence between countries are attributed by the authors to differences of sociodemographic characteristics and study settings. This explanation is vague. What about hospital malpractices and differences of economic resources and corresponding standard of care?

“The findings in the...present found”: please change

“The study reported...reporting”: please change.

Where is Felege Referral hospital?

A very long and confusing sentence: “Furthermore, the possible explanation...” Please make several sentences instead of a single one.

The association of hepatitis C transmission with blood transfusion was not found in Ghana o Pakistan. Please provide a more general reference for a well-known notion.

What are the rules of blood donation in Ethiopia and which tests are implemented on each donation? It seems that high risk populations are in position to give their blood.

What are the socio-cultural behavior explaining HCV transmission? It is vague.