

# A Response to Article “Seroprevalence of Hepatitis B Virus, Hepatitis C Virus, Syphilis and Associated Factors Among Female Sex Workers in Gondar Town, Northwest Ethiopia” [Letter]

Rina Isnawati <sup>\*</sup>, Widoretno Widoretno <sup>\*</sup>, Didik Tulus Subekti <sup>\*</sup>

Center for Biomedical Research, Research Organization for Health, National Research and Innovation Agency, Cibinong, West Java, Indonesia

<sup>\*</sup>These authors contributed equally to this work

Correspondence: Widoretno Widoretno; Didik Tulus Subekti, Email wido009@brin.go.id; didi028@brin.go.id

## Dear editor

We have read and appreciated the article entitled “Seroprevalence of Hepatitis B Virus, Hepatitis C Virus, Syphilis and Associated Factors Among Female Sex Workers in Gondar Town, Northwest Ethiopia”.<sup>1</sup> This study draws our attention to providing another insight that we hope will be useful in further studies. The study by Wondmagegn et al is interesting to observe although several other similar studies have been found. The work carried out by the authors has similar ideas to previous publications with the additional observation of serological testing for anti-HCV and Syphilis antibodies.<sup>2,3</sup> Initially we expected to find a more detailed discussion of the causative mechanism that describes the relationship between risk factors with infection rates and prevalence, unfortunately this is not found in the discussion as in other publications.<sup>2,3</sup> However, there are some points that can be leveraged to make the study more interesting if some data can be informed or available.

Observation of HBsAg solely is considered inadequate from two points of view. First, HBsAg examination without being followed by other serological tests (HbsAb and HBcAb) could not distinguish whether acute infection, chronic infection, recovery (viral clearance), or co-infection with another HBV serotype.<sup>4</sup> Clear information in this condition is very useful for elaborating data related to risk factors and infection status of respondents being studied. Second, put alongside the results of the HBsAg test with anti-HCV and syphilis antibody data is not appropriate. Anti-HCV and anti-Syphilis showed that the respondent had been in contact with microorganisms, whether exposure or infection could not be ascertained. Both only provide evidence of developed immunity as a result of past natural infection, post-vaccination or even development of immunity that occurs concurrently with the disease (acute or chronic).<sup>5</sup> Therefore at least it is highly recommended to do both HBsAg and HBsAb testing simultaneously.

The authors report that HBV, HCV and Syphilis are common occurs via the sexual transmission route in female sex workers (FSWs). Naturally, sexually transmitted infections will increase the risk of multiple infections in respondents. In the publication, authors seems to have been overlooked since multiple infection data such as HBV+HCV+Syphilis, HBV+Syphilis, HBV+HCV and HCV+Syphilis will provide more comprehensive information on actual field situations. This is very useful to provide an overview of the status of respondents in those epidemiological study which is able to capture the actual health status of each FSWs. We therefore suggest that some of the points we have mentioned and criticized above should be considered in future studies.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

1. Wondmagegn M, Wondimeneh Y, Getaneh A, Ayalew G. Seroprevalence of hepatitis B virus, hepatitis C virus, syphilis and associated factors among female sex workers in Gondar Town, Northwest Ethiopia. *Infect Drug Resist.* 2022;15:5915–5927. doi:10.2147/IDR.S380952
2. Daka D, Hailemeskel G, Fenta DA. Seroprevalence of hepatitis B virus and associated factors among female sex workers using respondent-driven sampling in Hawassa City, Ethiopia. *Infect Drug Resist.* 2021;14:4301–4311. doi:10.2147/IDR.S332333
3. Metaferia Y, Ali A, Eshetu S, Gebretsadik D. Seroprevalence and associated factors of human immunodeficiency virus, *Treponema pallidum*, hepatitis B virus, and hepatitis C virus among female sex workers in Dessie City, Northeast Ethiopia. *Biomed Res Int.* 2021;2021:1–13. doi:10.1155/2021/6650333
4. Kitt E, Hayes M, Cárdenas AM, Green AM. Interpretation and management of positive anti-hepatitis B core antibody tests in immunocompromised pediatric patients. *Transpl Infect Dis.* 2019;21:e13074. doi:10.1111/tid.13074
5. Mast EE, Weinbaum CM, Fiore AE, et al; Advisory Committee on Immunization Practices (ACIP) Centers for Disease Control and Prevention (CDC). A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP) Part 1: immunization of infants, children, and adolescents. *MMWR Recomm Rep.* 2005;54:1–33.

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