A retrospective study of HBV and co-infections in pregnancy in Lospalos, Timor Leste.

Authors:

Fernandes A^{1,2}, Vigneswaran N^{1,2}, Beckett J¹, Hall C^{,1}

¹ Maluk Timor, ² Menzies School of Health Research

Background: Reducing vertical transmission of hepatitis B (HBV) is vital in meeting the World Health Assembly's call to eliminate viral hepatitis as a major public health threat by 2030 (1). There is limited data regarding HBV in pregnancy in Timor-Leste; previous literature found a prevalence of 2.8% in women delivering in Dili (2). We aimed to generate further data on the prevalence of HBV in pregnancy to inform implementation of the 2022 Timor-Leste Elimination of Mother to Child Transmission of HIV/AIDS, Syphilis and Hepatitis B guidelines (3). Secondary objectives included prevalence of HIV and syphilis co-infection.

Methods: A retrospective study at a single community health centre, Lospalos, Lautem district, was conducted between January - December 2021. Data on HBV (HBsAg), HIv (serology) and syphilis (TPPA reactivity) was collated from routinely recorded data in ANC records and the Lospalos laboratory. Ethics approval was granted by Instituto Nacional da Saude (INS).

Results: A total of 752 pregnant women presented for antenatal care. 629/752 (83.6%) of women underwent screening for HBV during pregnancy; 123/752 (16.4%) were not tested. 40/629 (6.4%) were HBsAg positive. 28/752 (3.7%) had syphilis, whilst 1/752 (0.13%) was HIV positive.

Of those tested, 3/40 (7.5%) were found to have syphilis co-infection; there were no cases of HIV co-infection.

Conclusion: This study found a higher prevalence of HBV in pregnant women than previously described. Testing rates in pregnancy were suboptimal; increased funding and availability of tests for HBV are required in pregnancy in addition to tailored clinician and patient education programs. Development of assessment tools for antiviral treatment in pregnancy and treatment with HBIG should be implemented. Routine follow-up of HBsAg positive mothers and their newborns should also be instituted. This will subsequently lead to development and refinement of cascades of care for patients with hepatitis B in pregnancy and exposed infants.

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