The cascade of care for women with hepatitis B during pregnancy: progress, gaps and opportunities

Authors:

<u>MacLachlan JH¹</u>, Romero NR¹, Allard N^{1,2}, Yussf N¹, Mnatzaganian G¹, Deng A¹, Rowe S³, Cowie BC^{1,4}

¹WHO Collaborating Centre for Viral Hepatitis, The Doherty Institute, ²Cohealth, ³Victorian Government Department of Health, ⁴Victorian Infectious Diseases Service, Royal Melbourne Hospital

Background: Pregnancy is a key setting for the management of chronic hepatitis B (CHB), both for the prevention of mother-to-child transmission and as an opportunity to engage women into ongoing care. We assessed key indicators of guideline-based care for CHB in pregnancy.

Methods: We conducted two population-wide, retrospective cohort studies in Victoria. The first linked notified cases of CHB during 2009-2015 with hospitalization data, Medicare data, liver cancer cases, and deaths to assess key outcomes in the perinatal cascade of care, such as testing for CHB during pregnancy, and viral load testing and antiviral treatment for pregnant women with CHB. The second linked all births occurring in Victoria between 2009 and 2017 with hospitalization and notified cases of CHB, to assess provision of immunisation and hepatitis B immunoglobulin to children born to mothers with CHB.

Results: Between 2009-2015, 1,575 women with notified CHB had a hospital record for a live delivery in Victoria, of whom 955 (60.6%) had a record of hepatitis B serology testing during their pregnancy. Overall, 623 (39.6%) had a viral load test, though this proportion increased from 13.4% in 2009 to 57.8% in 2015. 84 women were initiated on antiviral treatment during their pregnancy (1.7%), however this was more common in recent years (11.8% of women giving birth in 2015). Women who had ever given birth were more likely to have ever had a viral load (70.9%) than women who had never given birth (62.0%). Of children born to women with CHB, 96.7% received hepatitis B birth dose vaccination within 7 days.

Conclusion: Despite improvements over time, key gaps remain in the care provided to pregnant women living with CHB and their infants, with potential implications for ongoing transmission and adverse outcomes. Pregnancy provides clear opportunities for enhanced engagement in ongoing evidence-based care.

Disclosure of Interest Statement: This linkage research was funded by the Royal Melbourne Hospital and the Victorian Government Department of Health. The WHO Collaborating Centre for Viral Hepatitis also receives ongoing research funding from the Australian Government Department of Health.