

UPTAKE OF PERINATAL IMMUNOPROPHYLAXIS FOR INFANTS BORN TO WOMEN WITH A RECORD OF HEPATITIS B IN VICTORIA (2009 - 2017)

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Background: Mother-to-child transmission (MTCT) of hepatitis B virus (HBV) remains one of the leading causes of transmission worldwide. An estimated 90% of infants who are exposed develop chronic hepatitis B (CHB) if they do not receive appropriate post-exposure prophylaxis. In Victoria, despite longstanding recommendations for universal antenatal screening and HBV vaccination, there is no regular monitoring or evaluation of intervention uptake, therefore the current coverage of interventions to prevent MTCT are unknown. We examined uptake of perinatal prophylaxis among infants born to mothers with a CHB record.

Methods: We conducted a population-wide, retrospective cohort study capturing births in Victoria between 2009-2017. These data were linked to the notifiable disease dataset to identify mothers with a CHB record, and administrative hospitalisation data. Multivariate logistic regression was undertaken to explore factors associated with HBV vaccination among infants.

Results: Among 681,312 births, 6,169 births (0.91%) were linked to 4,196 women with a record of CHB. 89.3% (95% CI: 88.4-90.7%) of all infants, and 96.7% (95% CI: 95.3-98.1) of infants born to women with CHB received HBV birth dose within 7 days. Infants born to overseas-born mothers were twice as likely to receive HBV birth dose compared to Australian born mothers; infants born in private hospital births were 4-times less likely to receive HBV birth dose when compared to public hospital births. Hepatitis B immunoglobulin administration was recorded for 1.36% of infants born to women with CHB.

Conclusion: In Victoria, the uptake of HBV birth dose varied across population and service type. To prevent MTCT in Victoria, improve health outcomes for women living with CHB and their infants and progress towards elimination of CHB as a major public health threat by 2020 and significant system improvements must be made to centralise perinatal HBV data collection and monitor intervention uptake.

Disclosure of Interest Statement:

The authors have no conflicts of interest to declare.