

Mapping the delivery of interventions for vaccine preventable infections during pregnancy in Victoria

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Background: Standard of care for pregnant women includes universal screening for chronic hepatitis B (CHB), administration of influenza and pertussis vaccination to women and hepatitis B vaccination for infants. This study explored how perinatal services for the prevention of these vaccine preventable diseases are delivered to women and their infants in Victoria.

Methods: Two online surveys conducted in 2021 investigated influenza, pertussis and CHB care and service delivery to identify barriers to optimal care. (1) **The Birthing Hospitals Survey** captured information about service delivery for influenza and pertussis vaccination, and interventions to prevent mother-to-child-transmission (MTCT) of CHB at the facility level and (2) the **Healthcare Providers Survey** captured information from antenatal and postnatal care providers working in both community and hospital settings to identify individual perceptions and knowledge relating to the delivery of these interventions.

Results: The Birthing Hospitals Survey was sent to all 56 birthing hospitals in Victoria and 34 hospitals (61%) completed the survey. 140 participants completed the Healthcare Providers Survey. Half of the birthing hospitals provided influenza (50%) and pertussis (53%) vaccinations to pregnant women and 53% provided an infectious diseases service for women with CHB at their hospital. Reported barriers for optimal care included challenges in confirming women's vaccination and CHB status – relying on verbal report from women, lack of standardised reporting, inadequate workforce training, lack of communication between services, and poor guideline-based clinical care for women with CHB and their infants. Three services reported stock-outs of hepatitis B immunoglobulin.

Conclusion: Substantial gaps in influenza, pertussis and CHB service delivery for pregnant women were reported. Coordinated and standardised system improvements including timely and universal access to vaccination and clinical care, training and education, improved data recording and reporting, and communication between services are needed to appropriately respond to the needs of pregnant women and their infants.

Disclosure of Interest Statement

The authors have no conflicts of interest to declare.