Maternal immunizations: Protects mother, fetus and newborn infant

Many infectious diseases can adversely affect the health of pregnant women; adversely impact the fetus directly during gestation and cause infectious illnesses in newborn infants who are too young to receive benefit from available vaccines. Globally, 10-50% of still births are due to maternal/fetal infections; 600,000-800,000 neonatal deaths are due to infections. Maternal immunizations with vaccines targeting influenza, pertussis and tetanus have already provided improved maternal health during pregnancy, fewer adverse fatal fetal events and reduced illness in young infants. Infections in young infants frequently result in illness and the need for medical care; while some result in morbidity and even mortality. Some of these infections are due to vaccine-preventable conditions which are acquired at an age prior to completion of an effective vaccine series, e.g. influenza, meningococcal group B, pertussis. Other infections are caused by infections for which there is no currently available vaccine, e.g. group B streptococcus and respiratory syncytial virus (RSV). Utilizing vaccines more effectively during pregnancy could result in better health outcomes for the mother, her off-spring or both. Future candidates for maternal immunizations include: Group B streptococcus vaccine, respiratory syncytial virus vaccine, meningococcal group B vaccine, meningococcal conjugate vaccine (MenACWY) and pneumococcal conjugate vaccine. Considerations that will impact successful utilization of a maternal immunization strategy include: Vaccine safety during pregnancy: Mother and fetus, vaccine efficacy for mother, fetus and infant, increasing capacity and acceptance of vaccine administration by obstetric providers and cost.

Biography
Michael T Brady is an Emeritus Professor of Pediatrics at The Ohio State University. He is a Pediatric Infectious Diseases Clinician and Researcher. He is an Associate Editor of the 2015 and 2018 American Academy of Pediatrics Committee on Infectious Diseases Red Book. He has made presentations on Maternal Immunizations nationally and internationally.

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