Need for advocacy for maternal immunisation

To the Editor: Even in the current era, many vaccine-preventable diseases, such as measles, polio and hepatitis B, still constitute a significant public health burden despite effective vaccines being available. Various factors contribute to reduced vaccine coverage, such as war-ravaged countries, rural areas with lack of access to healthcare, and the anti-vaxxers, who refuse vaccination, stemming from the disproved measles, mumps, rubella vaccine claims. This leads to disease outbreaks with considerable morbidity and mortality, e.g. measles outbreaks in developing and developed countries.

Besides the advocacy needed for childhood immunisation of vaccine-preventable diseases worldwide, there also exists a need for advocacy with regard to maternal immunisation that healthcare professionals and the public are not well aware of. Maternal immunisation – vaccination of pregnant women – has been shown in trials to protect both the mother and her infant from many vaccine-preventable diseases.[1,2] Transplacental transfer of maternal IgG antibodies provides passive immunity to the infant in the first 6 months of life.[3] As a pregnant healthcare professional seeking vaccination, I was surprised to discover that many obstetricians are unaware of the benefits of maternal immunisation and do not make any recommendations to their pregnant patients.

The South African (SA) National Institute for Communicable Diseases recommends inactivated influenza vaccine for all pregnant women at any stage of pregnancy during the influenza season.[4] Pregnant women are at increased risk of severe or complicated influenza and adverse birth outcomes.[4] A randomised placebo-controlled trial in SA found the influenza vaccine to be safe and effective in both HIV-infected and HIV-uninfected women and their infants.[5] The influenza vaccine is not licensed for infants <6 months of age who are vulnerable to severe or complicated influenza.[4] Maternal influenza immunisation has been shown to protect infants for the first 6 months of life.[5]

Tetanus, diphtheria, and acellular pertussis (Tdap) vaccination of pregnant women has been implemented in the UK and the USA since 2012.[3] Pertussis outbreaks in the USA resulted from the lower duration of protection from the acellular v. the previous whole-cell pertussis vaccines.[6] Locally, in KwaZulu-Natal, there were diphtheria outbreaks, and pertussis cases occur nationally.[7,8] The need therefore exists in our setting to protect infants before they develop immunity from the infant vaccine series.

Vaccines in development for maternal immunisation are for the respiratory syncytial virus, which causes bronchiolitis and pneumonia and is a major cause of morbidity and mortality in children, especially infants, and for group B streptococcus, which is a leading cause of invasive infection within the first 3 months of life.[9,10]

There is a misconception among the general public that all vaccines are unsafe during pregnancy; education by healthcare professionals and media communications to dispel false beliefs are required. With the influenza season on the horizon, I urge healthcare professionals to recommend maternal influenza vaccination. Maternal immunisation has the potential to improve maternal and infant health outcomes.

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