MATERNAL IMMUNIZATION: SAFE AND EFFECTIVE

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Maternal immunization is a safe and practical method for providing protection against many infections in a vulnerable period of life. Since vaccine strategies for preventing infections through infant immunization generally begin at 1 to 4 months of life and protective effects do not appear until 6 to 7 months of age, infant immunization fails to prevent many infections in the first months of life. Additionally, maternal immunization provides protection for the fetus. Furthermore, maternal immunization enhances passive immunity of young infants to microorganisms that produce life-threatening illness.

The concept of using maternal immunization to prevent fetal and infant infections is supported by several carefully conducted studies of many bacterial and viral vaccines. These studies recommended that vaccines for maternal immunization should be non-reatogenic to avoid maternal reactions and should be safe for both mother and fetus, without adverse effects on the fetus.

There is general agreement among public health authorities and obstetricians that pregnant women must be immunized. There is consensus on the following: inactivated vaccines are not considered hazardous to the mother or the fetus and may often be of major benefit; as a general rule, live vaccines should not be given to pregnant women; and the risk to mother or fetus from immunization of family members or other intimate contacts is uncertain.

The vaccines routinely recommended for pregnant women include vaccines against diphtheria, tetanus, and influenza. In special situations, vaccines against hepatitis (A and B), yellow fever, pneumococcus, and meningococcus may be recommended. Vaccines against tuberculosis, mumps, rubella, and chickenpox are contra-indicated.

In the article entitled “Vaccines in pregnancy: a review of their importance in Brazil”, Dr. Lucia Ferro Bricks emphasizes the safety and effectiveness of maternal immunization during pregnancy and reinforces that pregnancy is an excellent opportunity to raise the immunity of newborns and young infants. However, in Brazil, maternal immunization remains below expectations.
In summary, new advances in the development of safe and effective vaccines make maternal immunization a plausible option for the prevention of life-threatening illness in neonates. Moreover, immunization during pregnancy may cause an increase of specific antibody concentrations in colostrum and breast milk. Despite the recommendation to avoid inactivated immunization, the risk of these vaccine administrations in the third trimester of pregnancy may be minimal.

Further studies focusing on the safety and efficacy of maternal immunization must be encouraged to prevent serious infectious diseases in neonates and young infants.