Comment Maternal influenza immunisation in resource-limited settings
Odile Launay, Vassilis V. Tsatsaris

To cite this version:

HAL Id: inserm-01327503
https://inserm.hal.science/inserm-01327503
Submitted on 6 Jun 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.
Maternal influenza immunisation in resource-limited settings

Pregnant women and young infants are at high risk of developing severe influenza.1 Among infants, those younger than 6 months have the highest risk of developing complications associated with influenza; however, antiviral treatments and influenza vaccines are not approved in this age group. Given that influenza vaccines administered to pregnant women have shown a good safety profile and efficacy to prevent influenza in infants younger than 6 months,5 maternal immunisation seems to be an important strategy to protect both pregnant women and their infants. WHO targets seasonal influenza vaccination of pregnant women as a high priority.7 Most high-income countries recommend maternal influenza immunisation to reduce the burden of influenza in the pregnant woman and her infant.6 However, additional data are needed to support decisions about introduction of influenza vaccine in pregnant women in resource-limited settings. The Bill & Melinda Gates Foundation funded three large trials in South Africa, Mali, and Nepal, with the objective of increasing the evidence base for the effect of maternal influenza immunisation.9

In The Lancet Infectious Diseases, Milagritos D Tapias and colleagues10 report results of the trial done in Mali—a poorly-resourced country with high infant and maternal mortality. This is the largest randomised controlled trial evaluating the efficacy, safety, and immunogenicity of trivalent inactivated influenza vaccine administered to third-trimester pregnant women to prevent influenza in infants younger than 6 months. 4193 women were immunised: 2018 with trivalent inactivated influenza vaccine and 2085 with conjugate quadrivalent meningococcal vaccine. Vaccine efficacy against first-episode laboratory confirmed influenza in infants (the primary outcome) was 33·1% (95% CI 3·7–53·9) in infants born to women immunised at any time prepartum (intention-to-treat analysis), and 37·3% (7·6–57·8) in those born to women vaccinated at least 14 days prepartum (per-protocol analysis). Among participating women, vaccine efficacy was 70·3% (95% CI 42·2–85·8) overall, 76·6% (28·4–94·3) in pregnant women, and 70·1% (28·0–89·1) in the post-partum period. There was no beneficial effect of the trivalent inactivated influenza vaccine on birthweight.

The results of Tapia and colleagues’ large randomised trial are important because they show not only the efficacy, but also the feasibility, of maternal seasonal influenza immunisation on infant protection during the first months of life in Mali. Moreover, the investigators put forward several propositions to overcome the
difficulties of seasonal influenza vaccination in resource-limited countries. Nevertheless, supplementary data for influenza disease burden in low-income countries are urgently needed to support GAVI's decision.

*Odile Launay, Vassilis Tsatsaris
Université Paris Descartes, Sorbonne Paris Cité, Paris, France (OL, VT); Assistance Publique–Hôpitaux de Paris (AP–HP), DHU risks and pregnancy, Hôpital Cochin, 75679 Paris Cedex 14, France, (OL, VT); and Inserm, CIC 1417, F-CRIN, Innovative clinical research network in vaccinology (I-REIVAC), Paris, France (OL); and UMR 1153, Obstetrical, Perinatal and Pediatric Epidemiology Research Team (EPOPé), Paris, France (OL)
odile.launay@aphp.fr

OL has been an investigator for Sanofi Pasteur MSD; reports personal fees from Sanofi Pasteur; and reports grants and non-financial support from GlaxoSmithKline Biologicals, Sanofi Pasteur, and Pfizer. VT declares no competing interests.

Copyright © Launay et al. Open Access article distributed under the terms of CC BY.


