

Implementation research gaps for furthering maternal immunization

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Geneva
16 April 2015



**World Health
Organization**

Potential Public Health Impact of Maternal Immunization

- SAGE has recommendations for maternal immunization against three pathogens for prevention of newborn disease in certain circumstances (tetanus, influenza, pertussis)
- Recently, WHO Product development for vaccines advisory committee (PDVAC) gave high priority to early stage R&D for vaccines against GBS & RSV
 - Based on vaccine development progress and public health need
- BMGF recent maternal immunization impact analysis: ~1% of the global burden of <5 years mortality can be averted
 - With vaccines against TT, influenza, pertussis, GBS, and RSV

Maternal Influenza Immunization at IVR

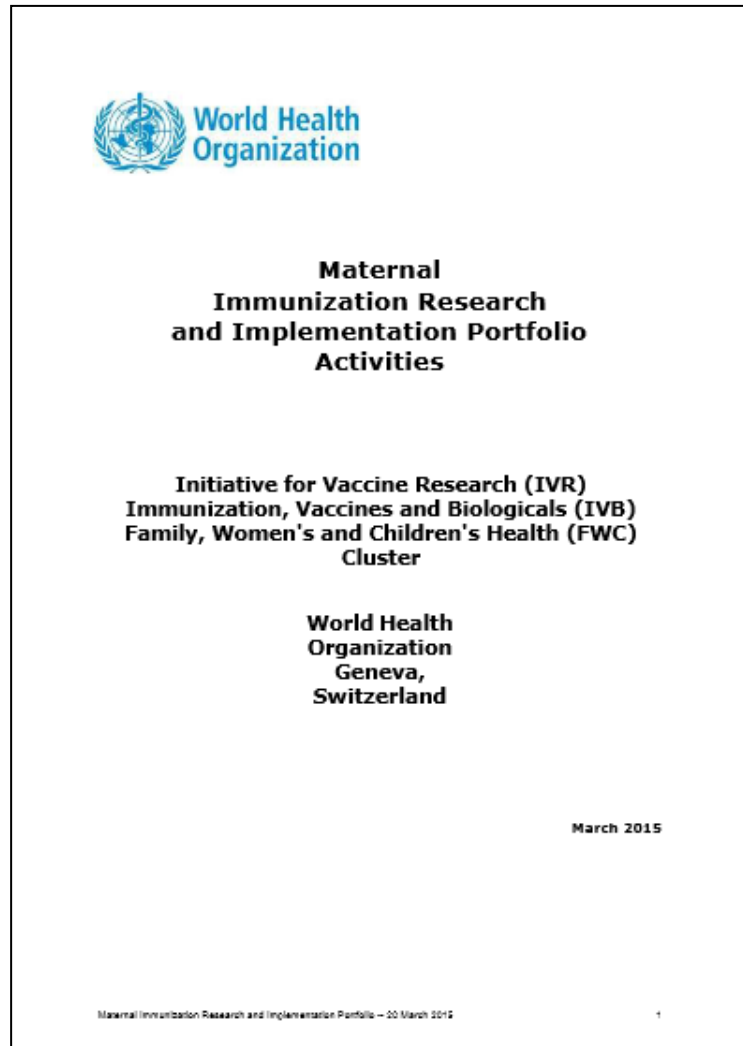
Main Objectives:

- Strengthen the evidence base supporting the existing WHO position on maternal influenza immunization
- Address obstacles to implementation of maternal immunization (influenza and other vaccines)

Building an immunization platform in conjunction with antenatal care in low- and middle-income countries

- Many WHO activities are not necessarily pathogen specific
 - Vaccine safety
 - Ethics
 - Vaccine hesitancy
 - Implementation guidance
- Other influenza vaccine activities will inform future work with other vaccines
 - Language in package inserts
 - Health economics
 - IVIR-AC Working Group reviewing disease burden

WHO Maternal Immunization Portfolio



- Global stakeholder survey of activities related to maternal immunization
- More than 60 projects described
- Resource to improve information sharing and coordination globally
- Clear activity gap is evaluation and optimization of vaccine delivery strategies

March Maternal Immunization Meeting

- High level considerations
 - Building political and financial support
 - Legal considerations
 - Regulatory issues
- Integration into ANC platforms
 - Monitoring and evaluation routine ANC
 - Experience of introduction of non-vaccine interventions into ANC
 - Opportunities and challenges afforded by MNTE program
- Implementation
 - Experiences of groups introducing maternal influenza immunization into LMICs

March Maternal Immunization Meeting

- Some countries have successfully targeted pregnant women, however many have required considerable resources to achieve modest coverage
- Immunization challenges cited
 - Pregnant women: vaccine hesitancy, lack of recognition of disease severity, limited access
 - Clinic: immunization and ANC separate, hesitancy among HCPs, lack of equipment, lack of training, busy ANC schedule, compensation
 - System: unclear optimal delivery platform, unclear best vaccine formulation, rotation and updating of stocks, package inserts, delivery and procurement, contraindicated in pregnancy in some countries
- Limited efforts globally to understand and to overcome these challenges and identify others

IVR Programmatic Activities Relevant to Maternal Immunization

- Program implementation guidance
- AEFI monitoring guidance
- Program monitoring and evaluation guidance

IVR Implementation Research Relevant to Maternal Immunization

- Country Case Studies
- Health Economics Guidance and Analyses
- Vaccine Confidence Protocols and Evaluations

Country Case Studies

PATH-Led Country Case Studies (Malawi & El Salvador)

1. Determine information needs of country stakeholders regarding influenza disease and maternal influenza vaccination
2. Identify key sociocultural factors that may influence acceptance of influenza vaccine for pregnant women
3. Assess health system capacity for influenza vaccine integration into antenatal care services
4. Review the current health policy environment for maternal vaccination

Health Economics Guidance Under Development

- Three Guidance Documents/ Tools Under Development
 - WHO Manual for Estimating the Economic Burden of Seasonal Influenza and associated Excel toolkit
 - WHO guidance document on the Economic Evaluation of Influenza Vaccination
 - WHO Maternal seasonal influenza vaccine programme planning and costing tool
- Each is in a different stage of development, but will undergo piloting in 2015.
 - Anticipate wider dissemination in 2016

Vaccine Confidence

- In 2012, case study assessing vaccine confidence and use in Pune, India (Swiss Tropical and Public Health Institute and the Maharashtra Association of Anthropological Sciences).
- Rigorous mixed methods approach focusing on pandemic influenza vaccine use by all ages
 - Wealth of data about individual factors affecting vaccine use
 - Analysis is ongoing
- In 2015, IVR commissioned the same group to develop and validate a survey of vaccine confidence and use targeting pregnant women
 - Once validated, IVR will pilot in different WHO Regions
 - Anticipate wider dissemination in 2016

More Implementation Research Is Needed

- Optimize the performance of seasonal influenza vaccines in pregnancy.
 - Duration of immunity, vaccine type, co-administration, annual campaigns vs. year-round
- Demonstrate that maternal immunization is feasible, and report on best practices.
 - Communication, perception, cost, health care worker needs, infrastructure, etc.
- Evaluate different delivery platforms, and ensure routine care and immunization not adversely effected

Advancing Implementation Research

- Plans to engage experts to develop a roadmap to advance maternal influenza immunization
 - Specify unmet public health needs as strategic goals
 - Identify priority activities to be performed to accelerate implementation globally
 - Strengthen coordination of stakeholders toward common goals
 - Highlight critical activities to funding agencies

Timeline of relevant future events

**2015
(Q3-4)**

- 2 BMGF RCTs published
- 4-5 WHO reviews published
- WHO meeting of perinatal epidemiologists to review fetal effects of influenza vaccine exposure
- WHO roadmap to advance maternal influenza immunization

**2016
(Q1-2)**

- Pooled analysis of 3 BMGF RCTs published
- 2-3 WHO reviews published
- WHO meeting on influenza disease burden estimation
- Completion of 3 country case studies (PATH)

2016-2017

- WHO health economics and vaccine hesitancy country assessments
- End WHO/PATH Maternal Influenza Immunization Project

Thank You



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