
www.asset-scienceinsociety.eu
share and move to face nasty bugs

## Gender Pattern and Vaccination

## Vanessa Moore (EIWH) GENDER IMPLICATIONS

The ASSET FINAL EVENT
Share and move for mobilization and mutual learning at local, national and international levels on Science in Society related issues in epidemics and pandemics

Rome, 30-31.10.2017


## Overview

- Introduction
- Biological issues
- Research
- Pregnancy
- Healthcare workers
- Older persons
- Hard to reach groups



## European Institute of Women's Health

- The European Institute of Women's Health is a health NGO founded in 1996
- Aims to ensure a sensitive approach to health policy, prevention, treatment, care and research in order to reduce health inequalities and improve quality of life
- Policy briefs
- Advocacy work on EU level
- Co-founders of the CLCI - Coalition for a Life-course approach to Immunisation.



## Sex and Gender

Sex

- The organs you are born with
- The chromosome makeup that determines your sex
- Biologically defined by XY or XX chromosomes

Gender

- Socially constructed characteristics of women and men
- Norms, roles and relationships of and between groups of women and men
- Norms that come with being of a particular sex, e.g. the female gender is expected to have certain characteristics, behaviours, and roles.


## Biological Issues

- Sex differences in immune function are well established
- for example, inflammatory immune responses are generally higher in females than in males
- Biologically, females and males differ in their immunological responses to seasonal influenza virus vaccines
- Women have higher antibody responses to influenza vaccinations -
 research shows that the antibody response of a woman to half a dose of influenza vaccine is equivalent to the antibody response of a man to the full dose
- Women also report a worse reaction to vaccinations than men do.


## Research

- Women are underrepresented in clinical trials - participation is especially low in early Phase I and I-II studies
- Contributes to lack of awareness among health care professionals about sex-specific differences across the lifespanthis creates problems with both diagnosis and treatment
- Pregnant women are generally excluded from clinical studies - but pregnant women get sick, and sick women get pregnant
- Women make up the largest proportion
 of the older population - but older people are generally excluded from clinical trials - this is an issue for both men and women.


## Research

- EU regulation - Clinical Trial directive 536/2014 contains new rules for including pregnant and breastfeeding women in clinical trials - adopted in 2014
- Guarantees the appropriate representation of both sexes in clinical trials; also results must present gender/age breakdown
- It defines the conditions under which
 pregnant or breastfeeding women can participate in clinical trials.


## Pregnancy

- Pregnant women:
- More likely to have severe disease and hospitalisation with either seasonal or pandemic influenza
- During pandemics, mortality rate for pregnant women is higher than non-pregnant women
- A number of reasons why pregnant women are more at risk
- Hormonal changes during pregnancy
- Immune function change
- Physiological changes, e.g. increased demands on cardiovascular output
- The WHO recommends all pregnant women to receive vaccinations during the influenza season
- Pregnant women should be given highest priority among all the risk groups.


## Pregnancy

- Vaccine covers of pregnant women tend to lag behind the general population
- Evidence points to pregnant women not knowing of the increased risks associated with pregnancy and influenza
- Many health care providers do not recommend pregnant women to take influenza vaccine due to concerns over giving a vaccine to a pregnant woman
- Data on pregnancy and vaccinations is
scarce - in terms of drivers and barriers for
 pregnant women, there is little evidence-based research.


## Healthcare workers

- Female participation in the workplace varies across Europe but is lower than men - EU average $54 \%$ for women and $72 \%$ for men -Italy: 44\% for women and 70\% for men -Romania: 55\% for women and 70\% for men -Sweden: $69 \%$ for women and $80 \%$ for men
- Women represent more than $50 \%$ of the healthcare workforce in many countries; also, in most countries nurses, teachers and childcare workers are mainly female -For example 80\% of employees in the Irish health services are women, and women account for $92 \%$ of nurses
- Studies have generally shown compliance rates from as low as $10 \%$ to 40-50\% among health care workers, with no clear pattern of barriers/facilitators - more research is needed.


## Older Persons

- Over-65s have a higher risk for severe influenza-related complications and highest risk of mortality - this includes both men and women
- Life expectancy for women in the EU is, on average, 5.5 years longer than that for men
- But - healthy life years difference is just 0.1 years difference in favour of women
- Older people are more likely to be poor than other groups, and women are more likely to be poor than men - older woman may find herself at a worse financial status due to the loss of spousal income.


## Hard to Reach Groups

- Hard to reach groups may have adverse health outcomes - the complex interplay of social/economic marginalisation makes this a particular issue
- There are a number of minority groups in society which have adverse health outcomes and where women are particularly affected, for example:
- Roma community
- Isolated immigrant communities
- Lower socioeconomic groups
- Need for an integrated interdisciplinary effort where systematic surveillance of
 trends in influenza uptake by hard to reach groups is implemented.


## Hard to Reach Groups

- Gender is one of the most critical variables in terms of health outcomes
- Roma women are more likely to experience social exclusion than Roma men and suffer the added disadvantages
- Migrants - extremely vulnerable group with an uncertain vaccination background
- Limited MMR vaccination of children in
 Somali community in Sweden - only 70\% of two-year olds in this community vaccinated against MMR
- Importance of intersectional research to address this.


## Any questions?



