

Global, regional and national levels and trends of preterm birth rates for 1990 to 2014:

development of updated WHO estimates

Dr Joshua Vogel



**World Health
Organization**

Background

- ❑ WHO estimates of PTB are an important global resource for:
 - assessing the burden at global, regional and national levels, and how that burden is changing over time.
 - Aid development and implementation of health policies
 - Inform resource allocation in health systems
 - Can be used to assess the impact of interventions
 - Raise awareness of preterm birth as an important global public health issue

Previous PTB estimates

- ❑ Blencowe 2012 (1990 – 2010) estimated 14·9 million babies (12·3–18·1 million) were born preterm in 2010, accounting for 11·1% of live births worldwide
- ❑ In the 65 countries with reliable time trend data for preterm birth, 62 countries had increasing rates from 1990 to 2010
- ❑ Estimates now require updating, in light of new data, time passing and continued refinements in statistical modelling methods

Objectives

1. To conduct a systematic review of all available data on preterm birth rates;
2. To critically appraise and synthesize eligible data, and conduct modelling to develop estimates of levels and trends of preterm birth rates at national, regional and global levels; and
3. To disseminate preterm birth estimates, in order to inform WHO Member States and other entities in the development of public health programmes and policies.

Methods

- ❑ Systematic reviews of PTB data for the period 1990 – 2014, for the 194 WHO Member States
- ❑ Searching and extract data from;
 - publicly available civil registration and vital statistics (CRVS) systems
 - Data relating to preterm birth in the published literature
- ❑ Forthcoming protocol publication on Methods

Statistical analysis

1. Model PTB outcome using two-level linear mixed regression models, including random country-specific intercepts and slope (ideally using regional models)
2. Prediction of PTB rate in 2014 for all countries, regions and globally based on regional models
3. Review of methods and estimates by independent Technical Advisory Group
4. WHO Member States consulted on methods and invited to supply any additional data

Data

- ❑ Some PTB data for countries is not published or not publicly available
- ❑ We invite any researchers or organizations to contact us, or submit PTB data for consideration on pretermbirth@who.int

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@HRPresearch

@josh_vogel

vogeljo@who.int

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