

Estimating and Projecting Disparities in Demographic Outcomes Using Bayesian Methods

Abstract

The main purpose of this seminar is to introduce Dr. Fengqing Chao to the researchers in Hong Kong. It is crucial to monitor demographic and global health indicators accurately to optimize resource allocation. This is especially so in developing countries where the improvement of these health indicators is most needed. However, estimating and validating these indicators are fraught with challenges, one of which is the paucity of accurate data. The Bayesian modeling approach implemented in Dr. Chao's research provides more objective, data-driven insights into estimating demographic and global health indicators. Dr. Chao will provide a set of important analyses and fill the previous research void on selected indicators. She also takes account of the data quality that varies across different sources and infers the levels and trends of indicators in countries and periods with limited data by data-rich country-years. The resulting estimates provide new insights into the sex ratio at birth and mortality globally. International agencies have used the methods and results for policy making.