Replication of *Nandi A, Hajizadeh M, Harper S, Koski A, Strumpf EC, Heymann J. Increased Duration of Paid Maternity Leave Lowers Infant Mortality in Low-and Middle-Income Countries: A Quasi-Experimental Study. PLoS Med. 2016;13(3):e1001985.*

Data sources

Analyses utilized three sources of data, specifically: (1) live birth information collected from respondents surveyed as part of the Demographic and Health Surveys (DHS) in 20 countries (Table 1); (2) measures of maternity leave policies; and (3) country level covariates such as GDP per capita, female labour force participation as well as the total and public health expenditures.

The DHS data are publicly available, but users must first register with the DHS program. Registration, which requires a summary of the proposed study and selection of country datasets, can be completed at: http://www.dhsprogram.com/data/new-user-registration.cfm.

Data on current maternity leave policies for each sampled country were provided by UCLA's World Legal Rights Data Centre (WoRLD) and then collected retrospectively to 1995 by McGill University's Maternal and Child Health Equity (MACHEquity) research program. The policy data are freely available through the website, www.machequity.com, without any restriction.

Country level covariates can be downloaded from the World Bank indicators website at: http://data.worldbank.org/indicator and include:

- GDP per capita, PPP (constant 2005 international dollars)
- Per capita total health expenditure, PPP (constant 2005 international dollars)
- Per capita government health expenditure, PPP, constant 2005 international dollars (created by multiplying Health expenditure per capita, PPP, constant 2005 international dollars by Health expenditure, public, % of total health expenditure)
- Labor force participation rate, female (% of female population ages 15-24)

A ready-to-use STATA dataset (country_vars.dta) with all of the maternity leave policy measures and the country level covariates necessary for running the analytical programs is provided.

Instructions

1. **Download data**. Complete DHS Program registration. Step-by-step instructions for requesting online data access and downloading datasets are available at: http://dhsprogram.com/data/Access-Instructions.cfm. Access to datasets is granted by country; once approved, full access is given to all survey datasets for that particular country. Once access is approved, download the following datasets:

Country	DHS survey years
Treated countries	
Bangladesh	2004, 2007, 2011
Kenya	2003, 2008
Lesotho	2004, 2009
Uganda	2006, 2011
Zimbabwe	2005, 2010
Control countries	
Armenia	2005, 2010
Bolivia	2003, 2008
Colombia	2005, 2010
Egypt	2005, 2008
Ghana	2003, 2008
Honduras	2005, 2011
Cambodia	2005, 2010
Madagascar	2003, 2008
Malawi	2004, 2010
Nigeria	2003, 2008
Nepal	2006, 2011
Philippines	2003, 2008
Rwanda	2005, 2010
Senegal	2005, 2010
Tanzania	2004, 2010

2. **Produce analytic datasets**. After downloading the datasets from the DHS Program and the provided country_vars.dta, which includes measures of maternity leave policy as well as various country-level covariates, you can produce the analytic datasets for analyses of: (1) infant and post-neonatal mortality and (2) neonatal mortality.

   DHS Birth's Recode (BR) files are used in the programs. The top portions of the programs need to be edited to reflect the correct directory paths to where each BR file for every DHS survey is stored, as well as where the country_vars.dta file has been saved.

   Once all the files are downloaded and directory paths edited the following STATA programs can be used to create the analytical datasets:
   a. Run the stata .do file 'data prep_ infm and postneo_20160628.do' in order to produce the analytic datasets for analyses of infant and post-neonatal mortality.
   b. Run the stata .do file 'data prep_neo_20160628.do' in order to produce the analytic datasets for analyses of neonatal mortality.

3. **Run analyses**. After producing the analytic datasets, the SAS programs can be used to replicate the results from the paper; the libname statement at the top of each program will have to be edited to reflect the location/directory of the replication files created in Step 2 above.

a. The file 'infm_rep_20160628.sas' can be used to replicate analyses of the effect of paid maternity leave on infant mortality
b. The file 'neo_rep_20160628.sas' can be used to replicate analyses of the effect of paid maternity leave on neonatal mortality
c. The file 'postneo_rep_20160628.sas' can be used to replicate analyses of the effect of paid maternity leave on post-neonatal mortality