merged this information to a sample of live births occurring between 2000 and 2008 in 20 LMICs surveyed as part of the Demographic and Health Surveys (DHS), and utilized a difference-in-differences approach to estimate the influence of paid maternity leave on mortality during the first year of life.

Methods

Sample

Information on birth outcomes was derived from the DHS. The authors had full access to the DHS data from which the analytic sample is derived. The DHS collect comparable information on demographic, socioeconomic, nutritional, behavioral, fertility, and health characteristics from a nationally representative sample of households in LMICs using a two-stage cluster sampling design. Individuals are selected for interviews from household rosters; information is collected on women of reproductive age (15–49 y), men (usually aged 15–54 or 15–59 y), and children under the age of 5 y. Trained interviewers and standardized tools and measurement techniques are used to ensure comparability of surveys across countries and survey waves. Further details regarding sampling strategies and study procedures are available elsewhere [21,22].

Our sample comprised all live births occurring to DHS respondents from 20 LMICs between 2000 and 2008. These 20 countries were selected because they administered at least two DHS surveys between 2001 and 2011, which permitted analyses of policy changes occurring within countries over time. Briefly, mothers surveyed in the DHS were asked to provide information concerning all children born alive in the previous 5 y. These data were used to construct a panel of live births, each with information on vital status, over a consistent set of years and countries. We created two separate samples, one for our analyses of infant and post-neonatal mortality and the other for analyses of neonatal mortality. We restricted these samples to the 282,836 and 304,294 live births that occurred at least 1 y and at least 28 d prior to the DHS interview date, respectively, in order to ascertain whether each child survived the infant (1 y) and neonatal (28 d) periods following birth. After further excluding observations with missing information on key covariates, our samples were composed of 282,751 live births between 2000 and 2007 for analyses of infant and post-neonatal mortality and 304,201 live births between 2001 and 2008 for analyses of neonatal mortality. Table 1 reports survey years and sample sizes for the sampled countries. The Institutional Review Board of McGill University reviewed and approved this study.

Measures

The exposure of interest in our study was the legislated length of paid maternity leave for each country and year. Data on current maternity leave policies for each sampled country were provided by the University of California Los Angeles World Legal Rights Data Centre, and data on past maternity leave policies back to 1995 were collected by McGill University's Maternal and Child Health Equity (MACHEquity) research program. We defined the duration of paid maternity leave as the legislated length of paid leave available to mothers only. We did not distinguish leave that could be taken in the prenatal period from leave that could be taken after birth; however, few maternity leave policies in LMICs mandate specifically prenatal versus postnatal leave. Further details regarding the collection and coding of global maternity leave policies are available elsewhere [1].

The outcome variables—infant, neonatal, and post-neonatal mortality—were measured using the 5-y birth histories provided by women interviewed in the DHS. We created binary indicators for infant, neonatal, and post-neonatal mortality to measure whether each child died within 1 y, within the first 28 d of life, or between 28 d and 1 y after birth, respectively.