

from the length of paid leave, another defining feature of paid maternity leave policies is the percentage at which wages are replaced. Because changes in the wage replacement rate sometimes coincided (i.e., in Lesotho) with changes in the legislated length of leave, we controlled for the wage replacement rate as a potential confounder. Additional time-varying country-level covariates included levels of economic development (measured by gross domestic product [GDP] per capita based on purchasing power parity [PPP], in constant 2005 international dollars), female labor force participation (the proportion of women age 15 y and older in the labor force), per capita total health expenditure (PPP, in constant 2005 international dollars), and per capita government health expenditure (PPP, in constant 2005 international dollars), which were available from the World Bank's World Development Indicators and Global Development Finance databases [34].

Statistical Analysis

We linked data on paid maternity leave policies to outcomes and covariates from the DHS by country and birth year and examined the effects of an increase in the duration of paid maternity leave on the risk of mortality during the first year of life. Specifically, we estimated for birth i the effect of an additional month of paid leave (lagged by 1 y to respect the temporal ordering between the policy and outcome) on the probabilities of infant, neonatal, and post-neonatal mortality using a linear probability model of the general form $Y_{ijt} = \alpha_j + \beta M_{jt-1} + \lambda_t + \epsilon_{ijt}$, where β measures the effect of a 1-mo increase in maternity leave in the prior year, M_{jt-1} (where j indexes the country and t the birth year), on infant, neonatal, and post-neonatal death, Y_{ijt} . We included fixed effects for country (α_j) and year (λ_t) to control for unobserved time-invariant confounders that vary across countries and any temporal trends in mortality that are shared across countries, respectively. The effects of paid maternity leave policies were therefore identified by changes in outcomes occurring within countries that modified their maternity leave policies during the study period (treated countries) relative to corresponding changes in outcomes in countries that did not modify their policies during the study period (control countries).

In the first model, we estimated the effect of an additional month of paid maternity leave on infant, neonatal, and post-neonatal mortality after including country and year fixed effects (Model 1). In the second model, we additionally controlled for measured individual, household, and country-level characteristics, including the lagged wage replacement rate, natural log per capita GDP, and female labor force participation (Model 2). In the third model, we included controls for natural log per capita total and government health expenditures (Model 3); these data were unavailable for all years for Zimbabwe, and observations from Zimbabwe were therefore dropped from Model 3 analyses. In order to examine potential nonlinearity in the effect of paid maternity leave, we introduced a quadratic duration-of-paid-leave variable into our fully adjusted model (Model 3). We also estimated the fully adjusted model on the risk ratio (RR) scale. All analyses incorporated respondent-level sampling weights to account for individual survey sample designs. Per DHS guidelines, we used information on the number of women aged 15–49 y in each survey-year, provided by the Population Division of the United Nations [35], and applied the de-normalization of standard weights approach described in the *DHS Sampling and Household Listing Manual* [36], in order to calculate an appropriate weight for each observation in the analyses. All models incorporated robust standard errors to account for clustering at the country level [37].

Sensitivity Analyses

We conducted sensitivity analyses to assess the robustness of our main findings. First, because there is no standard metric for maternity leave policies, we measured the effects of paid leave in