more effectively. Data from the MACHEquity research program showed that one-quarter of the Countdown countries provided less than 12 wk of paid maternity leave in 2012 (median = 12.9 wk). Our findings suggest that social interventions, in addition to health policy interventions [53], warrant further discussion in the post-2015 development agenda. More generous paid maternity leave policies represent a potential instrument for facilitating early-life interventions and reducing infant mortality in LMICs.

There were limitations to our study. First, as in any non-experimental study, there is the potential for unmeasured confounding. However, we controlled for potential confounding by individual, household, and country-level characteristics. We also included fixed effects for country and year to account for unobserved time-invariant confounders that vary across countries and any temporal trends in mortality that are shared across countries, respectively. Therefore, any unmeasured confounders that would remain to bias our estimates would have to coincide with policy changes occurring within treated countries and also influence mortality, which markedly reduces the list of potential unobserved confounders. However, the adoption of several policies, including paid leave policies, simultaneously would conflate effects and potentially bias our results. Second, the determination of our outcomes, neonatal and infant mortality, depends on maternal recall, and mothers may underreport the births and deaths of children who are not alive at the time of the interview. Such underreporting would bias our estimates only if it were different between our treatment and control countries. Third, our measure of paid maternity leave is calculated based on legislated maternity leave and does not account for other leave (i.e., parental leave) that might also be available to mothers. Fourth, in order to model the longitudinal effect of maternity leave policies on neonatal and infant mortality, we limited our analyses to 20 selected LMICs with at least two DHS surveys between 2001 and 2011; the inclusion of sampling weights allows us to generalize our results to these 20 countries, but not to all LMICs.

Caveats considered, our analyses suggest that an additional month of paid maternity leave is associated with as much as a 13% reduction in infant mortality in LMICs. From a policy planning perspective, further work is needed to elucidate the mechanisms that explain the beneficial effects of paid maternity leave on infant mortality and to evaluate the optimal balance of leave from employment prior to and following delivery, as well as varying levels of compensation. Further work is also needed to document the effects of paid maternity leave on women's labor force participation, health, and well-being in LMICs.

Supporting Information

S1 Fig. Trends in the duration of paid maternity leave for individual treated and aggregated control countries, 2000–2008.
(TIF)

S2 Fig. Predicted probabilities, with 95% confidence intervals, of infant, neonatal, and post-neonatal death at different durations of paid maternity leave. Top: infant; middle: neonatal; bottom: post-neonatal.
(TIF)

S3 Fig. Trends in infant, neonatal, and post-neonatal deaths per 1,000 live births among all treated and control countries. Top: infant; middle: neonatal; bottom: post-neonatal.
(TIF)

S4 Fig. Trends in infant and neonatal deaths per 1,000 live births among treated and control countries, after restricting to control countries with similar trends. Top: infant; bottom: