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. The policy data, as well as the statistical code for producing the analytic dataset and replicating our results (given DHS data that must be downloaded from the DHS program), are also available with unrestricted access from the corresponding author's Dataverse: https://dataverse.harvard.edu/dataverse/harvard.

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Abbreviations: DHS, Demographic and Health Surveys; FTE, full-time equivalent; GDP, gross domestic product; LMICs, low- and middle-income countries; MACHEquity, Maternal and Child Health Equity; PPP, purchasing power parity; RR, risk ratio; SD, standard deviation; SES, socioeconomic status.

Conclusions

More generous paid maternity leave policies represent a potential instrument for facilitating early-life interventions and reducing infant mortality in LMICs and warrant further discussion in the post-2015 sustainable development agenda. From a policy planning perspective, further work is needed to elucidate the mechanisms that explain the benefits of paid maternity leave for infant mortality.

Introduction

Paid leave for new parents, often specifically designated for new mothers, is a standard social benefit in most of the world. Over 180 countries have enacted legislation granting paid leave from employment in connection with the birth of a child, either in the form of maternity leave or gender-neutral parental leave [1].

Paid maternity and parental leave policies are consistently associated with improvements in child health in high-income countries [1–5]. For example, Ruhm found that increases in weeks of paid leave were associated with lower infant mortality in 16 European countries, although effects on perinatal and neonatal mortality were more modest [3]. Similarly, Tanaka showed that increases in paid parental leave were associated with decreases in perinatal, neonatal, post-neonatal, infant, and child mortality in a sample of 18 Organisation for Economic Co-operation and Development countries [4]. Recent work also showed that unpaid maternal leave provided through the Family and Medical Leave Act of 1993 in the United States was associated with decreases in neonatal, post-neonatal, and infant mortality, but only among women who were married and had graduated from college, suggesting that women of lower socioeconomic position may have been unable to take unpaid leave [5].

Paid maternity leave may affect neonatal and infant mortality through several mechanisms. First, paid maternity leave may increase access to pre- and postnatal health services. Some maternity leave policies allow for a short period of leave to be taken immediately prior to birth, which might increase receipt of third-trimester prenatal care. In the postnatal period, mothers able to take leave from employment may have more time to care for an ill child and seek medical care when necessary. Second, policies that provide income and ensure job protection during maternity leave may benefit women economically, reduce stress in the prenatal period, and improve maternal health after birth [6–8]; these factors might reduce adverse birth outcomes, including preterm birth and low birth weight [9–11]. Third, paid maternity leave might facilitate preventive care; for example, women able to take leave from employment are more likely to initiate breastfeeding and to continue breastfeeding for longer durations [12–15]. Paid maternity leave may also improve adherence to childhood vaccination schedules [16–18]. These mechanisms may interact synergistically; for example, increased income may be associated with more access to resources to support healthy behaviors and child-rearing practices [19,20].

Extant evaluations of paid maternity leave policies have been conducted almost exclusively in high-income countries. Whether these results can be generalized to lower-income contexts is unclear, given differences in the nature of non-parental child-care options as well as in women's participation in the formal economy. In this study, we provide the first evaluation, to our knowledge, of whether paid maternity leave policies affect infant (<1 y), neonatal (<28 d), and post-neonatal (between 28 d and 1 y after birth) mortality in low- and middle-income countries (LMICs). We constructed a database of maternity leave policies for LMICs over time,