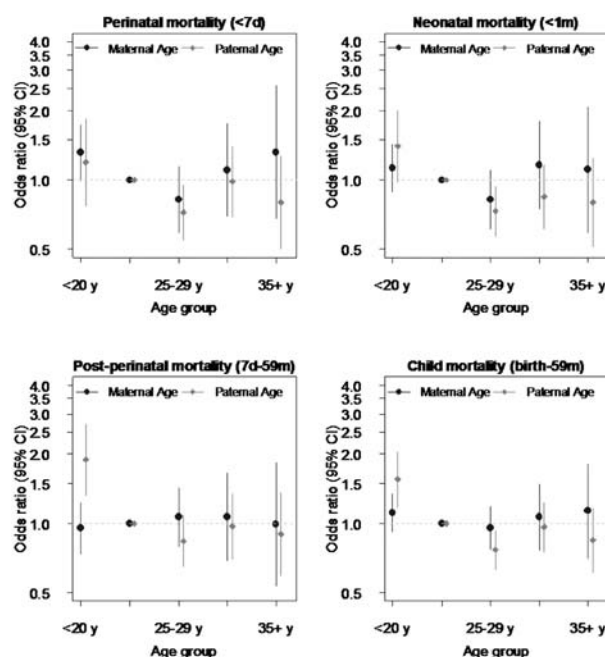
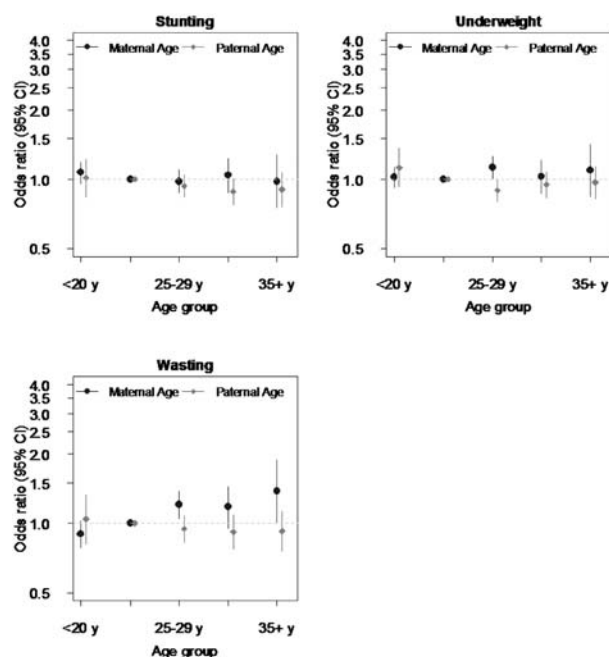


## (a) Mortality



## (b) Anthropometric Failure



**Web Fig. 1** Associations between maternal and paternal age at child birth with (a) perinatal mortality (<7 d), neonatal mortality (<1 mo), post-perinatal mortality (7 d-59 mo) and child mortality (birth-59 mo); and (b) stunting (<-2 SD for length/height-for-age), underweight (<-2 SD for weight-for-age), and wasting (<-2 SD for weight-for-height); National Family Health Survey, India 2005-2006.

Models adjusted for child age and sex, household wealth index, maternal and paternal education, place of delivery.

Author's calculations from 3<sup>rd</sup> National Family Health Survey (NFHS), 2005-2006 (India) [16]. NFHS is a multistage stratified national sample survey conducted in all the 29 states of India. We selected a sample of children born within 10 years of the date of interview to women aged 15 to 49 years using the birth history (or 'BR' file) and whose fathers participated (NFHS interviewed a random sample of husbands/partners of selected women in most states and in some states all men were invited). In total 109,999 births were identified although for 59,751 births, fathers were not interviewed by design leaving a sample of 50,248 births available with maternal and paternal ages available. In total, 3,499 child deaths were captured (1,486 in the perinatal period (<7d), 427 in the later perinatal period (7d to <1m) and 1,586 from 1-59m). We defined outcome categories for mortality as perinatal mortality (<7d), post-perinatal mortality (7d-59m), child mortality (birth-59m), and neonatal mortality (<1m). Secondary analyses also examined anthropometric data which was available on children alive, aged <59m at the time of survey, and who participated in the anthropometric measurements for height-for-age (n=19,452), weight-for-age (n=20,068), and weight-for-height (n=19,299). Raw anthropometric data was converted into age and sex-specific SD units (z-scores) using the WHO child growth standards. We defined dichotomous outcomes based on a defined cut-point of less than -2 SD for each anthropometric measure to capture stunting (low height-for-age), underweight (low weight-for-age) and wasting (low weight-for-height), collectively referred to as anthropometric failure. We specified logistic regression models to assess the mutually adjusted association between maternal and paternal age with child mortality and anthropometric failure. We used parental age categories as specified by Sinha and colleagues (<20 y, 20-24 y [reference], 25-29 y, 30-34 y, and ≥35 y) and included covariates child age and sex, household wealth index, categories of maternal and paternal education based on years of schooling (no education, primary [1-5y], secondary [6-10y], higher secondary [11-12y], and college [>12y]), place of delivery (home vs. health facility). Household wealth was defined by an index of household asset ownership indicators. The household population was divided along this index into fifths from poorest to richest. All models took account of the multi-stage cluster survey sampling design using sampling weights and survey regression procedures as implemented in Stata (version 13.1/SE).