

Small vulnerable newborns and the transgenerational cycle of health and development

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Small vulnerable newborns, those born preterm or small for gestational age, stand for 80% of neonatal deaths and are thus crucial to attain the sustainable development target of ending preventable deaths in children. Those who survive often have lifelong health problems that may extend to the vicious cycle of also the next generation having small vulnerable newborns. Our overarching aim is to study this transgenerational vicious cycle by following up women who were born preterm or small for gestational age themselves until they give birth and to study their reproductive outcomes and their children's health and development. We will pursue this aim in two unique longitudinal

cohorts, both with detailed phenotypes including accurately measured gestational age: the Maternal and Infant Nutritional Interventions in Matlab (MINIMat; born 2002-04) study in rural Bangladesh, and Lungwena Antenatal Intervention Study (LAIS; born 2004-07) in rural Malawi. We interact closely with stakeholders ranging from policymakers to operative healthcare actors and local communities.of infectious disease outbreaks, the time to act is now.



Main publications:

(other publications of our Finnish team)

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Heikkilä K, Metsälä J, Pulakka A, Nilsen SM, Kivimäki M, Risnes K, Kajantie E., Preterm birth and the risk of multimorbidity in adolescence: a multiregister-based cohort study., *Lancet Public Health.* 2023 Sep;8(9):e680-e690.

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