

Family planning and children's development in urban Malawi (2016-2018)

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In Malawi, in a trial carried out between 2016 and 2018, children grew taller and exhibited more rapid cognitive development when their mothers' access to family planning and reproductive health services improved. Daniel Maggio, Mahesh Karra, and David Canning conclude that the benefits of family planning investments extend beyond the direct recipients.

Unplanned pregnancies and children's growth

Each year, roughly 14 million unintended pregnancies occur in Sub-Saharan Africa (Guttmacher Institute 2022). For those carried to term, women and couples are left to care for a child that was unplanned, and that they may be unprepared or unwilling to raise.

They will also raise these children in a setting that faces a large human capital deficit. Sub-Saharan Africa ranks last in the World Bank's [Human Capital Index](#) - a composite index of health and education indicators. This deficit is partially due to shortfalls in national education systems - a child born in Sub-Saharan Africa can be expected to attend eight years of formal schooling, compared with more than ten years in all other regions of the world. But exposure to this deficit also begins before children enter school, as the region also has the world's highest childhood stunting rate.

Although the causes of childhood stunting are multi-dimensional, many suspect that the high rate of unintended pregnancies in the region contributes to the growth faltering of its children. Raising a child is costly, and the arrival of an unplanned child may oblige couples to look for new sources of income or divert resources away from other children, potentially leaving them worse off. With this in mind, it may be reasonable to expect that efforts to improve women's and couples' control of their fertility - a worthwhile goal in its own right - may also improve children's health and, by extension, their human capital attainment.

Family planning and the demographic dividend

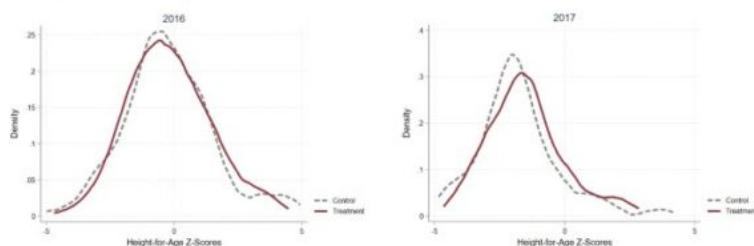
The high number of unintended pregnancies in Africa is partly a result of poor access to family planning and reproductive health (FP/RH) services throughout the region. Despite [recent advances](#), contraceptive use in Sub-Saharan Africa (33%) is still less than half as prevalent as in South Asia, and less than a third as prevalent as in East Asia. These disparities have motivated the establishment of a global partnership, FP2030, to steer the billions of dollars governments allocate each year toward achieving the Sustainable Development Goal of universal access to sexual and reproductive health services.

Governments allocate these funds partially because many in academia and international development view high fertility as a barrier to economic development. Guided by the idea of a “demographic dividend” - the concept that as couples reduce their fertility, they can work more and better care for their children, thereby spurring economic growth - these governments hope that their investments in FP/RH will help communities leverage the potential benefits of a demographic transition.

Although popular in both academic and policy circles, the evidence underlying the demographic dividend to date has primarily come from country-level studies and focuses heavily on the growth of the “Asian Tigers” throughout the latter half of the 20th century. However, in a new study we strengthen the case with evidence from a separate context (Maggio, Karra and Canning 2024). We used data from a trial carried out between November 2016 and November 2018 that provided pregnant and postpartum women in Lilongwe, Malawi with comprehensive access to FP/RH services, including counseling, free transportation to care, and coverage of costs, to show that children grow taller and cognitively perform better if their mother has improved access to services. These findings build on an earlier study of this trial that showed that women with improved access to services were more likely to use contraception and were less likely to become pregnant within two years of their previous birth (the WHO’s recommendation for healthy inter-pregnancy intervals).

In studying the effects of the intervention on children born just before the start of the trial, we also show that at roughly one and a half years old, these children were 0.33 standard deviations taller for their biological sex and age than their peers whose mothers did not receive this package of services. This growth is associated with a 12 percentage-point decrease in childhood stunting, although, for reasons discussed in the paper, this may be an overestimate of the true effect. At roughly two and a half years old, these children also perform 0.23 standard deviations better on a caregiver-reported measure of cognitive development.

Figure 1: Distributions of children’s heights at baseline and one year into trial (Lilongwe, Malawi, 2016 and 2017)



Source: Maggio, Karra and Canning (2024).

While the trial only focused on a two-year follow-up period, and these children were still too young to go to school, the finding that children develop better cognitively as a result of their mother's access to reproductive healthcare supports the idea of a demographic dividend. If children who develop faster are more likely to complete school and attain skills, it seems reasonable to assume that access to family planning services could lead to higher human capital attainment and a more skilled labor force in the long run.

Perhaps birth timing rather than birth parity

One may think that the main driving force behind the observed changes is a shift in family size. Indeed, a large body of academic work on the "quality-quantity" tradeoff suggests that parents, to some extent, choose between the number of children they have and how they invest in those children. However, caution is needed here, as women in this study repeatedly reported wanting to use contraceptive methods to space births according to their desired timeline, rather than wanting to limit their overall number of children. Even though the study results are driven by increases in post-natal care and a reduction in the chances that a child has a younger sibling within two years of age, the short observation window means that these findings could simply be the result of a shift in birth timing rather than a trend towards lower completed fertility. This may suggest that communities can realize the economic benefits of family planning without experiencing a fertility transition and a reduction in family size.

References

Guttmacher Institute (2022) [Unintended pregnancy and abortion worldwide](#)

Maggio D., Karra M., Canning D. (2024) [Family Planning and Children's Human Capital: Experimental Evidence From Urban Malawi](#), *Demography*.