

United Nations
Department of Economic and Social Affairs

Population Division

Expert Paper
No. 2013/2

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Policy Lessons**

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United Nations New York, 2013

NOTE

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PREFACE

The Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat organized an Expert Group Meeting on “Fertility, Changing Population Trends and Development: Challenges and Opportunities for the Future” at the United Nations Headquarters in New York on 21 and 22 October 2013. The meeting was convened to inform substantive preparations for the forty-seventh session of the Commission on Population and Development in April 2014. In light of the twentieth anniversary of the 1994 International Conference on Population and Development (ICPD), the Commission’s theme for 2014 is an “Assessment of the status of implementation of the Programme of Action of the International Conference on Population and Development”.

The meeting brought together experts from different regions of the world to address key questions about the future pace of fertility change, implications for age structure changes and other population trends and effective policy responses. A selection of the papers prepared by experts participating in the meeting is being issued under the Expert Paper Series published on the website of the Population Division (www.unpopulation.org).

This paper describes the relationship between women’s empowerment and fertility, drawing on research evidence and policy examples that have relevance for high-fertility settings. Natural experiments using policy-induced variation in access to contraceptives show that expanding access to contraception is of greatest benefit to poor, uneducated women, helping them avoid unplanned births. Greater control over childbearing also helps young women delay their first birth, increasing their schooling and job prospects. Moreover, planned children and children with fewer siblings have higher levels of human capital, improving their life-chances and helping break the intergenerational cycle of poverty. The paper discusses ways that low empowerment undermines women’s ability to shape their family size and the timing of childbearing via low decision-making power in the household, limitations on mobility outside the household and exposure to early childbearing. Concrete suggestions are provided on how family planning programmes can help reduce the constraints that women face in being able to have control over their childbearing.

The Expert Paper series aims at providing access to government officials, the research community, non-governmental organizations, international organizations and the general public to overviews by experts on key demographic issues. The papers included in the series will mainly be those presented at Expert Group Meetings organized by the Population Division on the different areas of its competence, including fertility, mortality, migration, urbanization and population distribution, population estimates and projections, population and development, and population policy.

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A. INTRODUCTION

Women's empowerment is a complex multi-faceted issue, deeply intertwined with societal norms and intra-household dynamics. Policies and programmes to empower women and increase gender equality encompass a wide range of interventions designed to help women be independent actors in the economy, polity, and society. For example, legal changes can empower women by enabling them to inherit and own property, access credit, and reduce barriers to their participation in the labour force. Other legal changes can enable them to vote and increase their representation in political positions. Other policies seek to increase overall levels of education for both men and women, while ensuring that women are not left behind. Such efforts to empower women can require substantial resources and implementation capacity. While these multi-pronged efforts have implications for fertility outcomes, they are beyond the scope of this short paper.

More direct efforts to influence fertility behaviour address gender equality in more specific ways. In low-fertility settings, many countries have policies that seek to raise fertility by offering various incentives, some of which make for greater gender equality. This includes policies that offer childcare, maternal leave, and other incentives that reduce the likelihood that childbearing will cost women in terms of career prospects and lower lifetime earnings.

In high fertility settings, many countries in the developing world have had policies that seek to lower fertility. The key policy tool is family planning programmes, which in their basic form increase access to contraception and encourage the use of contraception. This focus on supply and demand issues is not necessarily explicitly intended to empower women. However, the very fact of having access to contraception and being able to make informed choices about it is an enormous step forward in increasing women's control over their lives. It also enables them to obtain more schooling and earning capacity.

This paper focuses on high fertility settings. Section B discusses the evidence on how greater control over childbearing helps women gain control over their lives, and empowers them along several dimensions. "Natural experiments" using policy-induced variation in access to contraceptives in both developed and developing countries find that expanding access to contraception is highly pro-poor. It is of greatest benefit to poor, uneducated women, helping them avoid unplanned births. It helps young women delay their first birth, increasing their schooling and job prospects. Moreover, planned children and those with fewer siblings have higher levels of human capital, improving their life-chances and helping break the intergenerational cycle of poverty. Section C discusses some of the ways in which low empowerment can undermine women's ability to shape their family size and the timing of childbearing—that is, low decision-making power in the household; limitations on mobility outside the household; and exposure to early childbearing—and the ways in which family planning programmes can respond to reduce these constraints facing women. Section D concludes.

B. HOW DOES GREATER CONTROL OVER FERTILITY ENHANCE WOMEN'S EMPOWERMENT AND GENDER EQUALITY?

Studies show that greater control over the timing of childbearing and number of births empowers women in many ways, including economically. Moreover, these gains manifest themselves quickly, unlike the broader efforts to empower women through legal and other changes.

1. *Greater control over fertility increases female labour-force participation and earnings*

Childbearing can take a toll on women's labour-force participation, productivity, and lifetime earnings, reducing their financial independence. Studies in the developing world indicate that childbearing reduces women's participation in the labour force (Adair et al., 2002). In the developed world, studies find that this is especially the case amongst women who are less educated and those who begin childbearing early. A bivariate analysis of data from the United Kingdom found that a woman with no qualifications and two children has half the total lifetime earnings of her childless counterpart, and a mother of four has less than a fifth of the total earnings of a childless woman (Matheson and Summerfield, 2001). A rigorous analysis of data from the United States found that the negative effect of family size on women's labour-force participation is strongest amongst poorer and less educated women (Angrist and Evans, 1998).

Especially important for women's labour force outcomes is delaying age at entry into motherhood, which helps increase schooling and future earnings. Female education has been associated with lower fertility by raising the age at first birth in settings as varied as Guatemala, Indonesia and Nigeria (Behrman et al., 2006; Breierova and Duflo, 2004; Osili and Long, 2008). Lower fertility has also been found to be associated with higher earnings and employment.

Giving young women access to family planning has the greatest impact on women's schooling and lifetime earnings. Miller (2010) evaluated Colombia's family planning programme, exploiting differences in timing of the introduction of the family planning programme to estimate the impact of contraceptive availability on fertility. He found that young women who were given access to family planning obtained more schooling and were more likely to work in the formal sector. Women who start childbearing early, especially during adolescence, pay the highest wage penalty for childbearing. This was found in studies in four Latin American countries (Buvinic, 1998) and in the United States (Taniguchi, 1999).

Turning to the developed world, analyses of natural experiments in Sweden and the United States found significant female labour supply responses to differences in the provision of the birth control pill—access to the pill allowed women to delay marriage and invest in careers. Bailey (2006) found that in the United States, access to the pill before the age of 21 reduced the likelihood of being a mother before age 22 by 14 to 18 per cent, and increased later employment between the ages of 26 and 30 by 8 per cent. Analyzing data from Sweden, Ragan (2012a, 2012b) found that access to the pill was associated with a sharp decline in teenage motherhood in Sweden, and increased women's labour supply and earnings.

A study in the United States found that this holds even among women who are college graduates, having overcome all the hurdles of getting to that point (Goldin and Katz, 2002). The authors exploited cross-state and cross-cohort variation in pill availability to young, unmarried women college graduates, and found that their use of the pill raised their age at first marriage and increased their probability of undertaking long-duration professional training that qualified them for higher-paying jobs.

2. *Access to contraception especially empowers the most disadvantaged women*

Poor and otherwise disadvantaged women benefit the most from lowering the physical and financial barriers to accessing contraceptive supplies. Poorer women typically report higher unmet need for family planning in the Demographic and Health Surveys. They also have higher numbers of unwanted children than the rich except in settings with very effective programmes, such as Indonesia (figure I).

Analyses of natural experiments from very different settings examine the impact of variation in access to contraceptives, and these indicate that facilitating access to contraception is highly pro-poor. Two studies examined the impact of shifts in the application of the United States' "gag rule" (Mexico

City Policy) that restricts foreign aid for family planning to any organization that may provide abortions using other funds. Jones (2011) estimated that the policy was associated with a 12 per cent increase in pregnancies amongst rural women in Ghana, increasing both abortions and unintended births. The unintended births were concentrated among the poorest and least educated women. Bendavid et al. (2011) found that after the Mexico City Policy was reinstated in 2001, abortion rates rose in sub-Saharan African countries that receive high levels of foreign assistance from the United States for family planning and reproductive health. Salas (2013) found that policy-related disruptions in the public supply of free contraceptives in the Philippines was associated with elevated birth rates, especially among poor, less educated, and rural women.

Similar findings emerge from the analyses of natural experiments in the United States. Kearney and Levine (2009) examined the impact of state-level Medicaid policy changes in the United States that expanded eligibility for family planning services, and found that it reduced births, particularly for teenagers and those with lower educational attainment. Bailey (2012) estimated that that federally-funded family planning in the United States reduced childbearing among poor women by 19 to 30 per cent between 1964 and 1973.

3. Lower fertility helps improve women's health

Lower fertility is associated with improvements in maternal health, by reducing the number of times women are exposed to the odds of dying in childbirth. Women pay a high price for high fertility in terms of maternal mortality, which is a major cause of death for young women in high fertility settings (World Health Organization, 2011). Moreover, women's mortality risk remains elevated for long after childbirth: a study in Bangladesh found that it is nearly twice as high as normal for up to two years after childbirth (Menken et al., 2003). This is further complicated for the poor by the fact that they have less access to quality care during pregnancy and childbirth (Magadi et al., 2000; Bloom et al., 2001).

That fertility reduction can help improve women's health is suggested by figure II, which shows how much female adult mortality improved (relative to male) in India concurrently with fertility decline—from total fertility of 5.2 births per woman in 1972 to 2.6 births per woman in 2008-2010. The comparison with men provides a rough control for overall health improvements. In the early 1970s, female mortality plummeted relative to males in the early childbearing years, picking up gradually over the life cycle. Successive observations through 2006-2010 show adult women's mortality improving sharply relative to men. The improvement was sharpest at ages 15 to 44, that is, during the peak reproductive years and for a few years beyond, which is suggestive of reductions not only in maternal mortality but also in lagged mortality arising from maternal depletion and maternal morbidity from repeated childbearing. Improved maternal health care is another major factor underlying this shift, but the big donor thrust towards this was from the mid-1990s.

Precise estimates of the impact of contraceptive use on maternal mortality are difficult to derive, but in a careful analysis Ahmed and others (2012) estimated that contraceptive use helped avert 44 per cent of potential maternal deaths worldwide in 2008. They concluded that satisfying the unmet need for contraception could reduce maternal deaths by another 29 per cent per year.

4. Lower fertility and birth planning enhances children's life chances

Studies indicate that greater investments are made in planned children, and that children's life chances are enhanced when their mothers have more control over birth timing. Jones (2011) found that unintended children in Ghana were more likely to be stunted than their siblings. Do and Phung (2010) use the fact that in Viet Nam, some years are considered especially auspicious to bear children, while others may be inauspicious. They found that larger cohorts of children are born in auspicious years, and that they

have higher schooling attainment. They conclude that this is because parents are more likely to invest in planned children.

Similar findings emerge from the developed world. Madestam and Simeonova (2013) looked at the effect of municipal-level variation in subsidized access to the pill in Sweden for the period 1989-1998. They found that improved access to the pill reduced the abortion rate and had substantial positive effects on the next generation's educational and socio-economic success. Using data from the American Community Surveys from 2005 to 2010, Rotz (2013) analyzed the impact of legalizing abortion in New York, the first state in the United States to do so. She found that after abortion was legalized, children were born into families with greater resources. This increased the eventual wages of black, Hispanic, and lower-wage workers, the children of the women who had been given greater control over the timing of their births.

Family size also affects investment in children. Micro-studies in India and China found that lower fertility is associated with better child health and schooling (Rosenzweig and Wolpin, 1980; Rosenzweig and Zhang, 2009). Joshi and Schultz (2013) found that lower fertility in Matlab, Bangladesh, was associated with improved child health. Miller (2010) found that in Colombia, households with lower fertility also showed improvements in schooling, health, and earnings. He concluded that family planning may be 'among the most effective (and cost-effective) interventions to foster human capital accumulation'.

Gender adds a further twist to this story of "resource dilution", since there is a preference for sons in several developing country settings. Filmer et al. (2009) found that parents are more likely to stop bearing children if they have a son, which means that girls tend to have more siblings. They found that this effect is strongest in South Asia, followed by Central Asia and the Middle East and North Africa. Their datasets did not include China, but this pattern is strong there (Choe and others, 1992). The findings from other studies of resource dilution suggest that less is invested in girls because they have more siblings on average, regardless of whether parents favour boys in the allocation of investments in children.

C. HOW DOES WOMEN'S EMPOWERMENT CONSTRAIN THEIR CONTROL OVER CHILDBEARING, AND HOW CAN FAMILY PLANNING PROGRAMMES MITIGATE THESE CONSTRAINTS?

In many societies, women's primary roles are perceived to be those of a wife and mother, and there are few paths for women to become independent actors, financially and otherwise. Even if they work, they are often not the primary breadwinner (Quisumbing and Maluccio, 2000). Women are disempowered in ways that constrain their ability to make their own reproductive choices. They are often not the prime decision-makers in the household, and in some settings their mobility and access to information may be constrained. Early marriage is viewed as appropriate for girls in many settings, especially if their parents are poor. Where women become sexually active at young ages, whether married or single, they are exposed to early childbearing, which limits their prospects for schooling and future earnings. These forms of disempowerment are discussed below, along with ways in which family planning policies can help address them to increase women's control over their own childbearing.

1. *Low decision-making power in the household*

In many developing societies, young women are not the primary decision-makers on key household matters, including childbearing. Their husband or partner may be the primary decision-maker on key matters. The limitations imposed on women can be sharper in societies where the mother-in-law and other

relatives of the husband also shape key decisions—acting as gate-keepers—whether or not the couple lives with them (Das Gupta, 1995; Bloom et al., 2001).

In settings where contraceptive use is not yet commonplace, this can constitute a major barrier to its use. Studies indicate that in such settings, women are more motivated than other decision-makers in their household and community to control childbearing. A study in Zambia found that women who were given contraceptive information and access without their husbands present were more likely to use contraception and less likely to give birth than a control group of women accompanied by their husbands (Ashraf et al., 2012).

High levels of covert use amongst women using contraceptives were found in studies conducted in urban Zambia and Bolivia in 1996-1997 (Biddlecom and Fapohunda, 1998; McCarraher et al., 2005). However, this is not always easy: in Bolivia, women who used the pill covertly were 21 times more likely to have experienced method-related partner violence than women whose partners knew of their pill use (McCarraher et al., 2005). Interestingly, the study in urban Zambia found that women's covert use was attributable not to husband's pronatalism but to difficulties in spousal communication about contraception (Biddlecom and Fapohunda, 1998). It also noted that covert use was more widespread when contraceptive prevalence was low.

Analyzing data from a 1993 survey in the Philippines, Biddlecom et al. (1997) found that spousal agreement over approval of contraception was associated with higher levels of contraceptive use and intention to use them in the future. Spousal communication can be enhanced through simple measures. In Malawi, a peer-delivered educational intervention in 2008 significantly increased contraceptive use through increased ease and frequency of communication within couples (Shattuck et al., 2011).

The presence of in-laws can also shape a woman's use of contraception. A study in urban slums in Pakistan found that mothers-in-law influenced contraceptive decision-making (Fikree et al., 2001). In Mali, ever-use of contraceptives was strongly negatively associated with the presence of the husband's kin in a woman's network, while the reverse was the case when the mother and natal kin were in her network (Madhavan et al., 2003). Ever-use was also strongly positively associated with an increased proportion of network members located outside the village, indicating an effect of exposure to new ideas.

Obstacles to women's use of contraception arising from poor spousal communication or disapproval by husbands and mothers-in-law can be overcome through communication outreach at the community level and the mass media. This has the advantage of reaching everyone in a community, helping change social norms by helping everyone understand the benefits of postponing the first birth and having fewer children in the changed circumstances and economic opportunities facing people today. Communication outreach can illustrate how people can improve their living standards through new strategies for bearing and investing in children. More complex messages can be communicated through radio or television, such as soap operas that portray the lives of people with small families and how they access new opportunities.

Such communication outreach is powerful at changing norms and behaviours. In Brazil, a study analyzing the pathways through which maternal education affects child health found that most of the correlation between maternal education and child height could be explained by mothers' radio listening and television watching (Thomas, Strauss, and Henriques, 1990).

Media outreach has been found effective at increasing contraceptive use and lowering fertility. This has been found in many studies using cross-sectional survey data on access to media (e.g. Bhat, 1996). Quasi-randomized evaluations have found significant effects: reducing fertility and increasing

contraceptive use in Tanzania (Rogers et al., 1999) and reducing fertility in Brazil and India (La Ferrara et al., 2012; Jensen and Oster, 2009).

To motivate their evaluation of the impact of Brazilian soap operas on fertility, La Ferrara et al. (2012) report the results of an experimental focus group discussion in which adult women of middle and lower class backgrounds were asked to portray the families that are more frequently displayed on television, and those of common people. “The results were clear: television families are small, rich and happy; the families portrayed as common people are poor, contain more children and the faces reveal unhappiness....constant exposure to smaller, less burdened television families, may have created a preference for fewer children and greater sensitivity to the opportunity costs of raising children.”

This is exactly the approach used in many countries, such as India and the Republic of Korea. Their family planning programmes surrounded people with messages on the benefits of small families. Billboards conveyed images of glowing parents with one or two flourishing children, sometimes juxtaposed with images of overwhelmed parents surrounded by many children living in much poorer conditions. Short jingles on the radio and television reinforced the message that “a small family is a happy family”. Such media blitzes are especially important in settings where contraceptive use is not yet commonplace. By reaching entire communities, they help change social norms and reduce barriers to use. This also helps empower women to use contraception.

2. Limitations on mobility outside the household

In some settings, women’s mobility is a constraint. When compounded by low literacy, this limits women’s access to information (except through mass media that reaches their homes) and ability to interpret information. Pending social changes that reduce such restrictions, the difficulties women face in accessing reproductive health services can be reduced by doorstep delivery of services.

The Matlab programme in Bangladesh had community workers provide regular doorstep delivery of family planning and maternal and child health programme inputs to women in half the villages studied for the period 1974-1996, while the other half received regular government programme inputs. The first set of villages showed more rapid fertility decline after the programme began, and maintained lower fertility (Joshi and Schultz, 2013). This difference is especially striking given that fertility was falling rapidly across the country. Sinha (2005) found that 18 years after the programme began, the doorstep delivery intervention accounted for a 14 per cent decline in lifetime fertility (0.6 fewer births per woman) compared with women in the second set of villages. If sustained over time, this can considerably reduce the momentum of population growth, as illustrated differences of plus or minus 0.5 births per woman in the United Nations high and low projection variants compared with the medium projection variant (United Nations, 2013).

Restrictions on women’s mobility are noted in studies in many parts of South Asia but seem to be especially acute in rural Pakistan (Dyson and Moore, 1983; Das Gupta, 1995; Schuler, Hashemi, and Riley 1997; Khan, 1998; Mumtaz and Salway, 2005; Sathar and Kazi, 1997). In a 2000-2001 survey in rural Pakistan, 62 per cent of women reported that they cannot go to a health facility alone even if it is less than an hour away, and this rises to 82 per cent of respondents if the facility is further away (World Bank, 2005). The majority of women reported the need for permission, typically from a male household member, to visit a health facility. In qualitative interviews, women reported that they had to be accompanied by the husband or mother-in-law.

To help overcome these constraints, the Pakistan government initiated the Lady Health Worker (LHW) programme to bring reproductive health services to people’s doorsteps in rural and poor urban areas. LHWs are residents of the communities they work in, and work out of their home, which makes it

easy for them to reach their clients. They are married women with at least eight years of schooling. Their status in the community was enhanced by the fact that their wages were initially set at a level comparable to that of primary school teachers, though their real wages have eroded over time.

The data indicate that the LHWs were effective at expanding use of contraception and immunization uptake, which were their primary duties. However, it needs to be borne in mind that LHWs are likely to be found in better developed areas, since the programme has to find educated women within the catchment area of a functioning health facility to support their work. The programme still does not reach the poorest areas because of difficulties finding women with the minimum educational requirements and the lack of functional health facilities in the underserved areas (Kazi et al., 2013). The report suggests that one solution is to contract NGOs, as they have greater flexibility to reach out to populations in difficult areas.

Illiteracy rates are high among women in rural Pakistan (as in much of South Asia), and this in conjunction with physical seclusion reduces exposure to information from the outside world. This problem is partly offset by sources of information within the home or the neighbourhood. For example, 40 per cent of rural women interviewed in Pakistan in 2000-2001 reported watching television and 36 per cent reported listening to the radio, and exposure to the mass media was associated with sharp increases in the use of contraception (World Bank, 2005). The messages received from these and other sources are further disseminated through informal social networks. International evidence from countries such as Bangladesh suggests that such social networks can be quite effective in aiding the flow of health-related information among women (Munshi and Myaux, 1998; Montgomery, Casterline, and Heiland, 2001).

3. Exposure to early childbearing

Another factor that limits women's decision-making power about childbearing is that they are exposed to childbearing when they are still adolescents. This can be due to a tradition of child marriage (marrying below age 18) or due to early initiation of sexual activity. This exposes them to early childbearing, limiting prospects of schooling and future earnings, and potentially also exposes them to a longer duration of childbearing.

Child marriage is widespread in the developing world. The United Nations Population Fund (2012) estimates that for the period 2000-2010, a third of women aged 20 to 24 years in developing regions were child brides, i.e. married before their eighteenth birthday. The highest rates were for South Asia (46 per cent) and sub-Saharan Africa (37 per cent), while in Latin America it was 29 per cent. The report also points out that child brides have limited access to and use of contraception.

The report notes sharp differentials in child marriage by socio-economic status. In developing countries overall, child marriage was three times higher for girls with no schooling than for those with some secondary schooling (63 versus 20 per cent); over three times higher for those from the lowest wealth quintile than amongst the highest wealth quintile (54 versus 16 per cent); and twice as high in rural areas as in urban areas (44 versus 22 per cent).

In South Asia, the greatest disparities are by wealth quintile: child marriage among girls in the poorest quintile was four times higher than in the richest quintile (72 versus 18 per cent). In sub-Saharan Africa, the largest disparities are by schooling: child marriage was five times higher among girls with no education than those with secondary school or above (66 versus 13 per cent).

Laws against child marriage have been in place for many decades in several countries, but the practice persists where communities (and local law-enforcers) believe the practice to be "normal". Efforts to change attitudes about child marriage have included community dialogue and information and

education outreach involving men as well as women, as well as mass media messages that reach entire communities. These spread the word about the dangers of child marriage, the alternative opportunities for young girls, and the rights of girls (Amin, 2011).

Part of the problem may be a lack of perceived alternative opportunities for girls. Studies in Tanzania and Zimbabwe found that orphaned girls become married or otherwise sexually active earlier than other children, especially if they come from poorer households (Beegle and Krutikova, 2007; Gregson et al., 2005).

Child marriage or early entry into sexual activity by single girls can reduce school attainment. Several countries have sought to incentivize families to keep their girls in school and/or postpone their marriage, through programmes offering loans, scholarships, subsidies and conditional cash transfers. In some settings these are incentives to keep girls in school, as with the female stipend programmes in Bangladesh and Pakistan. Elsewhere additional incentives have been offered if the girl remains unmarried at age 18, as in some Indian states (Sekher, 2010).

Conditional cash transfers (CCTs) have been tried. The Zomba Cash Transfer Program is a randomized intervention in Malawi offering school fees and an average of \$10 per month cash (conditional on satisfactory school attendance) to current schoolgirls and recent dropouts to stay in or return to school. Baird et al. (2010) evaluated the intervention after just one year after the programme began, and found that it led to significant declines in early marriage, teenage pregnancy, and self-reported sexual activity among programme beneficiaries. For programme beneficiaries who were out of school at baseline, the probability of getting married and becoming pregnant declined by more than 40 per cent and 30 per cent, respectively. In addition, the incidence of the onset of sexual activity was 38 per cent lower among all programme beneficiaries than the control group.

However, CCTs require quite high levels of institutional capacity to identify recipients and administer payments correctly. They are also expensive to sustain over time in poor countries, unlike middle-income countries such as Brazil or Mexico that have the financial and administrative capacity to run such programmes on a large scale. Moreover, while CCTs have been found to lead to large increases in school enrolment, particularly among those with low enrolment rates to begin with (World Bank, 2009), they appear to have little impact on learning, possibly due to selection issues (Filmer and Schady, 2009; Baez and Camacho, 2011). Expanding vocational training and employment opportunities for girls as well as their access to credit can also help empower women, and mitigate the economic pressures in favour of early marriage.

Programmes to boost female schooling and earning capacity have many benefits beyond empowering women to control their childbearing. However, as far as the latter objective is concerned, the simplest approach is to make contraceptive information and supplies easily accessible to young women so that they can avoid unwanted pregnancies. The increasingly pervasive ownership of mobile phones, especially by young women, presents the opportunity to directly channel to them information, including on reproductive and health services. As discussed below, many studies in both the developing and developed world show that expanding young women's access to contraception is associated with higher levels of educational attainment, higher labour force participation, and higher earnings.

D. CONCLUSIONS

What can we expect for the future? Studies from both the developing and developed world show the same patterns clearly. First, delaying entry into childbearing sharply increases women's chances of being empowered, as it is associated with higher educational attainment, better prospects in the job

market, and higher lifetime earnings. Second, when women have access to greater control over their number of children and the timing of births, their children have higher levels of human capital, improving the life-chances of the next generation. Third, improved access to control over reproduction is highly pro-poor, benefitting most women at the lower end of the socio-economic spectrum.

Other studies focused on family size indicate that higher fertility reduces women's probability of labour-force participation and their lifetime earnings, and is associated with poorer health and schooling outcomes of their children.

Yet exposure to teen pregnancy is widely prevalent, through child marriage and in some settings also teen pregnancy among single adolescents, especially among the poorer and least educated girls. Also, the reported numbers of unwanted births are far higher among poorer women than richer women. Along with the findings of the studies in both developing and developed countries, this suggests that limited control over childbearing not only limits women's own empowerment, but also helps perpetuate poverty within the woman's household and in the next generation.

The prospects for perpetuating poverty are also increased by shrinking access to livelihoods in the regions where fertility levels remain high—in the least developed countries and in much of sub-Saharan Africa. Land availability is falling, job growth is slow compared to the increase in numbers entering working ages, and climate change adds to people's vulnerability to lower crop yields and natural disasters (Das Gupta, 2013). Lowering fertility would help mitigate people's vulnerability and poverty. And the experience of countries such as Bangladesh shows that family planning programmes can be highly effective even within a setting that is classified among the least developed countries.

Many kinds of policies and programmes can help empower women, and more broadly improve living standards. For example, subsidies and cash incentives have helped increase women's schooling. Efforts have been made to increase women's earning capacity. Legislation has been passed to prevent child marriage. Meanwhile, giving women more control over their childbearing can yield quick results in empowering them along several dimensions, and reducing poverty. This can be done through interventions such as:

- Mass media and community outreach, to reduce potential opposition by spouses or elders to women's use of contraception. In settings where contraceptive use has not become commonplace, such opposition can limit women's ability to decide on the number and spacing of their children.
- Community-based reproductive health service delivery, to make services accessible to women. Where mobility is a major constraint for women, doorstep delivery has been shown to work.
- Assure easy and uninterrupted access to low-cost contraception, so that women can avoid unwanted births. This is the most critical for poor women in developing countries, but has been shown to be very effective even in developed countries.
- Ensure that young women and adolescents have easy access to contraceptive information and supplies, so that they can avail of opportunities for schooling and work.

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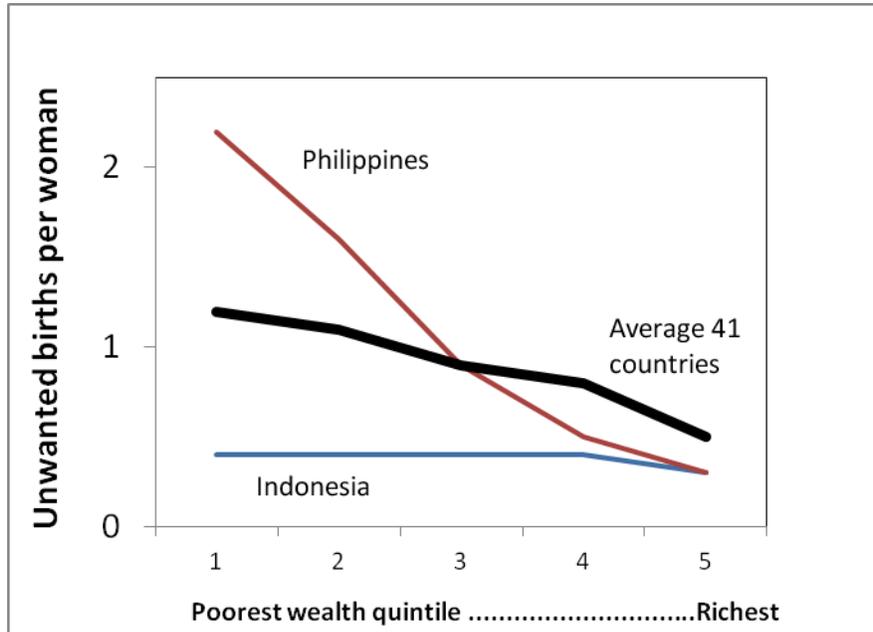
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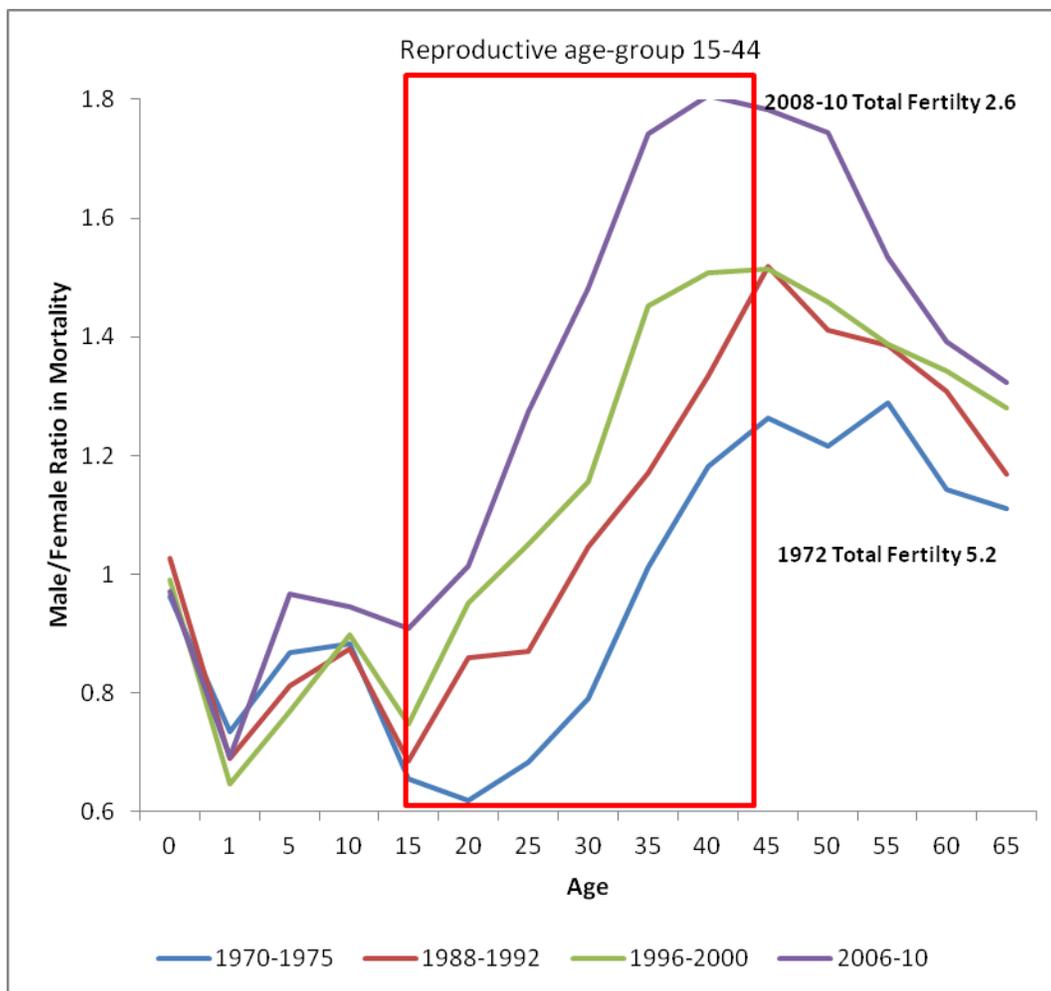
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Figure I. Unwanted fertility is higher among the poor, and effective family planning programmes can reduce this gap



Source: Gillespie et al. (2007): Table 1

Figure II. Fertility decline helps improve women's health
Women's mortality fell faster than men's especially during the reproductive years, India, 1972-2008



Sources: Mortality estimates from Government of India, Sample Registration Bulletin 16(1), June 1982, and Sample Registration Survey-Based Abridged Life Tables 1988-92, and 1996-2000, New Delhi: Registrar-General of India.

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