

# Policy Brief: Zambia

November 2015

Education Global Practice

Health, Nutrition, and  
Population Global Practice

## Beginning a Family and Adopting a Healthy Lifestyle: A Review of the Global Evidence

Corrina Moucheraud and Rifat Hasan

This policy brief presents program and policy approaches that have been implemented in different contexts to address two transitions—beginning a family and adopting a healthy lifestyle—that have long-term impacts on human development and thus on poverty alleviation and economic development. It also presents programmatic lessons and offers recommendations based on the global evidence.

### Beginning a Family

Various factors can affect the decision to begin a family either directly or indirectly. In the fertility literature, these factors are called proximate and distal determinants (Bongaarts 1978). Proximate determinants of fertility include marriage and sexual activity, contraceptive use, and postpartum infecundability (the result primarily of breastfeeding and postpartum abstinence), and distal factors include child mortality, mother's education, household wealth, urbanization, and religion. This section presents program and policy approaches that have been implemented in different contexts and shown to have an impact on two strong proximate determinants (family planning and age at marriage) and two key distal determinants (child health and mother's education) of fertility.

**Programs and policies that increase the use of family planning can do so through several approaches that improve**

**access to and generate demand for contraception by overcoming supply- and/or demand-side barriers.** These interventions have been found to be effective in increasing knowledge of family planning, increasing demand for birth spacing, decreasing desired family size, delaying childbirth, increasing use of modern contraception, and in some cases, reducing fertility. Increasing access to and generating demand for family planning also contribute to healthy sexual and reproductive lives of adolescents and better maternal and child health.

- **Community-based distribution of contraceptive supplies** has been one of the most successful ways to increase uptake of family planning. Community members are particularly effective at distributing contraceptive supplies and information to households. When a community-based distribution program was launched in the Matlab program in Bangladesh, there was not only an increase in the uptake of family planning but also improvements in maternal health, women's nutritional status, and pregnancy-related death and disability risks (Gribble and Voss 2009; Koenig and Keenan 2009).
- **Improving quality of family planning service provision** (including improved training of health workers and quality of counseling for patients) have also been effective in Nigeria (Farooq and Adeokun

1976) and Uganda (Ketende, Gupta, and Bessinger 2003). Some programs have targeted high-risk groups, including adolescents in Zambia (Mmari and Magnani 2003), postpartum women in Nepal (Bolam et al. 1998), and recent mothers in Mali (Population Services International 2012). A potentially effective way to reach adolescents is to ensure that services are youth-friendly—for example, training that teaches providers to be nonjudgmental and friendly, communications targeted to adolescents, and supportive community activities (Chandra-Mouli, Lane, and Wong 2015).

- **Programs that lower the financial burden of contraception for adolescents** have been effective, including vouchers for free care in Nicaragua (Meuwissen, Gorter, and Knottnerus 2006) and program-based education and free contraceptive supplies in Ethiopia (Edmeades, Hayes, and Gaynair 2014; Erulkar and Muthengi 2009).
- **Social and behavior change communication** can increase demand for family planning. Examples of strategies include large-scale media campaigns in Ethiopia (Farr et al. 2005), The Gambia (Valente et al. 1994), Tanzania (Rogers et al. 1999), and, specifically for youth, Cameroon (Plautz and Meekers 2007); community initiatives, which can include peer educators, community discussions, workshops for families, and involvement by local organizations including nongovernmental organizations and religious groups (Diop et al. 2004), in Zambia (Agha and Van Rossem 2004); and promotion of intra-household dialogue in Ethiopia (Terefe and Larson 1993) and Vietnam (Ha, Jayasuriya, and Owen 2005).
- **The most effective programs have combined supply- and demand-based strategies**, either through comprehensive programs and interventions or through national family planning programs. Efforts that have increased both access to and demand for contraception have performed better than programs that have focused on only one or the other (Debpur et al. 2002; Gribble and Voss 2009; Koenig et al. 1987; Molyneaux and Gertler 2000; Pitt, Rosengweig, and Gibbons 1993; Warwick 1986)—for example, in Bangladesh, Ghana (box 1), and Indonesia. Countries that have launched comprehensive national family planning programs with local distribution of contraceptives plus social and behavior

change campaigns, such as Bangladesh, the Islamic Republic of Iran, and Kenya, have seen steeper declines in fertility than their comparable neighbors (Bongaarts et al. 2012). Such comprehensive approaches require budgetary resources and political commitment, but they have had significant effects on contraceptive use as well as on overall fertility rates.

**Programs to delay marriage tackle complex normative and economic issues, usually by implementing multisectoral initiatives, including education and health, that involve families and community members.** Impact has been seen in changing the awareness, attitudes, and practice of early marriage in Ethiopia (box 2), Burkina Faso (Engelbrechtsen and Kabore 2011), and the Republic of Yemen (Freij 2008). These programs have taken a comprehensive community-based approach with the following elements:

- Pairing individual- and community-level interventions
- Strengthening social support systems (via mentoring or peer groups)
- Targeting both education and health
- Engaging families (formally or informally) and community and religious leaders.

Zambia's Adolescent Girls Empowerment Program includes group meetings with peer educators, health care vouchers, and girl-friendly savings accounts (results are not yet available).

There is little evidence about the impact of laws that seek to delay age at marriage (Cammack, Young, and Heaton 1996; Malhotra et al. 2011). This may be due to insufficient implementation and accountability mechanisms, lack of awareness of the legal framework, and slow-moving social norms and expectations.

**Programs that improve infant and child health can also affect childbearing behaviors through knowledge and use of family planning (especially delaying and spacing births) as well as through desired and realized family size.** These interventions have delivered vaccines, vitamin A, education about infant feeding, nutritional support, and treatment for respiratory infections and diarrhea. The following approaches have been taken to improving child health:

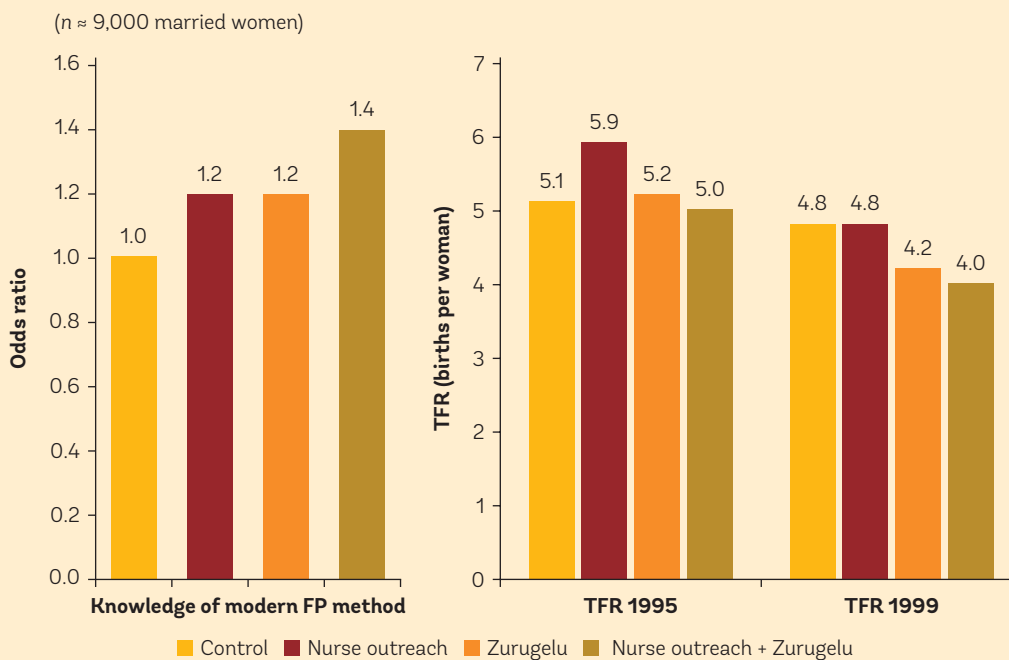
- Targeting postpartum women and peer groups for education about infant health care (Prost et al. 2013; Perry et al. 2015)

**Box 1. Combining Supply- and Demand-Side Interventions to Increase Knowledge of Family Planning and Decrease Fertility in Ghana**

The Navrongo Community Health and Family Planning Project in Ghana conducted an evaluation in which some communities received visits from a nurse, others received services from community volunteers (chosen by the community and trained by project staff), some received both of these supply- and demand-side components, and for others nothing changed. The project provided basic health care services, including some medicines and family planning supplies, as well as information about reproductive health and outreach to men.

The combined package resulted in the biggest increases in contraceptive use and the largest overall fertility effects (Debpuur et al. 2002), with 40 percent higher odds of having knowledge of modern family planning methods and a 15 percent greater decline in the number of births than in control communities. This decline represents a full 1 birth difference between those receiving the combined package and those in control communities.

**Ghana's Community-Based Efforts Show Fertility Decline**



- Integrating service delivery across the reproductive, maternal, newborn, and child health continuum, as in the Matlab program in Bangladesh (Gribble and Voss 2009; Koenig and Keenan 2009)
- Including child health and nutrition conditions for cash transfers, as in PROGRESA (Behrman and Hoddinott 2005) and Oportunidades (Gertler 2000) in Mexico and a recent program in Burkina Faso (Akresh, De Walque, and Kazianga 2013).

**Girls' education has a strong effect on fertility and family formation, as seen across countries and time.** Women who are more highly educated are likely to marry and begin childbearing at older ages, face a greater opportunity cost in child rearing,

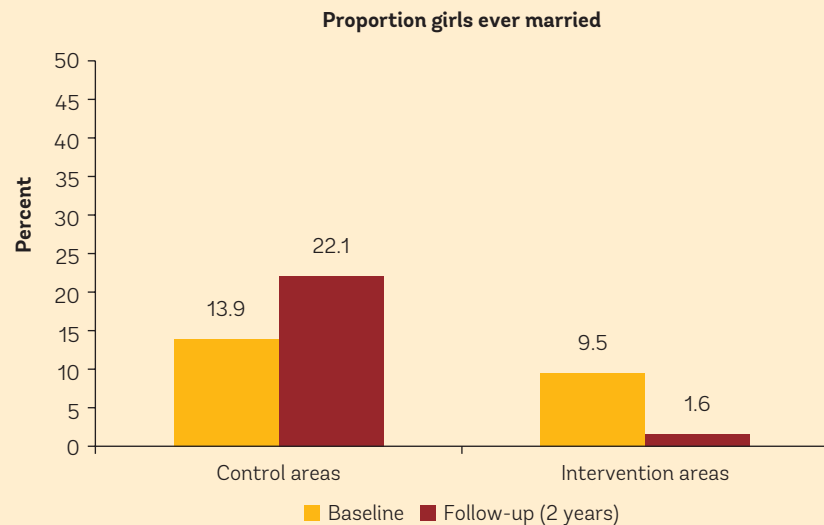
face a lower risk of child mortality, and have greater self-efficacy for use of contraceptive methods.

Different approaches to increase school attendance and attainment at both the primary and secondary level as well as to build skills for literacy and numeracy have been implemented globally. The impact on educational outcomes, age at marriage or sexual debut, and childbearing attitudes (ideal family size) and behaviors (number of children borne) have been measured and established. Approaches have included policy changes regarding primary schooling requirements, offsets of the cost of primary school education, financial incentives for secondary school attendance and achievement, and skills building for out-of-school girls.

## Box 2. Delaying Marriage Using a Comprehensive Community-Based Approach in Ethiopia

The Berhane Hewan program in Ethiopia incorporated both family planning and education alongside a community-based program that provided mentoring for girls, signed compacts with families to delay their daughters' marriages, and conducted community discussions about child marriage. Early results suggest that girls in the intervention group were 90 percent less likely to be married after the first two program years versus girls in the control group (Erulkar and Muthengi 2009).

Ethiopia's Berhane Hewan Program Decreased Early Marriage among Girls Ages 10–14



Source: Erulkar and Muthengi 2009.

### Adopting a Healthy Lifestyle

An individual's behavior can have important health impacts on the next generation via antenatal and intrapartum behaviors and human immunodeficiency virus (HIV) status. This section presents evidence related to key domains of healthy behaviors.

Younger women face higher risk of obstetric complications and increased risk of abortion and abortion complications. Maternal mortality and morbidity are higher among adolescent girls under the age of 20 than among women 20–24 (Greene and Merrick 2015; Nove et al. 2014).

**Improving maternal health care around the time of childbirth can address the so-called “three delays” in seeking care, reaching the health facility, and receiving quality care at the facility** (Thaddeus and Maine 1994). Targeting these delays could disproportionately improve the maternal health of adolescents in places where a substantial proportion of births are to adolescent mothers. To increase demand for care, some programs offer vouchers or fee exemptions for institutional childbirth. However, a recent review found that such financial incentives may increase rates of

institutional delivery but do not have any significant effect on maternal mortality (Hatt et al. 2013). Another approach is to target norms and knowledge—for example, via birth preparedness (Soubeiga et al. 2014) or women's groups. Women's groups have recently been linked to significant reductions in both maternal and neonatal mortality (Prost et al. 2013).

Programs may not have a substantial impact on mortality unless quality of care is also improved. Successfully improving facility-based delivery requires efforts to strengthen the health system:

- Interventions that improve the quality of care, as in India (Spector et al. 2012) and in Senegal and Mali (Dumont et al. 2013)—for example, health worker training and knowledge and use of checklists and audits
- Training for traditional birth attendants, which may have a stronger effect on neonatal mortality, as in Argentina, Bangladesh, Brazil, the Democratic Republic of Congo, The Gambia, Guatemala, India, Indonesia, Mozambique, Pakistan, and Zambia (Wilson et al. 2011).

### Box 3. Reducing Risky Behavior in Zambia

A program in Zambia that used peer educators to facilitate discussion about sexual health, demonstrate skills, and perform dramatic skits was associated with increased knowledge and approval of both abstinence and condom use as well as decreased incidence of multiple regular partners in the short term (Agha and Van Rossem 2004).

Nutritional status has important implications for the health of adolescent girls and their children. **Adolescent and women's nutrition can be improved through nutrition supplementation during pregnancy, fortification of foods, cash transfer programs, and community-based programs with local implementation by health care workers or community members** (Bhutta et al. 2013).

As supported by the Copenhagen consensus, fortification is one of the most cost-effective strategies for improving nutritional status, but it is most effective when implemented within a comprehensive nutrition strategy. There is increasing evidence that large-scale nutrition supplementation can be effective.

**Reducing risky behavior during adolescence is very important, not only for healthy sexual and reproductive health in the short term but also for human capital accumulation and productivity in the longer term.**

- **Comprehensive sexuality education programs** (Kirby, Laris, and Rollieri 2007), including those focused on HIV and those implemented in school settings (Paul-Ebhohimhen, Poobalan, and Van Teijlingen 2008), may change sexual behavior, including delayed sexual initiation, fewer sexual partners, and increased use of condoms. Evidence indicates little change, however, in health outcomes (pregnancy or rates of sexually transmitted infections).
- **Peer education programs, however, have not been found to consistently change sexual behavior** (Medley et al. 2009). A meta-analysis of HIV prevention strategies targeting youth in Sub-Saharan Africa found that condom use increased, but health outcomes did not change (Michelsen et al. 2010); an exception to this is a program in Zambia (box 3).
- **Other programs have used financial incentives to reduce risky behaviors, but results have also been mixed.** In Malawi and Tanzania, projects offered monetary payments to adolescents if they remained free of HIV or sexually transmitted infections, respectively. In Tanzania, this reduced the incidence of sexually

transmitted infections (De Walque et al. 2014), but in Malawi it had no effect on HIV status (Kohler and Thornton 2012).

### Conclusions

The global evidence indicates that interventions focused on increasing access to and demand for family planning, addressing early marriage through multisectoral approaches at the community level, comprehensively improving infant and child health, improving girls' education, improving access to quality maternal health care, addressing adolescent undernutrition, and providing comprehensive sexuality education and incentives to avoid risky behaviors can have positive impacts on adolescents' health behaviors and outcomes. These interventions provide an enabling environment for adolescents and their communities to make informed decisions about beginning a family and adopting a healthy lifestyle. Because youth transitions are influenced by many factors within and outside the health sector, they must be addressed using a multisectoral approach. Improved adolescent transitions can help a country to achieve the full demographic transition and its accompanying economic benefits, but requires strong political commitment and considerable resources to remove potential economic, logistic, or social barriers.

### References

- Agha, Sohail, and Ronan Van Rossem. 2004. "Impact of a School-Based Peer Sexual Health Intervention on Normative Beliefs, Risk Perceptions, and Sexual Behavior of Zambian Adolescents." *Journal of Adolescent Health* 34 (5): 441–52.
- Akresh, Richard, Damien De Walque, and Harounan Kazianga. 2013. "Cash Transfers and Child Schooling: Evidence from a Randomized Evaluation of the Role of Conditionality." Policy Research Working Paper 6340, World Bank, Washington, DC.
- Behrman, Jere, and John Hoddinott. 2005. "Programme Evaluation with Unobserved Heterogeneity and Selective Implementation: The Mexican PROGRESA Impact on Child Nutrition." *Oxford Bulletin of Economics and Statistics* 67 (4): 547–69.
- Bhutta, Zulfiqar, Jal K. Das, Arjumand Rigi, Michelle Gaffey, Neff Walker, Susan Horton, Patrick Webb, Anna Lartey, and Robert Black. 2013.



- "Evidence-Based Interventions for Improvement of Maternal and Child Nutrition: What Can Be Done and at What Cost?" *The Lancet* 382 (9890): 452–77.
- Bolam, Alison, Dharma Manandhar, Purna Shrestha, Matthew Ellis, and Anthony M. de L. Costello. 1998. "The Effects of Postnatal Health Education for Mothers on Infant Care and Family Planning Practices in Nepal: A Randomised Controlled Trial." *BMJ* 316 (7134): 805–11.
- Bongaarts, John. 1978. "A Framework for Analyzing the Proximate Determinants of Fertility." *Population and Development Review* 4 (1): 105–32.
- Bongaarts, John, John Cleland, John Townsend, Jane Bertrand, and Monica Das Gupta. 2012. "Family Planning Programs for the 21st Century: Rationale and Design." Population Council, New York.
- Cammack, Mark, Lawrence Young, and Tim Heaton. 1996. "Legislating Social Change in an Islamic Society: Indonesia's Marriage Law." *American Journal of Comparative Law* 44 (1): 45–73.
- Chandra-Mouli, Venkatraman, Catherine Lane, and Sylvia Wong. 2015. "What Does Not Work in Adolescent Sexual and Reproductive Health: A Review of Evidence on Interventions Commonly Accepted as Best Practices." *Global Health: Science and Practice* 3 (3): 333–40.
- Debpuur, Cornelius, James Phillips, Elizabeth Jackson, Alex Naggar, Pierre Ngom, and Fred Binka. 2002. "The Impact of the Navrongo Project on Contraceptive Knowledge and Use, Reproductive Preferences, and Fertility." *Studies in Family Planning* 33 (2): 141–64.
- De Walque, Damien, William Dow, Carol Medlin, and Rose Nathan. 2014. "Stimulating Demand for AIDS Prevention: Lessons from the RESPECT Trial." In *African Successes: Human Capital*, edited by Sebastian Edwards, Simon Johnson, and David N. Weil. Chicago: University of Chicago Press.
- Diop, Nafissatou, Modou Faye, Amadou Moreau, Jacqueline Cabral, Hélène Benga, Fatou Cissé, Babacar Mané, Inge Baumgarten, and Molly Melching. 2004. *The TOSTAN Program: Evaluation of a Community-Based Education Program in Senegal*. Washington, DC: Population Council.
- Dumont, Alexandre, Pierre Fournier, Michel Abrahamowicz, Mamadou Traoré, Slim Haddad, and William Fraser. 2013. "Quality of Care, Risk Management, and Technology in Obstetrics to Reduce Hospital-Based Maternal Mortality in Senegal and Mali (QUARITE): A Cluster-Randomised Trial." *The Lancet* 382 (9887): 146–57.
- Edmeades, Jeffrey, and Robin Hayes, with Gil Gaynair. 2014. "Improving the Lives of Married Adolescent Girls in Amhara Ethiopia: A Summary of the Evidence." International Center for Research on Women, Washington, DC.
- Engelbrechtsen, S., and G. Kabore. 2011. "Addressing the Needs of Girls at Risk of Early Marriage and Married Adolescent Girls in Burkina Faso." Population Council, Washington, DC.
- Erulkar, Annabel, and Eunice Muthengi. 2009. "Evaluation of Berhane Hewan: A Program to Delay Child Marriage in Rural Ethiopia." *International Perspectives on Sexual and Reproductive Health* 35 (1): 6–14.
- Farooq, Ghazi, and Lawrence Adekun. 1976. "Impact of a Rural Family Planning Program in Ishan, Nigeria, 1969–72." *Studies in Family Planning* 7 (6): 158–69.
- Farr, A. Celeste, Kim Witte, Kassa Jarato, and Tiffany Menard. 2005. "The Effectiveness of Media Use in Health Education: Evaluation of an HIV/AIDS Radio Campaign in Ethiopia." *Journal of Health Communication* 10 (3): 225–35.
- Freij, Leah. 2008. "Safe Age of Marriage in Yemen: Fostering Change in Social Norms." U.S. Agency for International Development, Washington, DC.
- Gertler, Paul. 2000. "Final Report: The Impact of PROGESA on Health." International Food Policy Research Institute, Washington, DC.
- Greene, M. E., and T. Merrick. 2015. "The Case for Investing in Research to Increase Access to and Use of Contraception among Adolescents." Alliance for Reproductive, Maternal, and Newborn Health, Seattle WA.
- Gribble, James, and Maj-Lis Voss. 2009. "Family Planning and Economic Well-Being: New Evidence from Bangladesh." Population Reference Bureau, Washington, DC.
- Ha, Bui T. T., Rohan Jayasuriya, and Neville Owen. 2005. "Increasing Male Involvement in Family Planning Decision Making: Trial of a Social-Cognitive Intervention in Rural Vietnam." *Health Education Research* 20 (5): 548–56.
- Hatt, Laurel, Marty Makinen, Supriya Madhavan, and Claudia Conlon. 2013. "Effects of User Fee Exemptions on the Provision and Use of Maternal Health Services: A Review of Literature." *Journal of Health, Population, and Nutrition* 31 (4, suppl. 2): S67.
- Ketende, Charles, Neeru Gupta, and Ruth Bessinger. 2003. "Facility-Level Reproductive Health Interventions and Contraceptive Use in Uganda." *International Family Planning Perspectives* 29 (3): 130–37.
- Kirby, Douglas, B. Laris, and Lori Roller. 2007. "Sex and HIV Education Programs: Their Impact on Sexual Behaviors of Young People throughout the World." *Journal of Adolescent Health* 40 (3): 206–17.
- Koenig, Joyce, and William Keenan. 2009. "Group B Streptococcus and Early-Onset Sepsis in the Era of Maternal Prophylaxis." *Pediatric Clinics of North America* 56 (3): 689–708.
- Koenig, Michael, James Phillips, Ruth Simmons, and Mehrab Ali Khan. 1987. "Trends in Family Size Preferences and Contraceptive Use in Matlab, Bangladesh." *Studies in Family Planning* 18 (3): 117–27.
- Kohler, Hanspeter, and Rebecca Thornton. 2012. "Conditional Cash Transfers and HIV/AIDS Prevention: Unconditionally Promising?" *World Bank Economic Review* 26 (2): 165–90.
- Malhotra, Anju, Ann Warner, Allison McGonagle, and Susan Lee-Rife. 2011. "Solutions to End Child Marriage." International Center for Research on Women, Washington, DC.
- Medley, Amy, Caitlin Kennedy, Karen O'Reilly, and Michael Sweat. 2009. "Effectiveness of Peer Education Interventions for HIV Prevention in Developing Countries: A Systematic Review and Meta-Analysis." *AIDS Education and Prevention* 21 (3): 181.
- Meuwissen, Liesbeth, Anna Gorter, and Andre Knottnerus. 2006. "Impact of Accessible Sexual and Reproductive Health Care on Poor and Underserved Adolescents in Managua, Nicaragua: A Quasi-Experimental Intervention Study." *Journal of Adolescent Health* 38 (1): 56.
- Michielsen, Kristien, Matthew F. Chersich, Stanley Luchters, Petra De Koker, Ronan Van Rossem, and Marlene Temmerman. 2010. "Effectiveness of HIV Prevention for Youth in Sub-Saharan Africa: Systematic Review and Meta-Analysis of

- Randomized and Nonrandomized Trials." *Aids* 24 (8): 1193–202.
- Mmari, Kristin, and Robert Magnani. 2003. "Does Making Clinic-Based Reproductive Health Services More Youth-Friendly Increase Service Use by Adolescents? Evidence from Lusaka, Zambia." *Journal of Adolescent Health* 33 (4): 259–70.
- Molyneaux, John, and Paul Gertler. 2000. "The Impact of Targeted Family Planning Programs in Indonesia." *Population and Development Review* 26 (suppl.): 61–85.
- Nove, Andrea, Zoe Matthews, Sarah Neal, and Alma Camacho. 2014. "Maternal Mortality in Adolescents Compared with Women of Other Ages: Evidence from 144 Countries." *The Lancet Global Health* 2 (3): e155–e64.
- Paul-Ebhohimhen, Virginia, Amudha Poobalan, and Edwin Van Teijlingen. 2008. "A Systematic Review of School-Based Sexual Health Interventions to Prevent STI/HIV in Sub-Saharan Africa." *BMC Public Health* 8 (1): 4.
- Perry, Henry, Melanie Morrow, Sarah Borger, Jennifer Weiss, Mary DeCoster, Thomas Davis, and Pieter Ernst. 2015. "Care Groups II: A Summary of the Child Survival Outcomes Achieved Using Volunteer Community Health Workers in Resource-Constrained Settings." *Global Health: Science and Practice* 3 (3): 370–81.
- Pitt, Mark, Mark Rosengweig, and Donna Gibbons. 1993. "The Determinants and Consequences of the Placement of Government Programs in Indonesia." *World Bank Economic Review* 7 (3): 319–48.
- Plautz, Andrea, and Dominique Meekers. 2007. "Evaluation of the Reach and Impact of the 100% Jeune Youth Social Marketing Program in Cameroon: Findings from Three Cross-Sectional Surveys." *Reproductive Health* 4 (1): 1.
- Population Services International. 2012. "ProFam Urban Outreach: A High-Impact Model for Family Planning." Population Services International, Washington DC.
- Prost, Audrey, Tim Colbourn, Nadine Seward, Kishwar Azad, Arri Coomarasamy, Andrew Copas, Tanja Houweling, Edward Fottrell, Abdul Kuddus, Sonia Lewycka, Christine MacArthur, Dharma Manandhar, Joanna Morrison, Charles Mwansambo, Nirmala Nair, Bejoy Nambiar, David Osrin, Christina Pagel, Tambosi Phiri, Anni-Maria Pulkki-Brännström, Mikey Rosato, Jolene Skordis-Worrall, Naomi Saville, Neena Shah More, Bhim Shrestha, Prasanta Tripathy, Amie Wilson, and Anthony Costello. 2013. "Women's Groups Practising Participatory Learning and Action to Improve Maternal and Newborn Health in Low-Resource Settings: A Systematic Review and Meta-Analysis." *The Lancet* 381 (9879): 1736–46.
- Rogers, Everett, Peter Vaughan, Ramadhan Swalehe, Nagesh Rao, Peer Svenkerud, and Suruchi Sood. 1999. "Effects of an Entertainment-Education Radio Soap Opera on Family Planning Behavior in Tanzania." *Studies in Family Planning* 30 (3): 193–211.
- Soubeiga, Dieudonne, Lise Gauvin, Marie Hatem, and Mira Johri. 2014. "Birth Preparedness and Complication Readiness (BPCR) Interventions to Reduce Maternal and Neonatal Mortality in Developing Countries: Systematic Review and Meta-Analysis." *BMC Pregnancy and Childbirth* 14 (1): 129.
- Spector, Jonathan, P. K. Agrawal, Bhala Kodkany, Stuart Lipsitz, Angela Lashofer, Gerald Dziekan, Rajiv Bahl, Mario Meriardi, Matthews Mathai, Claire Lemer, and Atul Gawande. 2012. "Improving Quality of Care for Maternal and Newborn Health: Prospective Pilot Study of the WHO Safe Childbirth Checklist Program." *PLoS ONE* 7 (5): e35151.
- Terefe, Ashenafi, and Charles Larson. 1993. "Modern Contraception Use in Ethiopia: Does Involving Husbands Make a Difference?" *American Journal of Public Health* 83 (11): 1567–71.
- Thaddeus, Sereen, and Deborah Maine. 1994. "Too Far to Walk: Maternal Mortality in Context." *Social Science and Medicine* 38 (8): 1091–10.
- Valente, Thomas, Young Min Kim, Cheryl Lettenmaier, William Glass, and Yankuba Dibba. 1994. "Radio Promotion of Family Planning in The Gambia." *International Family Planning Perspectives* 20 (3): 96–100.
- Warwick, Donald. 1986. "The Indonesian Family Planning Program: Government Influence and Client Choice." *Population and Development Review* 12 (3): 453–90.
- Wilson, Arnie, Ioannis Gallos, Nieves Plana, David Lissauer, Khalid Khan, and Javier Zamora. 2011. "Effectiveness of Strategies Incorporating Training and Support of Traditional Birth Attendants on Perinatal and Maternal Mortality: Meta-Analysis." *BMJ* 343d: 702. doi: <http://dx.doi.org/10.1136/bmj.d7102>.



© 2015 International Bank for Reconstruction and Development / The World Bank. Some rights reserved. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. This work is subject to a CC BY 3.0 IGO license (<https://creativecommons.org/licenses/by/3.0/igo>). The World Bank does not necessarily own each component of the content. It is your responsibility to determine whether permission is needed for reuse and to obtain permission from the copyright owner. If you have questions, email [pubrights@worldbank.org](mailto:pubrights@worldbank.org).

SKU K8491