

## Long Abstract

# **The costs and benefits of Investing in sexual and reproductive health in Pakistan**

Sabahat Hussain  
Population Council, Islamabad

### **Introduction:**

High maternal and infant mortality and morbidity levels are a continuing source of concern in Pakistan. Recent statistics from Pakistan estimate that 178 mothers die from pregnancy related complications per 100,000 live births<sup>1</sup> and 74 babies die before reaching their first birthday per every 1,000 live births<sup>2</sup>. According to the 2012-2013 Demographic and Health Survey (DHS) the total fertility rate (TFR) was 3.8 children per woman, and this rate was even higher among women living in certain regions of the country, those living in poverty, and those with low levels of education<sup>2</sup>. High fertility rates expose Pakistani women to several years of maternal mortality and disability risks. Additionally, with an average annual growth rate of nearly 2%<sup>2</sup>, Pakistan's public and private health infrastructure may not be equipped to handle a rapidly growing population and its related economic burdens. All of these factors combined can greatly affect the health and well-being of women and their families.

Unintended pregnancy, which generally results in unplanned births or induced abortion, is a significant issue in Pakistan. According to a recent nationally representative study, there were over 4 million unintended pregnancies in Pakistan in 2012<sup>3</sup>. The 2012-2013 DHS estimated that on average, women of reproductive age were having nearly one more child than desired, illustrating that unplanned births were a common occurrence<sup>2</sup>. In Pakistan, legal restrictions severely limit access to safe abortion and women who are faced with an unintended pregnancy often resort to clandestine or unsafe abortion risking serious health consequences, and even death. In 2012, there were an estimated 2.25 million induced abortions in Pakistan, translating to roughly 50 abortions per 1,000 women of reproductive age<sup>4</sup>. Among women who had an induced abortion, an estimated 623,000 were treated for complications and a portion of the remainder suffered complications that remained untreated<sup>4</sup>.

Lowering Pakistan's unintended pregnancy levels could improve maternal and child health in multiple ways: it would decrease women's exposure to pregnancy and childbirth and their associated risks, it would decrease use of unsafe abortion and its associated complications, and it would also ease the burden of maternal and infant conditions on the

health sector by reducing the number of women and children needing care. Reducing unintended pregnancy is, in part, dependent on women's adequate access to contraception. Enabling women to plan when they want to get pregnant and achieve their desired family size could eliminate the health burdens associated with unplanned childbearing and unsafe abortion. In Pakistan, however, contraceptive use remains low—only 35% of married women currently use any method of contraception and 26% use a modern method<sup>2</sup>. Furthermore, about one in five married women has an unmet need for contraception, meaning they are at risk of an unintended pregnancy but do not use contraception. In order to meet reproductive health needs of Pakistani women, it is necessary to greatly improve both access to and quality of comprehensive contraceptive services<sup>2</sup>.

An important concern in developing countries like Pakistan has been the availability of financial resources to provide such services to women. A 2014 report entitled “Adding It Up” published by the Guttmacher Institute and UNFPA showed that it was both cheaper and more cost-effective to invest in the provision of contraceptive services (to address unintended pregnancies) than it was to treat the maternal and child health conditions associated with unintended childbirth and unsafe abortion<sup>5</sup>. The report found that not only would investing in contraceptive services likely be economically beneficial to both the health sector and individual, more importantly, it would reduce maternal and child mortality and morbidity.

This paper will apply the techniques used in the 2014 “Adding It Up” report to estimate the costs of investing in contraceptive services in the Pakistani context<sup>5</sup>. The techniques will also estimate the benefits to Pakistan in terms of reduced maternal and infant mortality and disability, reduced numbers of unsafe abortion, as well as overall economic savings to the health sector.

### **Data and methods:**

This study will use data from several sources including Pakistan census projections, the forthcoming 2015 Pakistan DHS, the most recent demographic estimates from the United Nations, Pakistan abortion data from the Population Council and Guttmacher Institute, and various recent country reports to estimate the monetary costs of providing sexual and reproductive health services in Pakistan for the year 2017. The study will also estimate the benefits in terms of reduced maternal and infant mortality rates, reduced rates unsafe abortions, reduced DALYs (disability-adjusted life-years), reduced health care expenditures for the year 2017.

Specifically, the study will model the costs and benefits of expanding contraceptive use in four alternative scenarios: the current contraceptive landscape and three hypothetical

scenarios. The first scenario shows the costs and benefits associated with the current level of contraceptive use, in which some of the demand is satisfied, but substantial unmet need still exists. The second scenario is a hypothetical scenario that estimates the costs and benefits if no contraceptive services were provided. The third scenario is also a hypothetical scenario that estimates the costs and benefits of satisfying about 50% of the current unmet need for contraception. Developing country governments often consider satisfying 50% of the unmet need a more feasible goal, compared to satisfying all unmet need. The purpose of modeling this hypothetical scenario is to demonstrate that there are benefits to satisfying even half the current unmet need. The fourth scenario examines the costs and benefits associated with satisfying all current unmet need for contraception.

In order to examine any structural inequalities in the provision of reproductive health services, results will be disaggregated by wealth status and by region.

### **Results:**

The paper will present the estimates of several indicators for each scenario discussed above:

- Number of women at risk of unintended pregnancies
- Number of unintended and intended births, induced abortions, and miscarriages
- The costs of providing contraceptive and maternal and newborn health services

Additionally, it will estimate the benefits in terms of maternal and infant deaths averted, DALYs reduced, and abortions and unintended pregnancies avoided for each scenario. All results will be shown by wealth status and by region.

### **Conclusions:**

Hopefully the study findings will show that investments in sexual and reproductive health services, which may appear costly in the short-term, will actually result in net benefits in mother and child health to the Pakistani society. The paper will conclude with suggestions for policy and program actions to further encourage the Pakistani government and donor agencies to invest in family planning.

## References:

1. World Health Organization, UNICEF, United Nations, Department of Economic and Social Affairs, Population Division, World Bank. Trends in maternal mortality: 1990 to 2015 : estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. 2015.  
<http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2015/en/>
2. NIPS/Pakistan NI of PS-, International ICF. Pakistan Demographic and Health Survey 2012-13. 2013 [accessed 2017 Sep 25]. <http://dhsprogram.com/publications/publication-FR290-DHS-Final-Reports.cfm>
3. Unintended Pregnancy and Induced Abortion In Pakistan. Guttmacher Institute. 2015 Jan 27 [accessed 2017 Sep 25]. <https://www.guttmacher.org/fact-sheet/unintended-pregnancy-and-induced-abortion-pakistan>
4. Sathar Z, Singh S, Rashida G, Shah Z, Niazi R. Induced Abortions and Unintended Pregnancies in Pakistan. *Studies in family planning*. 2014;45(4):471–491.  
doi:10.1111/j.1728-4465.2014.00004.x
5. Singh S, Darroch J, Ashford L. Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health 2014. Guttmacher Institute. 2015 Sep 25 [accessed 2017 Sep 25]. <https://www.guttmacher.org/report/adding-it-costs-and-benefits-investing-sexual-and-reproductive-health-2014>
6. Meeting Women’s Contraceptive Needs in the Philippines. Guttmacher Institute. 2009 Feb [accessed 2017 Sep 25]. <https://www.guttmacher.org/report/meeting-womens-contraceptive-needs-philippines>
7. Vlassoff M, Sundaram A, Bankole A. Benefits of Meeting the Contraceptive Needs of Ugandan Women. Guttmacher Institute. 2009 Nov [accessed 2017 Sep 25]. <https://www.guttmacher.org/report/benefits-meeting-contraceptive-needs-ugandan-women>
8. Sundaram A, Vlassoff M, Bankole A, Remez L, Gebrehiwot Y. Benefits of Meeting the Contraceptive Needs of Ethiopian Women. Guttmacher Institute. 2010 Jul [accessed 2017 Sep 25]. <https://www.guttmacher.org/report/benefits-meeting-contraceptive-needs-ethiopian-women>
9. Jerman J, Vlassoff M, Beninguisse G, Kamgaing F, Zinvi-Dossou F. Benefits of Meeting the Contraceptive Needs of Cameroonian Women. Guttmacher Institute. 2014 Aug [accessed 2017 Sep 25]. <https://www.guttmacher.org/report/benefits-meeting-contraceptive-needs-cameroonian-women>
10. Vlassoff M, Tsoka M. Benefits of Meeting the Contraceptive Needs of Malawian Women. Guttmacher Institute. 2014 Nov [accessed 2017 Sep 25]. <https://www.guttmacher.org/report/benefits-meeting-contraceptive-needs-malawian-women>
11. Bankole A, Vlassoff M, Sundaram A, Remez L, Belemsaga Yugbare D. Benefits of Meeting Women’s Contraceptive Needs in Burkina Faso. Guttmacher Institute. 2011 [accessed 2017 Sep 25]. <https://www.guttmacher.org/report/benefits-meeting-womens-contraceptive-needs-burkina-faso>