# POLICY BRIEF













4

# A Closer Look at Health Services and Fertility in Nepal

Based on the peer-reviewed publication Brauner-Otto et al. 2007 in *Demography*<sup>1</sup>

Health services are important because they have the potential to impact the quality of life of the people they serve. New research from the University of Michigan using data from the Chitwan Valley Family Study suggests that health services are associated with more contraceptive use to limit childbearing.

In Nepal, growth of maternal and child health services and family planning services could reduce parents' motivation to have many children. These services may decrease child mortality and make contraceptives more readily available with reduced stigma.

This policy brief examines the connection between health services and fertility behaviors in Nepal. Specifically, it examines maternal and child health services, family planning services, and other community characteristics and how they are related to contraceptive use to limit childbearing.<sup>1</sup>



# Research Context

- Maternal and Child Health Services includes four measures:
  - o Child immunizations
  - o Prenatal care (regular exams and iron supplements)
  - o Pregnancy and delivery assistance services
  - Family planning services (provision of contraceptives and/or awareness campaigns
- Fertility Limitation is any behavior or method a person uses to stop having more children. Some examples are birth control pills, condoms, IUDs, Depo-Provera, and male or female sterilization.<sup>1</sup>

## **Data Source**

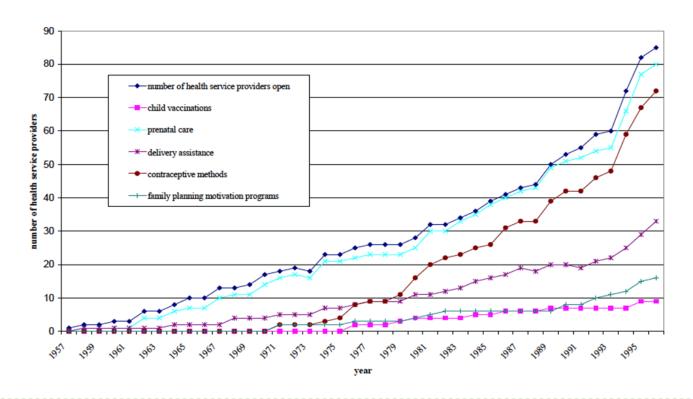
This policy brief is based on a peer-reviewed publication<sup>1</sup> that analyzes data from the Chitwan Valley Family Study (CVFS) — a comprehensive mixed method panel study of individuals, families, and communities in the Western Chitwan Valley of Nepal.

The CVFS investigates the relationships between changing social contexts, environmental factors, land use, and population processes. CVFS data include full life histories for more than 10,000 individuals, tracking and interviews with all migrants, continuous measurement of community change, 20+ years of demographic event registry, and data linking human and natural systems.





# Study Description: Change Over Time in Health Services in Chitwan<sup>1</sup>



# Findings: Health Services Impact Fertility Changes in Nepal

In Nepal, research suggests that maternal and child health services, family planning services, and motivation programs are associated with increased use of contraceptives to limit childbearing.

#### **Maternal and Child Health Services**

 Women whose closest health service provider offered child immunizations, prenatal care, and pregnancy and delivery assistance services had much higher rates of using contraceptives to stop childbearing.

#### **Family Planning Services**

 Provision of contraceptive methods resulted in 171% higher rates of using contraceptives to stop childbearing. Motivation and education programs were associated with 87% higher rates of using contraceptives to stop childbearing.

#### **Location of Services**

 The number of health services offering child immunizations and their presence within 2 or 5 kilometers increased the rate of contraceptive use to stop childbearing.

#### **Independent Effects**

 Women whose closest provider offered child immunizations had rates of contraceptive use to stop childbearing 72% higher than those who did not.

# **Policy Implications**

Research conducted in Chitwan, Nepal suggests that providing contraceptives with and without additional programs is related to increased fertility limitation. Specifically, this research supports three main findings about increased availability of family planning services:

- 1) It lowers costs of fertility limitation, which leads to increased fertility limitation.
- It reduces costs of fertility regulation through improved information about contraceptive methods and their side effects.
- 3) It reduces the demand for children through targeted motivation programs.<sup>1</sup>

### **Looking Forward**

The health services described in this policy brief may keep children healthy, lower infant and child mortality, reduce motivations to have many children, and generally change attitudes toward family size preferences. The spread of these services typically happens with other social and economic changes that affect fertility behaviors. Other research conducted in Nepal has suggested that many factors work together to change fertility behaviors.<sup>2</sup> For example, the lack of transportation services in Chitwan could make health services closest to families more important in their behaviors to limit fertility. Other research has suggested that if couples think their children are more likely to survive, they may change their behaviors to limit fertility.<sup>3</sup> More research is needed to understand what exactly is responsible for the relationship between increased health services and increased fertility limitation.

#### **Conclusion**

All three mechanisms discussed here – contraceptive services, family planning motivation programs, and maternal and child health services – may be working together to increase fertility limitation in Nepal. This study provides a base set of information for further study of fertility and health services in Nepal.

# Factors that May Influence Low and Limited Fertility

Research has suggested that many factors may cause the shift to low and limited fertility within a population:

- Motivation for fertility decline can come from ideas from worldwide communication.<sup>4</sup>
- Economic changes can affect couples' values through different social experiences.<sup>5</sup>
- Social change can affect several aspects of life, including fertility preferences.<sup>6</sup>
- Parental perceptions of risks to their children's health and mortality not actual risk itself may be important for their childbearing decisions. <sup>3,7,8</sup>

## Changes in Health Services in Chitwan 1965 Year 1995 Number of Health 10 85 Service Providers **Providers** 70 0 Offering Contraceptive Methods

# Footnotes and References

- 1) Brauner-Otto, S. R., Axinn, W. G., & Ghimire, D. J. (2007). The spread of health services and fertility transition. Demography, 44(4), 747-770.
- 2) Tuladhar, J. M. (1989). The onset of a fertility decline in Nepal. Asian-Pacific Population Journal, 4(3), 15-30.
- 3) Mason, K. O. (1987). The impact of women's social position on fertility in developing countries. Sociological Forum, 2(4), 718-745. Kluwer Academic Publishers.
- 4) Freedman, R. (1979). Theories of fertility decline: A reappraisal. Social Forces, 58(1), 1-17.

- 5) Lesthaeghe, R., & Surkyn, J. (1988). Cultural dynamics and economic theories of fertility change. Population and Development Review, 14 (1), 1-45.
- Thornton, A., Lin, H. S., & Lin, H. (1994). Social change and the family in Taiwan. University of Chicago Press.
- 7) Montgomery, M. R. (2000). Perceiving mortality decline. Population and Development Review, 26 (4), 795-819.
- 8) Sandberg, J. F. (2002). Child mortality, family building and social learning in a Nepalese mountain community. University of Michigan.

Suggested Citation: Hawes, A.M. (2018). A Closer Look at Health Services and Fertility in Nepal, Policy Brief 11. Institute for Social and Environmental Research-Nepal.

MORE POLICY BRIEFS: http://isernepal.org.np/view/categoryPub/ResearchandPolicyBrief

## **Contact Information**

#### Institute for Social Research

Society, Population & Environment 426 Thompson Street
Ann Arbor, Michigan, USA
E-Mail: psc-socpopenv@umich.edu
http://spe.psc.isr.umich.edu/

# Institute for Social and Environmental Research – Nepal

P.O. Box 57
Bharatpur, Chitwan, Nepal
Telephone: +977-56-591054/892406
E-Mail: iser.nepal@outlook.com
http://isernepal.org.np/

Funding for the research reported in Brauner-Otto et al. 2007, upon which this policy brief is based, was supported by grants from the National Institute of Child Health and Human Development, including a center grant to the Population Studies Center at the University of Michigan.



