The Changing Influence of China's Family Planning Programme on Women's Contraceptive Choices: Evidence from a Multilevel Analysis of the Recent UNFPA

**Reproductive Health Surveys** 

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Short abstract

Historically, the family planning programme in China has been driven administratively with a

strong emphasis on post-partum IUD use after first birth and sterilization after any

subsequent births. Following the ICPD recommendations, China began implementing a

client-friendly informed choices approach to the delivery of family planning services,

encouraging women or couples to be the prime decision makers of their methods of choice

rather than service providers. Using data from the UNFPA reproductive health and family

planning surveys conducted during September 2003 and November 2005, this paper applies

multilevel modelling techniques to demonstrate the effect of changes in family planning

programme on women's contraceptive decisions and behaviour in 30 selected counties

covering eastern, central and western regions of China. The preliminary results show clear

evidence of county-level effects, underscoring the influence of family planning workers in

determining women's choices to use IUD at parity one and sterilization at parity two.

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## Extended abstract

## **Motivation for the Paper**

Historically, the family planning programme in China has been driven administratively with a strong emphasis on the use of long-term reversible methods after the first birth (IUD) and sterilisation after any subsequent births. The overall use of any modern method among currently married women in China has been over 80%, of which more than 60% rely on IUD and the remaining use sterilization<sup>1</sup>. In the past, the Chinese government and family planning officials were sensitive to the difficulty of reaching a below replacement fertility rate in rural areas<sup>2</sup>, and as a result women and couples in rural agricultural areas were subjected to a twin pressure of adhering to government's childbearing requirements on one side and by societal influence of strong son preference on the other side<sup>3</sup>. Those in urban areas were compelled to restrict their family size to not more than one child<sup>4</sup>. Since the 1994 International Conference on Population and Development (ICPD) in Cairo, China has committed to implementing the Plan of Actions of the ICPD proceedings. As a result of this commitment, the UNFPA has been working in China to implement an environment of client-centred informed choice delivery of reproductive health services. In other words, the aim is ensure the main motivator for method choice is the individual and/or couple rather than the service providers of the programme.

The UNFPA fifth country programme was completed in 2005. In order to evaluate the impact of the intervention programme, baseline and endline surveys were carried out that aimed to measure a set of objectively verifiable indicators. The baseline survey of women was conducted in September 2003 and the endline survey of women was conducted in November 2005. Both surveys asked women what their current method of contraception was, when they started using, and who was the main influence on their choice. Therefore, we have a rich data

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<sup>&</sup>lt;sup>1</sup> Dept. of Planning and Accounting and the State Family Planning Commission of China (2002) National Family Planning & Reproductive Health Survey, China Population and Information Research Centre, Beijing.

<sup>&</sup>lt;sup>2</sup> Merli, Giovanna M and Smith, Herbert L (2002) Has the Chinese family planning policy been successful in changing fertility preferences. *Demography*, 39(3): 557-72; Feeney, Griffith and Wang, F (1993) Parity progression and birth intervals in China: The influence of policy in hastening fertility decline. *Population and Development Review*, 19: 61-101.

<sup>&</sup>lt;sup>3</sup> Hardee, Karen., Xie, Zhenming and Gu, Baochang (2004) Family planning and women's lives in rural China. *International Family Planning Perspectives*, 30(2): 68-76.

<sup>&</sup>lt;sup>4</sup> Short, Susan and Zhai, F.Y. (1998) Looking locally at China's one-child policy, *Studies in Family Planning*, 29(4): 373-87; Winkler E.A (2002) Chinese reproductive policy at the turn of the Millennium: dynamic stability, *Population and Development Review*, 28(3):379-418.

source to examine whether the influence of the administratively oriented family programme is diminishing over time. The preliminary analysis shows that there has been a general reduction in the influence of service providers on method choice but this is not uniform across all methods<sup>5</sup>. It is therefore pertinent to assess this more formally using more complex statistical analysis.

## Structure of the Analysis

Based on the historical structure of the programme we aim to examine contraceptive choice (IUD vs Other Reversible) at parity one and parity two (Sterilization vs Reversible) in separate models. The data from the endline and baseline will be combined and current use will define the response variable conditional on the use commencing in the last two years prior to the baseline and endline surveys. The selection of time period is important as clearly the UNFPA intervention cannot affect the current use of older women who were sterilized many years previously. The aim of this paper is to compare the influence of the family planning programme on current choice before and after the UNFPA intervention.

The data from the two surveys have a hierarchical structure. At the top level are the 30 counties chosen to be in the UNFPA intervention, within the counties is a sample of townships, within the townships are communities, and within communities is a sample of women. In addition to the data from women, there are also data from facilities and service providers within the sampled townships that add context to the analysis. With this structure, a multilevel analysis makes a lot of sense as we can see the unexplained influence on contraceptive choice arising from the external environment within which the women live. The county level is of particular interest because it is at this level that the family planning programme is implemented. Therefore, decreasing the effects at the county level potentially represent a reduction in the [directness] of the programme.

## **Preliminary results**

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<sup>&</sup>lt;sup>5</sup> Bohua, Li et al. (2006) UNFPA/China Quality of care in reproductive health/family planning project. Fifth Country Programme, Quantitative Evaluation Report 2003-05. Key Findings. China Population Development Research Centre, National Centre for Women and Children's Health, Chinese Centre for Disease Control and Southampton Statistical Sciences Research Institute, UK [http://www.s3ri.soton.ac.uk/projects/proj-unfpa.php].

The authors have already undertaken an initial multilevel analysis of the baseline data. This confirmed that after controlling for a range of socio-demographic variables:

- family planning workers were a strong influence on the use of IUD at parity one and sterilization at parity two;
- the random effect at the county level in both models dominated over effects at the township and community levels and remained important after controlling for contextual variables relating to the facilities.

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