A reversal in the population policy of Iran: Do curbing family planning programs raise low fertility?

Objectives

Iran has experienced an extraordinary fertility decline in recent decades: the country's total fertility rate has fallen from 5.3 children per woman of reproductive age in 1988 to 2.0 children in 2000 (MOHME 2000; Statistical Center of Iran 2000). The decline in the fertility rate accelerated after the government adopted an anti-natalist population policy, followed by the implantation of a nationwide family planning program, in 1989. It has been estimated that 61 percent of the rapid decline in period fertility during one decade is attributed to a sharp increase in deliberate marital fertility control through a rise in the use of family planning services, delivered freely through 16,000 health houses in rural areas and health centers in urban settings (Erfani and McQuillan, 2008). Through the new family planning program a full choice of contraceptives, including female and male sterilization, IUDs, the pill, condoms, implants, and injectables, has been made available to all rural and urban married women up till now. Iran's family planning program has been recognized by domestic and international observers as one of the most successful in the world, and particularly in the Middle East (Erfani and Yuksel, 2012).

Over the past decade, however, the fertility rate has remained low in Iran. The current national total fertility rate is 1.7 children and nine provinces, including Tehran, have a rate under 1.5 children (Statistical Center of Iran, 2012, 2008; Erfani, 2010). The persistent low fertility has become an increasing concern for Iranian leaders, as it leads to rapidly ageing populations, declining labor force size, and smaller overall population size. As a result, an increasing attention is being paid to policies that might reduce the social and economic burdens of the negative consequences of low fertility. For example, in a recent speech, Iran's Supreme Leader, Ayatollah Ali Khameni announced that "the former anti-natalist population policy must have been stopped in the mid of 1990s, when the country's fertility rate reached the replacement level; this was a mistake that we continued the population control policy up to now". Then, he added that "the anti-natalist policy must be put to an end" (Khamenei, 2012). Following this speech, a number of conservative political figures in the Parliament and the government and religious leaders put forward the idea of eliminating the existing family planning program, with the hope to raise the fertility rate (Mahmodi, 2012). In an interview with Fars News Agency, the health Minister, Dr. Marzieh Dastjerdi, also announced that "the former anti-natalist population policy has been eliminated and is not any more funded by the government, but we have asked the government to fund a new population program, known as "Reproductive Health", with the amount of 190 billion Rials that foster the health of mothers, infants, and children." In her interview, she did not say further details about the new program and whether or not the provision of family planning services should be curbed (Dastjerdi, 2012). While the announced new pro-natalist population policy by the Supreme Leader is still at its early stages of development, this study aims to provide evidence-based answers to the questions as to 1) do curbing family planning programs raise the fertility rate? 2) Which sub-groups of women are more likely to experience higher rates of unintended pregnancies and clandestine induced abortion, as results of a possible limitation in the provision of family planning services?

Methodology
This proposed study will use the most recent data from the 2009 Tehran Survey of Fertility (TSF) and the 2012 Tehran Survey of Fertility Intentions (TSFI), conducted by the author. As a secondary source of data, this study will also utilize data from the 2000 Iran Demographic and Health Survey (IDHS). TSF and TSFI were administered face-to-face among a representative sample of 2934 and 2,267 married women in the reproductive ages, respectively, who resided in Tehran's 22 residential districts.

Data analyses will be grouped into four categories. First, to measure the relative contribution of contraceptive use to the current low fertility, I will estimate the relative fertility inhibiting effects of four main proximate determinants of fertility, namely contraceptive use, marital age structure, induced abortion, and postpartum infecudability, utilizing an improved, weighted, age-specific version of classical Bongaarts' fertility model (see Erfani and McQuillan, 2008). Second, to examine shifts in the patterns of contraceptive methods, used by wives and husbands, over the last decade, I will estimate contraceptive prevalence rates by methods for 2000 and 2009. Third, a description of fertility intentions among different sub-groups of married women will be provided, using data from TSFI. Finally, I will describe the levels of unintended pregnancies and induced abortion rates among different socio-demographic subgroups of women that have will be extracted from two recent studies, conducted based on data from TSF (Erfani, 2011; Erfani forthcoming).

Some Preliminary Findings

Figure 1 shows that 69 percent of the reduction in the observed total fertility rate in the city of Tehran is due to contraceptive use, while delaying marriage (23%), postpartum infecundability (5%) and induced abortion (3%) accounts for the rest of the reduction in the total fertility rate. Other evidence in Table 1 indicates 61 percent of contraceptive users in 2009 used male-based contraceptive methods, namely withdrawal, condoms and vasectomy. Withdrawal is naturally and freely available and condoms can be purchased with a little cost from drug stores. This pattern of contraceptive use is common in all Iran's urban areas that comprise 75 percent of the country's population (IRMIDHS, 2012; SCI, 2012). Therefore, curbing the provision of family planning services is unlikely to increase fertility rates in urban settings, but it will affect women's fertility in the rural areas, where family planning services are "actively" delivered to women.

Figure 1.   Estimated age-specific fecundity rate, ASF(a), natural marital fertility rate, ASNMF(a), marital fertility rate, ASMF(a), and observed fertility rate, ASFR(a), Tehran, TSF 2009
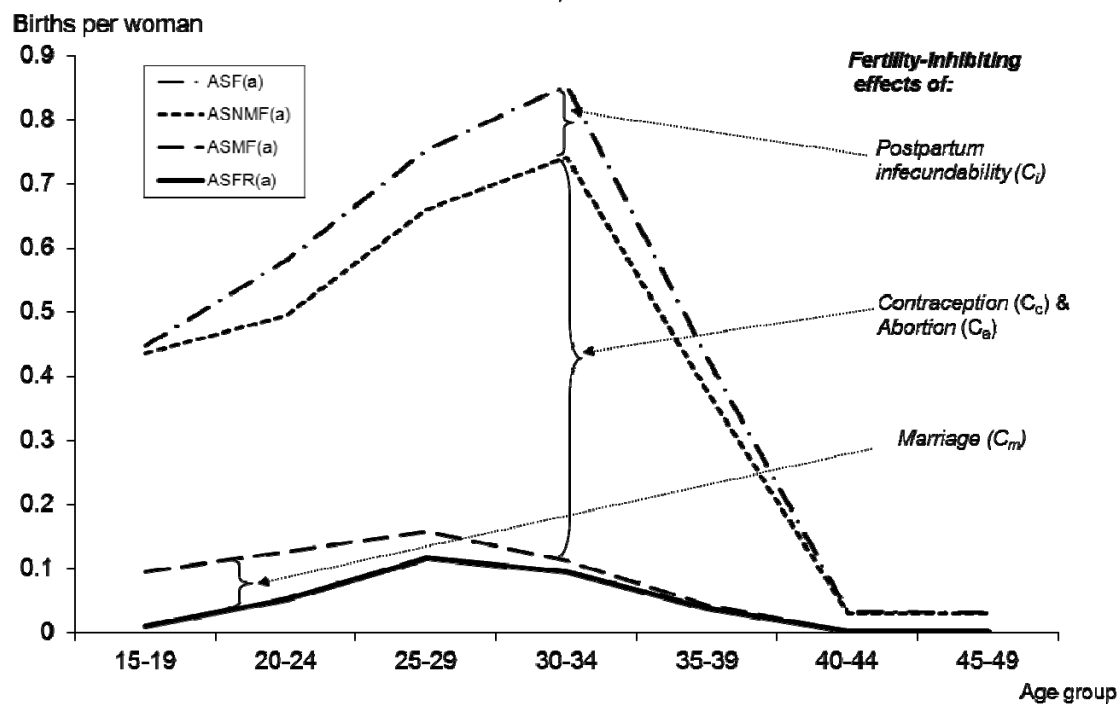
Births per woman

Table 1. Percent of contraceptive use by methods among married women aged 15-49 in the city of Tehran, Iran: 2000 and 2009

Contraceptive methods	2000 IDHS	2009 TSF	% change
Any methods	**77.6**	**85.3**	**+ 7.7**
Withdrawal	27.0	30.0	+ 3.0
Male condoms	6.0	16.0	+ 10.0
Male sterilization	5.0	6.0	+ 1.0
Female-based methods	39.0	33.0	- 6

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