

1-2008

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Recommended Citation

Erfani, Amir (2008) "Abortion in Iran: What Do We Know?," *PSC Discussion Papers Series*: Vol. 22 : Iss. 1 , Article 1.
Available at: <https://ir.lib.uwo.ca/pscpapers/vol22/iss1/1>

**Abortion in Iran:
What Do We Know?**

**by
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Discussion Paper no. 08-01

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January 2008

On the web in PDF format: <http://sociology.uwo.ca/popstudies/dp/dp08-01.pdf>

Policy brief presented at the workshop of the Population Reference Bureau (PRB) held in the annual meeting of Population Association of America in New York City, March 29-31, 2007.

Acknowledgments

This report was prepared when the author was a Policy Fellow in the PRB. Thanks are due to PRB, who provided this opportunity. The author also thanks Lori Ashford, Nancy Yinger and Jeremy Shiffman, who reviewed a draft of this report and suggested insightful comments.

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Overview

Annually, an estimated 73,000 induced abortions* are performed by married women of reproductive age in Iran. In addition to the post-abortion costs, which place a burden on the government, about 16 million dollars are spent annually by women in Iran to obtain these abortions, which are mostly illegal and unsafe. The extent of maternal mortality and health risks associated with unsafe abortions remain uncertain due to data limitations. To reduce clandestine, unsafe abortions, modern contraceptives should be supplied to provinces and sub-groups of the population with high fertility and low modern contraceptive use.

Introduction

While the total fertility rate of Iran dramatically declined from 5.3 children per woman in 1988 to 2.0 in 2000, unintended pregnancies accounted for 34 percent of all pregnancies in the whole country, with 16 percent as *unwanted* and 18 percent mistimed¹. There are strong indications that a number of these *unwanted* pregnancies are terminated by clandestine, unsafe abortions². Abortion complications have been widely recognized as one of the main causes of maternal deaths around the world. In effect, 13% of the maternal deaths from pregnancy-related causes which occur around the world each year are attributable to complications of unsafe abortions³. Many of these deaths occur in developing societies where abortion is often illegal and access to safe abortion is mostly denied to women with unwanted pregnancies. In Iran, abortion complications are also

* In this policy brief, the term “abortion” refers to “induced abortion”, as opposed to “spontaneous abortions” which are commonly known as miscarriages.

recognized as one of the main causes of maternal mortalities from pregnancy-related causes, responsible for an estimated 5.2 percent of maternal deaths⁴. However, data regarding the link between unsafe abortion and maternal mortality and morbidity are limited in Iran.

Recent shift in the technique for abortion from curettage to medical abortion in Iran has reduced to certain extent the health risks of abortions⁵. Nevertheless, women who were admitted to hospitals due to abortion complications experienced systemic side effects of abortion including nausea, vomiting, diarrhea, and lower abdominal cramps and massive vaginal bleeding. Many of the abortions were incomplete which led to infections and psychological distresses⁶.

Despite this limited information about incidence and health impact of abortion in Iran, the *national* and *sub-national* abortion rates and the demographic and health impact of abortions remain uncertain. These are because no reliable and accurate data on abortion are available, as abortion is illegal and highly restricted in Iran. In this situation, government agencies responsible for family planning and health programs are not able effectively to address the unsafe abortions.

This policy brief is based on the findings of a recent study⁷, which analyzed the 2000 Iran Demographic and Health Survey and used a demographic method referred to as the residual technique⁸. First, the brief gives an overview on the evolution of abortion policy in Iran. Then, the estimated national and provincial abortion rates and characteristics of

women who practice unsafe abortions will be presented. Finally, the policy implications of unsafe abortion in Iran will be discussed.

Abortion Policy in Iran

Although abortion and sterilization have been conducted in clinics since 1973 in Iran, granting an official license to individuals to conduct an abortion in clinics or hospitals started in 1976, when a new abortion law was introduced⁹. Based on this new law, an abortion was permitted either because of social reasons, or if the fetus is less than 12 weeks of gestational age and a third-party authorization, taken from parents or guardians, has been provided, or if the life of the mother is in danger due to her pregnancy.

After the 1979 Islamic revolution, the abortion law was changed and abortion was defined as a criminal offense, with penalties for the providers, and it was permitted only to save mother's life and if gestation was less than 4 months. Yet, there were many pregnant women who were carrying a fetus recognized with a disease which led to a still birth or a permanently disabled child. As a result, women wanted to abort their impaired and unhealthy fetuses, as taking care of a permanent disabled newborns would create such economic burdens and social pressures which they could not tolerate. Although the Legal Medicine Organization, affiliated to the judiciary system, has been granting a license for aborting an impaired fetus with specific diseases, almost half of the applicants for aborting legally their unhealthy fetus were rejected, as there was no inclusive law to recognize a wider range of fetus's diseases as legitimate reasons for abortion. Out of 245 women who applied for a legal abortion from the Legal Medicine Organization of Iran

from 1999 to 2000, only 126 women were given a license to obtain a legal abortion¹⁰.

Among the diseases for which an abortion was permitted, women's heart disease and fetus's thalassemia[†] were most likely to lead to a positive response.

To resolve this problem, the judiciary proposed a bill to the parliament in 2003 to legalize abortion in certain circumstances. Subsequently, in 2004, Iran's parliament passed a new law, named as "abortion-therapy", allowing a legal abortion to save the life of the mother *and* to prevent impaired and still births¹¹. According to this law, a woman is permitted to obtain a legal abortion if three expert physicians and a legal physician, appointed by the judiciary, accept that: 1) the mother or her fetus suffers from one of the diseases specified in the law, which jeopardizes the mother's life or will lead to a still birth or a seriously impaired child that would create "intolerable difficulties" for the newborns and their parents; 2) gestational age is less than 4 months and 10 days, when the fetus holds no soul according to the Islamic beliefs.

In effect, the abortion-therapy law is based on a religious legislation (*fatfa*), known as *osro-haraj* (i.e., intolerable difficulty), indicating that if a conception will lead to a permanently physically or mentally disabled newborn, and hence create "intolerable socio-economic difficulties and burdens" for the parents and the society, or endanger a woman's life, an abortion will be legally permitted before the gestational age of 4 months and 10 days. Should a woman meet these conditions, she will be allowed to abort her

[†] Thalassemia is an inherited disease of the red blood cells, where the genetic defect leads to reduced rate of production of normal globin chains and hence the blood cells are susceptible to physical injury and die easily. Blood transfusions on a regular basis (two to three week intervals) are used by many patients to tackle the disease and uphold a healthier lifestyle than living with no treatment.

fetus in a public hospital. The approval of this law can be considered as the first step toward legalization of induced abortion after the 1979 Islamic revolution in Iran. At the same time, it is also apparent that clandestine illegal abortions are still widely practiced.

Results

National and Provincial Estimates of Abortion

The national and provincial estimates of abortion rates are shown in Table 1. The total abortion rate for the whole country is 0.26 abortions per married woman. That is, married women, on average, have less than one abortion during their reproductive lifetimes. This rate can be translated into an annual general abortion rate of about 7.5 abortions per 1000 married women age 15-49 for Iran. Given that there are 9.76 million currently married women aged 15-49 in Iran (Statistical Center of Iran, 1996), it is estimated that 73,200 abortions are annually performed by married women in Iran.

These clandestine, unsafe abortions have serious health and economic consequences for both women and government agencies. Assuming a minimum cost of US\$ 200 per illegal abortion in Iran, we estimate that about 16 million dollars are annually spent by individual women to have 73,000 abortions. The high cost of abortion in Iran is mainly due to the fact that a woman needs to purchase an injectable medicine from the black market, or pay a large amount of money to an illegal health practitioner to abort her unwanted pregnancy. It should be noted that post-abortion health services also entail considerable costs for both individuals and government, which have not been taken into consideration here.

Induced abortion has reduced the total fertility rate of Iran from 2.2 to 1.98 children per woman. Although the demographic impact of abortion for the whole country is low, the incidence of induced abortion varies widely across 28 provinces and the city of Tehran (see Table 1). There is a range of abortion rates across the provinces of Iran, from rates of zero in eleven provinces to greater than one abortion per woman in Sistan-Baluchestan and Hormozgan. In 16 provinces and the city of Tehran, the total abortion rates are less than one abortion per woman, ranging from 0.03 abortions per woman in Zanzan to 0.8 in Guilan.

Table 1. Fertility and estimated abortion rates by province among currently married women aged 15-49, Iran 2000

Province	TAR	GAR	TFR
Azarbayejan (West)	0.00	0.0	2.5
Khuzestan	0.00	0.0	2.5
Kerman	0.00	0.0	2.4
Khurasan	0.00	0.0	2.4
Charmahal-Bakhtiari	0.00	0.0	2.1
Semnan	0.00	0.0	2.1
Yazd	0.00	0.0	2.2
Ardebil	0.00	0.0	2.0
Ghom	0.00	0.0	2.6
Golestan	0.00	0.0	2.3
Zanjan	0.03	0.8	2.0
Hamedan	0.09	2.4	1.8
Kermanshah	0.11	3.1	1.8
Kurdestan	0.11	3.1	1.9
Ilam	0.12	3.3	1.8
Tehran (excl. City)	0.14	3.9	2.0
Lorestan	0.22	6.2	1.9
Markazi	0.24	6.8	1.7
Azarbayejan (East)	0.24	6.8	2.1
Ghazvin	0.24	6.8	1.8
Kuhgiluyeh	0.35	10.0	2.2
Esfahan	0.41	11.6	1.7
Mazandaran	0.44	12.6	1.7
City of Tehran	0.57	16.3	1.3
Bushehr	0.67	19.1	2.2
Fars	0.75	21.4	1.7
Guilan	0.80	22.8	1.4
Hormozgan	1.42	40.6	2.7
Sisatn-Baluchestan	1.62	46.3	4.1
Iran	0.26	7.5	2.0

Notes: **TFR** = observed total fertility rate (the average number of children per woman at the end of the reproductive years), calculated from births that occurred in the one-year period preceding the survey.; **TAR** = total induced abortion rate (the average number of induced abortions per woman at the end of the reproductive years); **GAR** = annual general abortion rate per 1000 currently married women.

Source: Erfani (2006).

Socioeconomic Variations in Abortion

The results in Table 2 show variation in abortion by women's education, place of residence and employment status. Although educational variation in abortion rates is not

significant, the abortion rate is two times greater among urban and employed than among rural and unemployed women.

Table 2. Fertility and estimated abortion rates by schooling, residence and employment among currently married women aged 15-49, Iran 2000

	TFR	TAR	GAR
Years of Schooling			
None	3.0	0.73	20.9
1-5	2.2	0.54	15.5
6-11	1.8	0.72	20.6
12+	1.5	0.67	19.2
Place of Residence			
Urban	1.8	0.79	22.7
Rural	2.3	0.40	11.4
Employment Status			
Unemployed	2.0	0.56	16.0
Employed	1.6	1.10	31.5

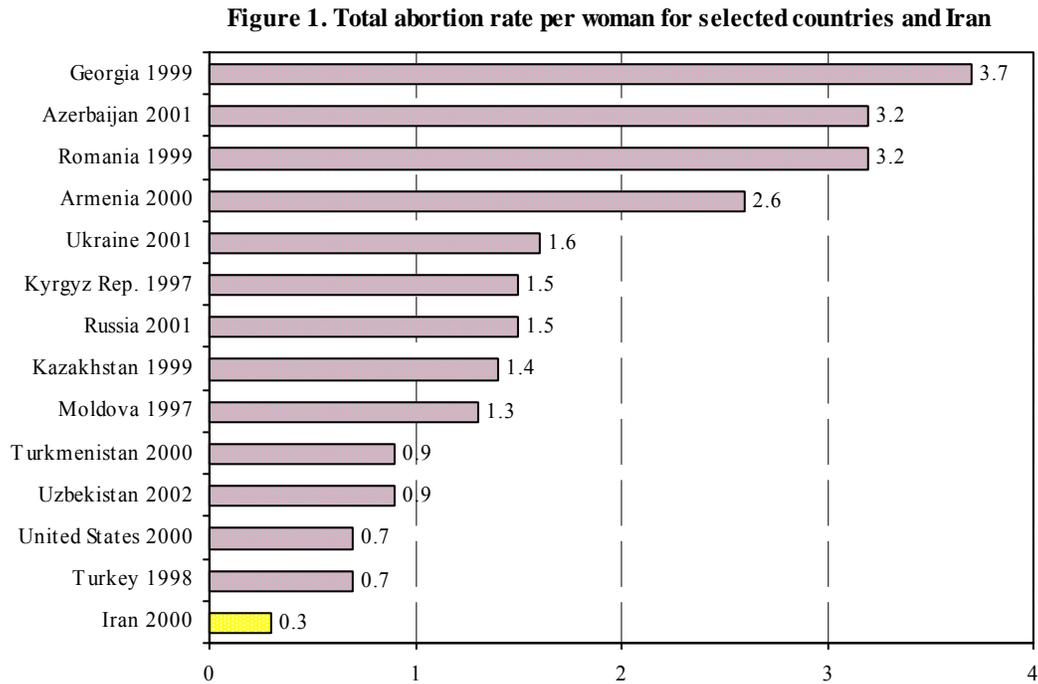
Notes: **TFR** = observed total fertility rate (the average number of children per woman at the end of the reproductive years), calculated from births that occurred in the one-year period preceding the survey.; **TAR** = total induced abortion rate (the average number of induced abortions per woman at the end of the reproductive years); **GAR** = annual general abortion rate per 1000 currently married women.

Source: Erfani (2006).

Contraception and Abortion

Abortion is a function of three direct determinants, namely couples' fertility preferences, the prevalence and effectiveness of contraceptives used to practice their reproductive preferences, and the probability of undergoing an abortion when a contraceptive fails or is not used¹². In effect, prevalence of contraceptive use is inversely related with incidence of abortion. As Figure 1 shows, compared with 12 countries in the Central Asia and Eastern European and the United States, Iran has the lowest induced abortion rate. The total abortion rates in these countries are strongly associated with use of modern

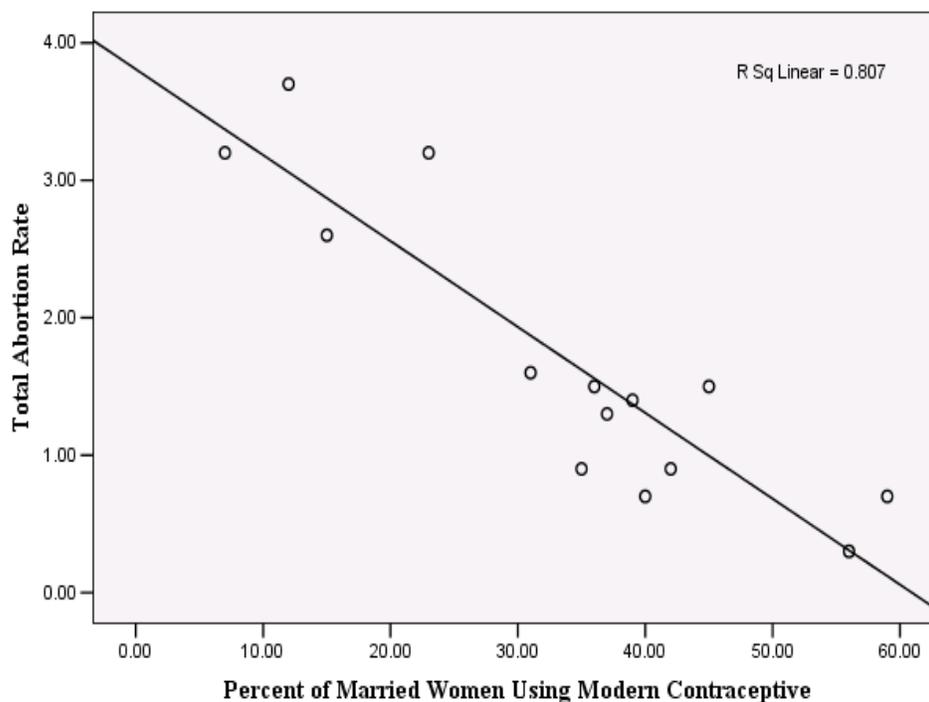
contraceptives (see Figure 2). The abortion rate decreases as the use of modern contraceptives increases. As expected, there is a very strong inverse correlation between the use of modern contraceptives and the total abortion rate in these 14 countries.



Notes: Rates are based on the three years preceding the survey for women age 15-44. In Russia and the United States rates are for that year, and estimate of rate for Iran is for women age 15-49.

Source: Rate for Iran was taken from Table 1 and rates for other countries were directly taken from Westoff (2005).

Figure 2. Relationship between total abortion rate and percent of married women using modern contraceptive for selected countries and Iran



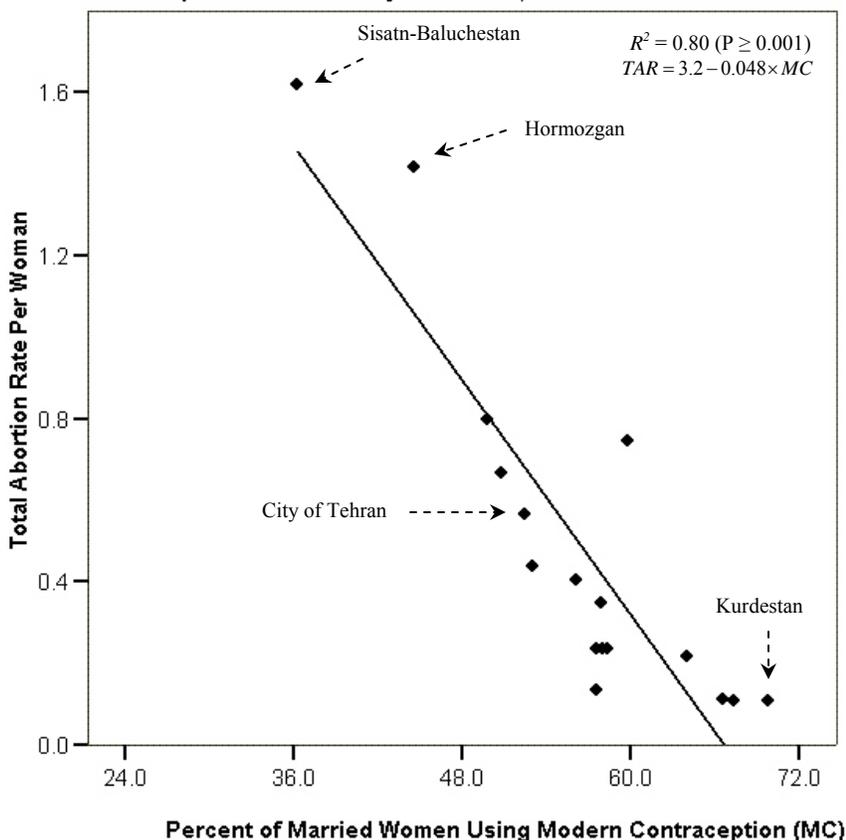
Source: The percentage and rate for Iran were taken from Erfani (2006), and percentages and rates for other countries were directly taken from Westoff (2005).

A similar inverse relationship between contraception and abortion exists in the provinces of Iran. That is, the total abortion rate decreases as use of modern contraceptives increases[‡] (see Figure 3). A 10 percent increase in the use of modern contraceptive methods (with an average contraceptive use-effectiveness of 92%- meaning 92% of women would not become pregnant within a year using contraceptive methods- leads to a decline of 0.48 in the total abortion rate (i.e., less than one abortion). Appropriately, we can say that a 20% increase in modern contraceptive use results in a decline of almost one

[‡] Provinces with zero value on total abortion rate (TAR) were excluded from the analysis of linear relationship between abortion rate and modern contraceptive prevalence to avoid violating the linearity assumption in regression analysis.

abortion per woman in her reproductive lifetime. This finding is close to the estimate of Bongaarts and Westoff (2000), suggesting that a 10 percent increase in contraceptive prevalence rate leads to a decline of 0.45 in the total abortion rate, given very similar assumptions. Although one would normally expect a high degree of failure among women relying on coitus interruptus, commonly known as withdrawal, and therefore a higher rate of abortion, this does not appear to be the case in certain provinces and city of Tehran. This implies that the use-effectiveness of withdrawal seems to vary among provinces and sub-population of Iran, which needs to be examined in further research.

Figure 3. Relationship between total abortion rate (TAR) and Percent of married women using modern contraception (MC) for 18 provinces and city of Tehran, Iran 2000



Source: Erfani (2006).

Religiosity[§] and Abortion

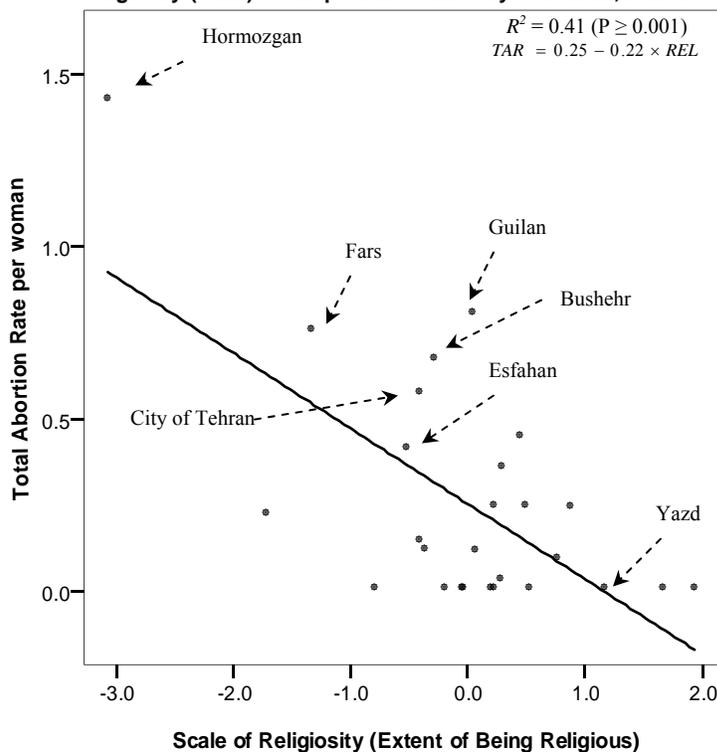
The estimated total abortion rates for 10 provinces are almost zero (see Table 1). One of the reasons for abortion rates of zero is that these provinces are more religious than other provinces. Thus, as abortion is against religious beliefs and hence is stigmatized in traditional and religious contexts, the *probability* of an abortion following an unwanted pregnancy is expected to be lower in these 10 provinces, compared with the rest of

[§] "Religiosity" refers to how religious a person is. A scale of religiosity was developed to measure to what extent people in a province are religious, using data pertaining to two questions in the World Values Survey: 1) "How important is religion in your life?" And 2) "How often do you attend religious services?" The values of developed scale ranges from -3.0 (weak religiosity) to +2.0 (strong religiosity). The methodological details of construction of the scale have been discussed elsewhere (Erfani, 2006).

provinces. There is a significant inverse relationship between the total abortion rate and the degree of religiosity in 26 provinces of Iran, indicating the higher the extent of being religious, the lower the total abortion rate (see Figure 4).

The other reason for the abortion rate of zero in the 10 provinces of Iran is the high use of modern contraceptives in 5 out of the 10 provinces. Although withdrawal has been effectively used in Iran, particularly in certain religious provinces of Yazd, Ghom, Semnan, and Kerman and certain socio-economic and demographic sub-groups of population, it is not possible to draw a general, reliable conclusion on the effectiveness of withdrawal in Iran, since there is no information available for measuring the use-effectiveness of withdrawal.

Figure 4. Relationship between total abortion rate (TAR) and religiosity (REL) for 26 provinces and city of Tehran, Iran 2000



Source: Erfani (2006).

Conclusion

These findings clearly tell us that induced abortion is carried out in secret and unhealthy conditions in Iran, which seriously endangers the health of 73,000 married women annually. Moreover, these clandestine, unsafe abortions have economic consequences for both women and government agencies. Although the demographic impact of abortion is known, the health consequences of unsafe clandestine abortions are not very clear.

The strong inequality in abortion behaviour of Iranian women across provinces needs to be addressed. The provinces and sub-groups of populations identified with high abortion rates need to be addressed by sensitive local health and family planning programs.

Further reduction in unsafe abortions relies on increasing the use of modern contraception.

To reduce unsafe abortions, the Ministry of Health of Iran needs to tailor the current health and family planning policies and programs in the short run in the way that to develop more sensitive and local programs targeting certain provinces and areas with high abortion rates. As practical actions, modern contraceptives should be supplied in provinces with high fertility and low prevalence of contraceptive use, such as provinces of Sistan-Baluchestan, Hormuzgan and Bushehr. In addition, family planning services and contraceptive information need to be improved among urban and employed women through health centers, places of work and media. Also, the urban and employed women should be encouraged to shift from traditional to modern methods and be trained about use of emergency pill in the case of a risky intercourse. The emphasis could be placed on modern contraceptive methods and emergency contraception in the required counseling for pre- and post-marital couples. Finally, development of effective programs to deal with health consequences of unsafe and clandestine abortions requires precise information, which should be provided by further researches focusing on health and economic consequences of abortion. The data coming from such studies would help policy makers how to reduce the economic burdens and health risks of unsafe abortions,

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