

Men and Family Planning in Iran

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Abstract

Having followed a pronatalist policy during the first decade of its life, the Islamic Republic of Iran adopted a frankly antinatalist policy with specific demographic and health objectives in 1989. The official Family Planning Programme reintroduced since then has proven exceptionally effective by international standards. By 1997, when the last nation-wide KAP survey was conducted, contraceptive prevalence rate had risen to just under 75 percent of all currently married couples, most of the couples were using modern contraceptives and the traditional gap between urban and rural areas had all but disappeared.

Because of the primary emphasis of the programme on women and its reliance on a cadre of community-based female health workers (in rural areas) or female volunteers (in urban areas) as family planning promoters and service providers, men would seem to have been largely neglected by the national programme. Nevertheless, despite their apparent exclusion, Iranian men have played a major role in the success of the programme. The aim of this paper is to review available data on the relative contribution of men in Iran's family planning programme.

The main source of data are the nation-wide KAP surveys conducted by the Ministry of Health in 1992, 1994, 1996 and 1997. Results of smaller scale but nationally representative surveys conducted in 1976 and 1989 are used to establish comparable base rates for previous time periods. Similarly small scale surveys carried out in Fars province by the authors in 1996-1997 are used to provide more detailed information on the couples using male methods.

The results indicate that, in 1997, male method users accounted for one-third (33.5%) of all contraceptive users, its relative share being much higher (40.3%) in urban areas than the rural (20.1%). The majority of male method users (69.8% of all, 71.3 in urban and 64.9% in rural areas) were, however, relying on the "traditional method" of coitus interruptus. In urban areas, 21.0% of all male method users were using condoms and 7.7% had undergone vasectomy. Corresponding figures for rural areas are 27.5% and 7.6%, respectively. The share of male method users of all contraceptive users varied considerably across the 27 provinces. For the urban population, the range was from about 10% (in Ilam and Baluchistan provinces) to over 47% (in Gilan province). For the rural population the range varied from less than 3% (in Kohgiluyeh province) to over 33% in Yazd province). There is a strong positive correlation between the level of development and relative prevalence of male methods. Provinces occupying the highest position in terms of male method use score significantly higher than those occupying the lowest position with respect to such measures of development as urbanization, literacy rates of men and women and access to electricity, piped water, gas, and telephone. At the same time, despite the fact that the majority of male method users depend on coitus interruptus, provinces with higher male method use rates demonstrate a much lower fertility rate.

If the 27 provinces are divided into three equal groups in terms of the prevalence of male methods, the following nine provinces appear to occupy the top position: Yazd (40.5%), Isfahan (39.4%), Qom (38.8%), Tehran (36.2%), Gilan (33.2%), Markazi (32.2%), Semnan (30.1%), Mazandaran (26.5%) and Kerman (26.3%). In two other provinces (Ghazvin, 26.2% and Khorasan, 25%) too about 25% of all women were using one of the three male methods. On the other extreme, the lowest rates of male method use belong to the following nine provinces: Sistan & Baloochistan (5.7%), Kohgiluyeh & Boyerahmad (7.2%), Ilam (7.7%), Kurdistan (10.4%), Ardabil (10.9%), Kermanshah (12.3%), Zanjan (12.4%), Loristan (12.8%) and Chaharmahal & Bakhtiari (13.9%). The male method prevalence rates of the remaining nine provinces fell between 26.2% and 14.8%.

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Introduction,

Until recently, family planning programs had generally addressed women as their main target groups. Despite research bearing on the importance of husband-wife communication and joint decision making that was carried out in 1970s, men had remained as the “neglected half” of the population in most countries. It is only during the past two decades that the importance of addressing men as a major target group for reproductive health programs and persuading them to play a more active and responsible role in family planning has been taken seriously. Two events have played a central role in this process. On the one hand, inspired by the feminist ideology, increasingly large numbers of women have struggled for joint responsibility taking by men for various household duties, including family planning. On the other hand, the breakout of the HIV/AIDS epidemic has led to a renewed recognition and acceptance of the prophylactic value of condom, the oldest and often disliked male method of contraception. The effect of these developments can be clearly seen in the recommendations of the ICPD (UNFPA, 1994).

The traditional neglect of male methods by modern family planning programs does not, however, mean that men have always refused to take a leading role in contraceptive and other reproductive health decisions. There are historical instances where couples have almost exclusively relied on male methods for birth prevention. This is clearly seen in the early history of family planning in most European countries where such contraceptive strategies as periodic abstinence, rhythm and withdrawal could hardly be effectively practiced without the active participation of men. Even in such traditionally male dominated societies as Japan, until recently couples had almost exclusively relied on condom as the main method of fertility regulation, backed by ready availability of abortion for cases of method failure.

There is however a lingering tendency to underestimate the contribution of men to family planning and contraceptive use. Traditional societies known for male dominance in economic and marital relations are particularly likely to be singled out for special concern in this respect. Most Muslim societies are usually classified as part of the latter group. But there is growing evidence that this view of the traditional Islamic societies as being exceptionally pronatalist or wanting in male participation in family planning may have been exaggerated. This paper aims at a review of the historical and current evidence on the contribution of men to family planning decisions and practice in Iran, a typical Islamic society that has taken a radically traditional approach -frankly inspired by Islamic teachings and ideals- to development since late 1970s.

Historical Background

Iran was one of the first major Middle Eastern countries to be conquered by Muslim Arabs and to accept Islam during the first decades of the Islamic era. Since then, despite their remarkable ability to maintain their national language and cultural identity, the people of Iran have shared Islamic values and practices with other nations of the area. This includes Islamic teachings on family formation and reproductive norms and practices. And, contrary to their male chauvinist reputation, male participation in family planning has a long recorded history going back at least to the beginning of Islamic period in Iran and other parts of the Middle East. The prophetic narratives (*hadith nabavi*) concerning the practice of “Azl” (Arabic word literally meaning “climbing down” or withdrawal, *coitus interruptus*) by some of the companions of prophet Muhammad and his approval of their practice bears witness to this contention (Omran, 1992). Repeated discussions of Azl by almost all major Islamic jurists (*Fughaha*), including Imam Ghazali and even some of the *infallible Imams* of the twelver school of Shi’ism now dominant in Iran (Mehryar, 2001), in earlier centuries provides further evidence of the willingness of Muslim men to take responsibility for fertility regulation.

In this context, it may be of interest to note that almost all discussions of Azl as a means of deliberate fertility regulation in early Islamic jurisprudence refer to male companions of the holy prophet who were concerned about the religious implications of this practice. In the first recorded narrative (*hadith*) bearing on this topic it is a man by the name of Al-Jaber, who declares that “we were practicing Azl during the life of the [holy] prophet while the holy Quran was being sent down (i.e., revealed)”. This statement has traditionally been taken to mean that there was nothing against Azl and family planning in the holy Quran. The second oft-quoted narrative concerns a man who shares his concern regarding the practice of Azl and family planning with the holy prophet and asks for his counsel. According to the narrative, he admits to have avoided having another child for five years since his last child was born. His reason for this is the insistence of his wife who was concerned that getting pregnant may interfere with her ability to breast feed her child and thus jeopardize his health. The holy prophet is reported to have assured him regarding the propriety of the practice. In addition to these, there are several traditions attributed to the holy prophet according to which he has tacitly approved of the practice of Azl (See Omran, 1992, Pp. 118-123).

The Shiite jurists writing on the subject have added narratives (*ravayat*) bearing on the acceptability of the practice from the twelve *Imams* regarded as sacred (infallible) as the holy prophet by the *twelver* Shiite Muslims (Mehryar, 2001). Thus, in response to a question on the appropriateness of Azl by one of his clients, Imam Jafar-al-Sadeq (d.765 AD), the sixth imam and founder of the twelver Shiite school of theology, is quoted as saying “This is up to the man, he can do however he wants” (Ayazi, 1994, P. 49). In another *ravayat* attributed to the fifth infallible Imam, Muhammad al-Baqir (d.737 AD), he is quoted as saying: “There is no problem with practicing Azl with a free woman (i.e., regular wife) even if she does not like it, if her husband desires to do so.” (Ayazi, 1994, P. 50). According to another *ravayat*, one of the clients of Imam Jafar-al-Sadeq asks him

“What do you say about Azl?” The Imam responds “[My great grand father] Ali did not practice Azl, but I do”. (Ayazi, 1994, P. 51).

One of the most eminent Islamic jurists who has given a full description of the pros and cons of Azl is the great Islamic philosopher and theologian Al-Ghazali (d. 1111 AD) According to Al-Ghazali, *Azl* or birth control is not wrong or against the basic tenets of Islam as long as it is practiced for a proper reason. He mentions five different motives for the practice of family planning. These are:

1. To avoid financial loss due to the automatic liberation of a female slave in case she gets impregnated by her owner;
2. To help save the beauty and happiness of the wife and her husband and to guard against potential harm to the life of woman that may result from pregnancy;
3. To avoid emotional strains and fatigue which might be caused by a large number of children and numerous pregnancies;
4. Fear of having a female child and the social disgrace associated with it;
5. Reluctance of the wife to have children because of her pride or obsession with cleanliness and fear of discomfort associated with bearing and rearing children.

According to Al-Ghazali only the last two motives for avoiding pregnancy are inappropriate and do not justify the practice of *Azl*. The first reason, that is sex with a slave woman, would seem to have been a major reason for the use of withdrawal and probably other methods of contraception and pregnancy termination. According to Islamic jurisdiction a slave woman automatically becomes free if she gives birth to a child that is produced by her master. Thus, an unintended pregnancy not only would result in the additional responsibility of parenthood but would also deprive the man from all the legal rights of owning a slave woman. The use of withdrawal was also not conditional on the “informed consent” of the slave women as it was in the case of free women. Despite the disappearance of slavery in Iran and other Muslim countries, this distinction is still maintained and emphasized by present day *fatwa*'s on the propriety of *Azl*.

The motives mentioned above provide some indication of the circumstances that necessitated the practice of *Azl* (and probably other forms of contraception) in traditional Islamic societies. The two motives found inadmissible by Al-Ghazali and most other Islamic jurists as sound grounds for contraception, that is fear of bearing a girl and the obsessive fear of cleaning and maintenance of the child, reflect basic Islamic opposition to gender preference and unnecessary concern with cleanliness (*taharat*). Al-Ghazali goes on to extend his disapproval to the behavior of women who refuse to marry because of a concern that marriage would put them at a lower position vis-a-vis men (Ketabi, 1998).

There is no doubt that the reasons given by Al-Ghazali continued to force many couples to resort to withdrawal and other traditional methods of contraception. This is clearly reflected in medical textbooks written in Arabic and Persian during the third and fourth centuries of the Islamic era. Omran (1992, Pp. 173-174) has given a selected list of the

early medical texts written by Muslim physicians which include a discussion of contraceptive methods and health considerations for pregnancy prevention. The list includes over a dozen texts written by authors who lived from the 9th to the late 16th centuries. Among these is the well known *Al-Qanun* by the Prince of Islamic Physicians Abu-Ali Sina who is known to have been an Iranian and staunch believer in Shiism.

These medical texts cover not only coitus interruptus but also primitive forms of such current methods as condom, cap, and diaphragm as well as the use of certain chemicals to augment the effectiveness of withdrawal. For example, the earliest general medical textbook in modern Persian (entitled *Hidayt-al-Muta'llemin fil-Tibb*, or Students' Guide to Medicine) written around 985 AD (and not included in Omran's list) has devoted a whole page to the description of "*measures taken by women to avoid pregnancy*". The methods described include insertion of the half-shell of a walnut attached to a string to block the entrance of uterus; the use of a cow's bladder (*zahreh*) to cover the penis and to prevent the semen from entering the uterus; and to withdraw and emit semen outside the vagina. Mention is also made of several natural substances (chemicals, drugs) used to anoint the vagina or penis prior to coitus in order to kill the semen (Mehryar, Moharreri & Khajavi, 1992). The early predecessor of condom mentioned in this medical text would seem to have been known outside medical circles as well. Al-Ghazali has made repeated references to a similar device.

References to family limitation motives also abound in literary texts. In a well-known piece of poetry, the famous Persian poet Saadi Shirazi () has described the deep sorrow experienced by a man on hearing that his young child had broken teeth and needed feeding . The comforting advice "*Don't worry, He who gives teeth will also provide bread*" offered by his wife has become a proverb that is widely used even today. Around the same period, the great Sufi poet, Jalal-ud-Din Rumi () described the allegorical story of a rich merchant who had instructed his daughter how to avoid getting pregnant by watching the eyes of her husband and withdrawing as soon as they started to change color, a supposed sign of imminent ejaculation! When the method failed and the angry father scolded her for being careless, the girl responded "*But father, by the time his eyes started changing colors, my eyes had gone completely blind*", a subtle reference to orgasm.

With the introduction of syphilis and other venereal diseases to Iran by Portuguese sailors occupying the Hormoz island during the 16th century, Iranian men would seem to have found a new motive to be careful about their sexual contacts. For the first time in the history of Iranian medicine, Iranian physicians of the Safavid period (1550-1780) devoted a separate part of their textbooks to the frightening new disease that had become known as "*Kufte Ferangi*" [the French (or European) disease] (Elgood, 1970). Judging by the accounts of European physicians that worked in Iran during the 19th century (e.g., Polak, 1865/1982), venereal diseases continued to be frighteningly rampant during that period. In early twentieth century they were so common and well known that almost all doctors advertising their services in mid-1930s found it useful to include additional expertise in treating STDs among their specialties! This is not surprising in view of the fact that until the triumph of Islamic Revolution, most Iranian cities had a publicly known "red-light"

district. In response to the problem, Iranian authorities had decided to put these red light districts under police control and require women working there to undergo regular tests for STD. A similar STD test was also required from all men and women getting officially married. But the STD testing services were only available in major urban centers. Despite the increasing familiarity with condoms, STDs remained a major source of concern particularly among physicians working with the army until late 1950s when penicillin became widely available.

Condom, known by its French name “capote”, would seem to have been introduced into Iran during the First World War and has been used by increasing numbers of men engaging in illicit sexual relations since then. While men visiting known sex workers in urban centers used condom to protect themselves against STDs, many others used it in illicit premarital or extramarital relations to avoid unwanted pregnancies that would have forced them to marry their sex partner. Gradually a large number of educated men concerned with family limitation adopted condom as a birth control method within marital relations. Although since 1940s condom had become widely available through pharmacies, its historical association with illicit sex and prostitution prevented many men from using it.

Men and the Modern Family Planning Program

Thus, long before a national family planning program was initiated in mid-1960s, most Iranian men had known some traditional methods of birth control (coitus interruptus) and many of them had heard of and could obtain condom from chemists as well as street corner vendors. Such knowledge of and access to condoms was no doubt initially limited to better educated urban men. With the introduction of the compulsory military service in early 1930s increasingly large numbers -if not all- of the young men from rural and tribal areas were also forced to spend about two years of their life in military training camps and barracks situated in urban areas and thus became exposed to commercial sex and the need to use a condom. As a result, when a national family planning program was initiated in 1967 Iranian men were probably well prepared to accept and use the only modern male contraceptive then available. Nevertheless, because of the priority given women and female contraceptives by the program, the number of men attracted by the program remained at a relatively low level. In fact, as the main target of the program was women, men using condoms for family planning were expected to get it through their female partners.

Because of the availability of condoms through such private sources as drugstores and supermarkets, official statistics on family planning services in pre-Revolutionary period often do not include condom (Nortman & Hofstatter, 1976). There is however some data on its use during this period. According to the *Iran Fertility Survey (1976)* conducted during the last years of the old regime, 37% of Iranian couples (55% of the urban as compared with 20% of the rural) were using a contraceptive. Of these, about 11% (14% in urban areas as compared with just over 2% of the rural) were using condom. An even larger proportion (31.7% in urban areas as compared with 15.5% in rural areas) were

relying on withdrawal for contraception. Vasectomy was introduced in early 1970s but was not accepted widely, partly because it was popularly mistaken for castration and loss of virility. In 1976 only about 0.1 percent of women, all of them urban, reported that their husbands had undergone vasectomy. Thus, over 45% of urban and 17% of the rural couples were relying on a male method.

The misconception regarding the equivalence of male sterilization with castration was also partly responsible for the disapproval of male sterilization by the religious leaders who had no qualms to approve of family planning in general and use of most other modern methods as long as both partners agreed and there was no harm to the mother. It may be of some interest to note that this misconceived rejection of vasectomy by religious authorities was explicitly noted and rejected by Sheikh Mohammad Hossain Bahishti in his presentation at the Rabat Conference on Islam and Family Planning in 1971 (Nazer, Karmi, & Omran, 1974). Later on, Sheikh Mohammad Hossain Bahishti emerged as one of the most influential leaders of the Islamic revolution, and served in such important positions as the member of the Revolutionary Council, Speaker of the Constitutional Assembly, Head of the Judiciary System, and the General Secretary of the powerful Islamic Republican Party until his untimely assassination in 1981. The acceptance and promotion of vasectomy by the official family planning program launched in 1989 owes much to the open-minded clergy like him and the late Imam Khomeini who also had endorsed it in his reply to a question raised by a MOH official in 1980 (Ashofteh-Tehrani, 1964; Mehryar et al, 1999).

After the Revolution

After the Revolution, although the official family planning program was suspended, the government continued to offer family planning services, including free or heavily subsidized contraceptives, through its maternal and child health facilities. This was based on the *fatwa* (formal approval) obtained from Imam Khomeini and several other top Ayatullahs by some members of the MOH regarding the legitimacy of birth control in general and the use of both withdrawal and such modern methods as pill, IUD and condom. Due to continuing doubts regarding the permissibility of sterilization, tubectomy and vasectomy were excluded from the list of freely provided methods but they could be obtained from the private sector. Condoms were not only freely provided by the government run MCH centers, but they were also easily available through drugstores and street corner supermarkets at relatively cheap prices. Thus, urban couples who for one reason or other did not want to visit a public MCH center had no problem in getting contraceptive pills from a private clinic or buying condoms from a local chemist, supermarket, or street corner vendor. As an indication of the government commitment and contribution to family planning services during the period 1979-1988 (when there was no family planning program and the religious leaders were explicitly calling for earlier marriage and unlimited reproduction) it may suffice to note that according to official statistics kept by the MOH, between 1979-1989 over 54 million boxes of pills and some 6 million packages of condoms had been distributed by the publicly run MCH clinics (Ladier-Fouladi, 1996, Table 9; Mehryar et al, 1995; Mehryar et al, 2000).

These officially provided devices as well as those available through the private sector and the market were in no way sufficient to meet the need of an enlarged population. It is thus quite safe to assume that an even larger proportion of couples resorted to traditional methods, mainly coitus interruptus, during this period. There is in fact some evidence that supports this expectation. In 1989, almost simultaneously with the official revival of the family planning program, the MOHME conducted a nation-wide KAP survey on a sample of 8,876 married women aged 15-49. The survey revealed a surprisingly high level of contraceptive awareness and use. Close to one half of all women (64% of the urban and 31% of the rural) reported that they were using a contraceptive method. Thus, contrary to the claims that family planning had been totally suppressed during the first decade after the revolution, the proportion of women using a contraceptive had almost doubled between 1976 and 1989 (Table 1).

Table 1. Contraceptive Prevalence Rates Revealed by National KAP Surveys Conducted in Iran between 1976-1997.

<i>Region/Year</i>	<i>1976</i>	<i>1989</i>	<i>1992</i>	<i>1994</i>	<i>1996</i>	<i>1997</i>	<i>2000</i>
Urban	53.8	64.0	74.1	77.6	78.0	78.0	77.4
Rural	19.9	31.0	51.5	63.5	65.0	64.0	67.2
Total	37.0	49.0	64.6	72.3	74.6	74.0	73.8

Source: MOHME, 1998; Aghajanian & Mehryar, 1999.

The rise was, however, partly due to a considerable increase in the proportion of women using male methods. About 12% of urban women (as compared with 8.3% of the rural) reported using condoms. A much larger proportion (42% of urban and 25% of the rural) reported using withdrawal. From the 1989 survey it is obvious that, even at the absence of an official family planning program, a large proportion of Iranian couples had continued to use family planning methods, most of them such modern methods as the pill, condom and IUD. *More important, almost half (48%) of all couples using a contraceptive (53.5% of urban and 33.6% of rural) had relied on a male method for protecting themselves against unwanted pregnancy.* As sterilization had not yet been officially sanctioned, no question was asked about it (Bulatao & Richardson, 1994, Table 8; MOHME, 1998).

Table 2. Contraceptive Prevalence Rates by Modern/Traditional Distinction, 1992-1997

Region	1976		1989		1992		1994		1996		1997		2000	
	Mod	Trad	Mod	Trad	Mod	Trad	Mod	Trad	Mod	Trad	Mod	Trad	Mod	Trad
Urban	34	21	33	31	47	27	52	26	54	24	54	24	55.2	22.2
Rural	15	5	21	10	41	10	52	10	55	10	55	9	57.3	10.0

Source: MOHME, 1998; Aghajanian & Mehryar, 1999.

A larger KAP survey conducted by the MOH in 1992 on a national sample of 36,000 married women aged 15-49 only three years after the official inauguration of the family planning program, indicated a substantial rise in contraceptive prevalence rates. Almost

two-thirds (64.6%) of all women (74% of the urban as compared with 51.5% of the rural) reported using a contraceptive. About one tenth (10.8% of urban and 8.2% of rural couples) reported using condom. Although there is no specific information on the proportion of couples relying on withdrawal, one can safely assume that the overwhelming majority of cases coded under “other methods” (36.4% of urban and 20.2% of rural) were most probably using withdrawal. Male sterilization was not still offered as part of the official program and there is no information on the number of couples using this method in the 1992 survey. The share of female sterilization had, however, climbed to 10.4% and 14.4% of urban and rural contraceptive users, respectively (Bulatao & Richardson, 1994, Table 8).

Annual KAP surveys on large samples of urban and rural married women aged 15-49 conducted in 1996 and 1997 have shown that the trend in contraceptive use has continued to grow. The large-scale demographic and health survey carried in late 2000 (Mehryar, et al, 2001) has confirmed these findings. Tables 1 and 2 summarize the main findings of the seven major surveys carried out since 1976. Table 3 gives the share of main male methods, that is condom, vasectomy, and withdrawal, used by Iranian couples during the period covered by these surveys. As indicated in Table 3, male methods had accounted for 46% of urban and 17% of rural contraceptive users in the last survey conducted before the Revolution (The 1976 Iran Fertility Survey). By 1989, two-thirds of urban and one third of rural couples had reported using a male method. The use of these male methods by the rural couples had almost doubled during the first decade after the Revolution when there was no official family planning program. Interestingly, during the same period, while the proportion of condom users had decreased slightly (from 14% to 12%) in urban areas, it had experienced a fourfold increase (from 2% to 8%) in rural areas. Meanwhile the proportion of couples using traditional methods (mainly coitus interruptus) had increased by about 10% in both urban and rural areas.

Table 3. Share of Male Method Users of All Contraceptive Users in Iran, 1976-1997

<i>Year</i>	<i>Urban Areas</i>	<i>Rural Areas</i>
<u>1976 Survey:</u>		
Condom	14.0%	2.0%
Withdrawal	31.7%	15.5%
Vasectomy	00.0%	00.0%
Total	45.7%	17.5%
<u>1989 Survey</u>		
Condom	12.0%	8.3%
Withdrawal	42.0%	25.0%
Vasectomy	00.0%	00.0%
Total	54.0%	33.3%
<u>1992 Survey</u>		
Condom	10.8%	8.2%
Withdrawal	36.4%	20.2%
Vasectomy	00.0%	00.0%
Total	46.4%	28.4%
<u>1996 Survey</u>		
Condom	12.0%	6.4%
Withdrawal	24.2%	9.5%
Vasectomy	4.3%	1.8%
Total	40.5%	17.7%
<u>1997 Survey</u>		
Condom	12.0%	8.3%
Withdrawal	42.0%	25.0%
Vasectomy	4.3%	1.8%
Total	58.3%	35.1%
<u>2000 Survey</u>		
Condom	9.3	5.3
Withdrawal	27.8	13.9
Vasectomy	4.4	1.8
Total	41.5	21.0

Source: MOHME, 1998; Aghajanian & Mehryar, 1999.

By 1996 almost 75% of all married women aged 15-49 (81.0% of urban vs. 71.0% of rural) were practicing family planning. Almost the same contraceptive prevalence rates were uncovered by the 1997 KAP survey and the 2000 DHS. Surveys conducted in 1992 and 1996 have revealed a gradual decline in the proportion of couples using male methods in both urban and rural areas. This is apparently due to the fact that with the revival of the family planning program and the increasing availability of modern female

methods, many couples have switched to the latter. Between 1989 and 1992, a decrease has taken place in the proportion of urban couples using both condom and withdrawal. In the case of rural women, however, only the proportion of couples using withdrawal has gone down (from 25% to 20%). During the following 4 year period while the overall rate of contraception had gone up remarkably in both urban and rural areas, the proportion of urban women using condom has gone up slightly (from 11% to 12%) while that of rural women has declined (from 8.2% to 6.4%). Meanwhile, the proportion of urban and rural couples using withdrawal have fallen by one third (from 36% to 24%) and one-half (from 20.2% to 9.5%), respectively.

The 1997 KAP survey conducted by the MOHME indicated a sudden rise in the prevalence of male methods in both urban (from 40.5% to 56.3%) and rural areas (from 17.7% to 35.1%). In the case of urban couples the increase is mainly due to a substantial rise (from 24.2% to 42%) in the proportion of couples using withdrawal while the proportions of couples using condom (12%) and vasectomy (4.3%) have remained constant. The more marked rise in the share of male method users in rural areas is also largely due to a marked rise in the proportion of couples using withdrawal (from 9.5% to 25.0%) although there is also some rise in the proportion of condom users (from 6.4% to 8.3%). These rather drastic changes over a one-year period are rather surprising and hard to explain.

The results of the DHS conducted in 2000 indicate, if anything, a slight decline (from 74.0% to 73.8%) in the overall contraceptive prevalence level of Iranian women since 1997. The decline is mainly due to a 0.6% fall in the CPR of urban couples (from 78.0% to 77.4%) while that of rural women has gone up more by over three percentage points (from 64% to 67.2%). The decline in contraceptive prevalence rate of urban women is, however, mainly due to a fall (from 24.0% to 22.2%) in the proportion of couples relying on traditional methods or withdrawal. The proportion of couples using modern methods has actually gone up in both urban (from 54.0% to 55.2%) and rural areas (from 55.0% to 57.3%). Interestingly, the proportion of rural couples relying on coitus interruptus has also gone up by one percent since 1997.

With regard to the proportionate share of male method users of all contraceptive users too the DHS2000 indicates a considerable fall in both urban (from 58.3% to 41.5%) and rural areas (from 35.1% to 21.0). In this respect the findings of the DHS2000 are more similar to those of the 1996 survey. They indicate only a slight increase in the share of male method users since 1996. It would appear that just over one third (34.2%) of all contraceptive using couples rely on one of the three male methods known to be available in Iran. Urban couples are almost twice as likely to use these methods. In both in urban and rural areas, however, the traditional male method of withdrawal accounts for two-thirds of male method users. The proportionate share of couples using this method of all contraceptive users in urban and rural areas are 27.8% and 13.9%, respectively. A large chunk of the better educated and more prosperous urban couples continue to depend on coitus interruptus as their main method of birth control. In view of the legal prohibition of abortion and the serious criminal and health risks associated with illegal abortions it is unlikely that most urban couples using withdrawal as their main method of birth control

can resort to abortion in case of method failure. Thus, the lower fertility rate of urban couples in comparison with their rural counterparts would seem to suggest that at least when used by highly motivated couples withdrawal may not be as unreliable as it is assumed to be.

Regional variations

In addition to urban-rural differences noted above, there are considerable variations across different provinces with regard to the relative prevalence of different contraceptives. . Moreover, these variations would seem to have persisted over time. Comparing the results of the three major KAP surveys conducted since 1995 it would appear that the relative rank of various provinces in terms of male method use has remained constant.

In both 1996 and 1997 approximately one fourth of all married women aged 15-49 were using one of the three male methods. The proportion of male method users was much higher in urban (33%) than the rural areas (15%). The situation had changed little by the time of DHS2000 when 26% of all women (32.4% in urban and 14.6% in rural areas) reported using a male method. There are however considerable differences in the proportion of male method users in different provinces. In 1996 Iran was administratively divided into 26 *Ostans* (provinces). The number of *Ostans* had risen to 28 by the year 2000. In view of the importance of the Tehran Metropolitan Area, the 1997 KAP survey and DHS2000 have treated this huge urban megalopolis as an independent sampling unit. Thus there were 26 rural and 27 urban provinces in 1997 survey and 28 rural and 29 urban provinces in the 2000 survey.

The KAP surveys carried out by the MOHME are designed in such a way that the urban and rural populations of each province are sampled separately. In 1996 survey, the size of samples interviewed varied from 583 to 940 in rural areas and from 713 to 926 in urban areas. Similarly large samples were used in the 1997 survey. In the DHS2000 survey a sample size of 2000 households were taken from rural and urban population of each province. Thus, provincial differences in the prevalence of various contraceptives can hardly be explained away in terms of sampling fluctuation or error.

For all women, the prevalence of male methods revealed by the 1997 survey varied from 5.7% (in Sistan & Baloochistan province) to 40.1% (in Yazd province). The range of variation for urban and rural areas were 44.7% to 9.1% (for the urban women of Gilan and Sistan & Baloochistan provinces, respectively) and from 31.9% to 2.7% (for rural women of Yazd and Kohgiluyeh/Boyerahmad provinces, respectively). If the 27 provinces covered by the 1997 are divided into three equal groups in terms of the prevalence of male methods, the following nine provinces appear to occupy the top position: Yazd (40.5%), Isfahan (39.4%), Qom (38.8%), Tehran (36.2%), Gilan (33.2%), Markazi (32.2%), Semnan (30.1%), Mazandaran (26.5%) and Kerman 26.3%). In two other provinces (Ghazvin, 26.2% and Khorasan, 25%) too about 25% of all women were using one of the three male methods. On the other extreme, the lowest rates of male

Table 4. Provincial Variations in the Prevalence of Male and Female Methods of Contraception by Place of Residence in 1996 and 1997 Surveys.

Provinces	1996				1997				2000			
	Urban		Rural		Urban		Rural		Urban		Rural	
	Male Methods	Female Methods	Male Methods	Female Methods	Male Methods	Female Methods	Male Methods	Female Methods	Male Methods	Female Methods	Male Methods	Female Methods
All Country	32.98	47.70	14.68	55.42	32.9	48.9	14.20	57.00	32.4	44.9	14.6	52.6
ARDABIL	23.26	57.32	5.54	63.21	18.40	64.40	5.50	77.60	15.5	60.6	5.0	65.3
AZARBAYJAN, E	31.61	48.52	8.56	68.01	29.60	55.01	10.90	64.70	26.3	48.3	7.1	62.3
AZARBAYJAN,W	24.57	54.07	5.23	62.17	23.30	60.80	7.80	63.90	21.5	55.3	6.5	62.2
BOOSHEHR	29.95	44.69	15.06	44.11	30.00	45.01	14.80	42.82	30.2	38.9	16.4	40.4
CHAHARMAHAL	23.46	55.00	6.62	60.75	21.20	59.70	9.10	57.00	23.7	55.5	8.8	61.3
ESFAHAN	47.41	37.17	29.64	52.20	45.60	40.10	29.50	53.11	43.6	37.0	25.9	50.0
FARS	22.77	54.99	12.10	56.76	25.80	55.40	9.40	60.80	28.3	47.3	12.4	53.9
GHAZVIN	43.06	45.80	16.05	57.81	35.90	49.80	17.50	57.10	32.8	45.7	17.4	55.2
GILAN	41.67	40.39	27.51	50.07	47.00	38.71	24.90	54.20	37.8	38.2	24.2	49.8
GOLESTAN	NA	NA	NA	NA	NA	NA	NA	NA	30.9	46.9	11.6	56.3
HAMADAN	32.09	48.75	12.48	57.91	29.90	53.10	13.90	61.91	31.7	47.9	14.0	60.6
HORMOZGAN	29.87	45.07	7.53	35.10	26.90	47.70	8.00	40.50	25.6	44.0	8.1	35.8
ILAM	6.15	69.14	2.24	63.80	9.80	69.10	6.20	67.20	8.5	65.7	2.7	62.6
KERMAN	43.53	37.26	21.28	50.00	39.40	41.41	16.10	49.61	35.0	41.4	18.8	44.2
KERMANSHAH	18.61	58.68	3.62	66.00	16.30	63.81	7.00	68.01	16.2	61.1	7.1	63.6
KHORASAN	34.33	45.90	14.51	54.34	35.60	40.71	14.70	49.70	33.3	39.6	14.5	47.2
KHUZISTAN	20.83	52.19	6.17	51.59	25.00	49.41	6.90	52.51	22.8	52.8	7.9	49.6
KOHLUYEH	14.80	58.77	2.75	51.49	15.30	66.10	2.70	55.00	15.4	57.0	4.8	52.0
KURDISTAN	17.92	60.14	5.24	62.12	16.10	64.20	6.20	71.20	17.7	61.1	6.6	59.8
LORISTAN	19.00	55.94	5.34	55.75	21.60	58.40	4.70	56.31	20.2	55.4	5.7	62.5
MARKAZI	38.03	48.29	26.95	51.15	42.60	42.41	23.00	56.21	36.3	43.0	20.7	53.5
MAZANDARAN	35.78	44.84	20.86	54.00	36.20	47.50	21.90	58.60	37.9	42.2	26.0	51.2
QOM	NA	NA	NA	NA	42.20	41.20	30.20	42.31	40.2	33.0	29.0	42.7
SEMNAN	43.31	43.94	27.96	56.63	35.60	40.71	24.00	55.52	43.7	38.9	22.4	52.5
SISTAN & BAL.	11.51	56.70	5.99	49.82	10.30	55.20	3.30	43.40	12.9	42.8	2.5	26.0
TEHRAN (Province)	39.01	46.92	29.17	50.73	39.80	46.31	30.70	56.61	29.6	50.2	25.0	51.6
TEHRAN CITY	NA	NA	NA	NA	NA	NA	NA	NA	40.2	41.5	0.0	0.0
YAZD	50.13	37.08	39.23	45.68	45.70	39.31	33.80	5.10	41.3	36.3	29.2	46.2
ZANJAN	16.71	61.91	3.65	65.68	19.60	66.00	7.30	61.70	26.3	53.6	5.5	61.2

Source: MOHME, 1998; Aghajanian & Mehryar, 1999; MOHME, 2001.

method use belong to the following nine provinces: Sistan & Baloochistan (5.7%), Kohgiluyeh & Boyerahmad (7.2%), Ilam (7.7%), Kurdistan (10.4%), Ardabil (10.9%), Kermanshah (12.3%), Zanjan (12.4%), Loristan (12.8%) and Chaharmahal & Bakhtiari

(13.9%). The male method prevalence rates of the remaining nine provinces fell between 26.2% and 14.8%.

In the DHS2000 the proportion of urban women using a male method of contraception varied from as high as 43.7% (in Semnan province) to as low as 8.5% (in Ilam province). Provinces occupying the top nine positions in terms of male method use are: Semnan (43.7%), Isfahan (43.7%), Yazd (41.3%), Tehran Metropolitan Area (40.2%), Qom (40.2%), Mazandaran (37.9%), Gilan (37.8%), Markazi (36.8%), and Kerman (35%). On the other extreme, provinces with the lowest male method use rates reported by urban women are: Ilam (8.5%), Sistan/Baluchistan (12.9%), Kohgiluyeh (15.4%), Ardabil (15.5%), Kermanshah (16.2%), Kurdistan (17.7%), Loristan (20.2%), W. Azarbayjan (21.5%), and Khuzistan (22.8%). The male method use of remaining 11 provinces range from 23.7% (for Chaharmahal) to 33.3% (for Khorasan).

Considering the rural population, the male method use rates of the 28 provinces vary from as low as 2.5% (in Sistan/Baluchistan) to as high as 29.2% (in Yazd). The nine provinces with the highest male method use rates are: Yazd (29.2%), Qom (29%), Mazandaran (26.0%), Esfahan (25.9%), Tehran province (25.0%), Gilan (24.2%), Semnan (22.4%), Markazi (20.7%) and Kerman (18.8%). In contrast, provinces occupying the bottom nine positions with respect to male method use rates of their rural population are :Sistan/Baluchistan (2.5%), Ilam (2.7%), Kohgiluyeh (4.8%), Ardabil (5.0%), Loristan (5.7%), W. Azarbayjan (6.5%), and Kurdistan (6.6%), E.Azarbayjan (7.1%) and Kermanshah (7.1%). The male method use rate of the remaining 10 provinces varied between 7.9% (in Khuzistan) to 17.4% (in Ghazvin).

The geographical distribution of the three groups of provinces with high, medium, and low prevalence of male methods is presented in Figure 1. Those who know Iran will easily realize that provinces with the highest male contraceptive use rates are mostly among the more developed provinces situated to the south and north of the national capital, Tehran, while provinces with the lowest male method use rates are all relatively less developed provinces with large tribal populations which lived a nomadic life until early 1960s.

When the three groups of provinces are compared in terms of such well established indices of development as education, urbanization, and access to modern amenities (e.g., piped water, electricity, telephone, etc.) the relative underdevelopment of provinces with low male contraceptive prevalence rate becomes quite obvious (Table 5). Thus, provinces with the highest rates of male contraceptive use surpass those with medium or low male contraceptive use rates in all eleven indicators of development included in Table 5. Moreover, judging by the differences between the low and medium groups, the correlation between male contraceptive use and socioeconomic development would seem to be linear in at least 8 of the 11 indicators used. The differences are particularly marked with regard to urbanization, female literacy, literacy rate of the population aged 60+, and access to piped gas and telephone.

Table 5. Socio-economic Development Levels of Provinces with Low, Medium and High Rates of Male Contraceptive Use, Iran 1997

<i>Characteristics</i>	<i>Low Male Method Prevalence</i>	<i>Medium Male Method Prevalence</i>	<i>High Male Method Prevalence</i>
<i>Urbanization Rate (%)</i>	51.69	51.17	67.68
<i>Literacy Rate (%), Male</i>	79.86	82.94	86.32
<i>Literacy Rate (%), Female</i>	65.28	70.53	78.03
<i>Female Economic Activity Rate (%)</i>	8.01	7.78	10.13
<i>Literacy Rate (%) of 60+</i>	13.41	17.15	23.07
<i>Enrolment Rate (%) of Children Aged 6-14 Years</i>	85.50	87.09	92.50
<i>Enrolment Rate (%) of Population Aged 6-24 Years</i>	64.07	63.59	69.12
<i>% of Households with: Piped Water</i>	80.35	84.75	89.42
<i>Electricity</i>	90.88	94.22	97.78
<i>Piped Gas</i>	14.88	19.4	36.53
<i>Telephone</i>	25.71	28.53	36.54

Source: 1996 Census (SCI, 1998).

The differences are not however limited to indicators of socioeconomic development. As shown in Table 6, the three groups of provinces with different rates of male contraceptive prevalence also differ markedly on a large number of demographic and health characteristics. Compared with the other two groups, provinces with higher male method prevalence rates would seem to be more densely populated. They have a positive net migration rate, contain a relatively older population, and yet have a lower dependency ratio. Their average crude birth and death rates are also lower than those of the other two groups.

Yet, despite having had a positive migration rate during the decade preceding the 1996 census, they have experienced a lower rate of population growth over the last part of the same decade (1991-1996). This is apparently due to their much lower fertility as indicated by the estimated TFR and fertility ratios for the first (CWR2) and second (CWR1) halves of the decade preceding the 1996 census. Other health indicators included in Table 6 (i.e., infant mortality and life expectancy at birth) also confirm that provinces with high male contraceptive use rates enjoy better health status. This is not unexpected in view of the better availability of such modern amenities as piped water, electricity and Gas in these provinces (Table 5).

Table 6. Major Demographic Characteristics of Provinces with Low, Medium and High Rates of Male Contraceptive Use, Iran 1997

<i>Characteristics</i>	<i>Low Male Method Prevalence</i>	<i>Medium Male Method Prevalence</i>	<i>High Male Method Prevalence</i>
<i>Population</i>	16,843,000	25,612,750	22,875,300
<i>Density</i>	44.12	47.90	105.20
<i>Net Migration Rate</i>	-2.68	-1.17	1.50
<i>% Aged 0-14</i>	43.91	41.53	37.71
<i>% Aged 15-64</i>	52.19	54.24	57.47
<i>% Aged 65+</i>	3.90	4.23	4.82
<i>Dependency Ratio</i>	91.67	86.00	74.30
<i>CWR1</i>	518	469	384
<i>CWR2</i>	891	793	663
<i>Population Growth</i>	1.52	1.45	1.43
<i>Crude Birth Rate</i>	26.67	23.43	19.09
<i>Crude Death Rate</i>	8.49	7.85	7.13
<i>Infant Mortality Rate</i>	53.39	44.75	37.57
<i>Total Fertility Rate</i>	3.77	3.33	2.70
<i>Life Expectancy, M</i>	63.15	64.92	66.81
<i>Life Expectancy, F</i>	64.75	67.00	68.86

Source: Calculated from 1996 census and/or various MOHME Reports; UNDP, 2000.

Table 7. Differences in Contraceptive Use Rates of Provinces with Low, Medium and High Rates of Male Contraceptive Use, Iran 1997

<i>Characteristics</i>	<i>Low Male Method Prevalence</i>	<i>Medium Male Method Prevalence</i>	<i>High Male Method Prevalence</i>
<i>Pill</i>	28.6	24.2	17.8
<i>IUD</i>	7.6	7.9	7.5
<i>Tubal Ligation</i>	18.2	15.1	17.9
<i>Injectibles</i>	5.8	4.0	1.5
<i>Norplant</i>	1.5	0.3	0.5
<i>Other Female Methods</i>	1.2	0.9	.03
<i>All Female Methods</i>	62.9	52.4	45.5
<i>Condom</i>	3.6	5.7	8.3
<i>Vasectomy</i>	1.4	1.6	2.3
<i>Traditional (CI) Method</i>	6.2	13.7	24.8
<i>All Male Methods</i>	11.2	20.98	35.40
<i>All Modern Methods</i>	67.9	59.7	56.1
<i>All Methods (Mod.+Trad.)</i>	74.1	73.4	80.9

Source: Calculated from MOHME, 1998data.

As expected, the three groups of provinces also differ remarkably with regard to the use of various contraceptive methods. These are shown in Table 7. The average prevalence rates of all six modern female methods offered by the national family planning program is lower in the provinces with a high rate of male contraceptive method use. The most outstanding differences are seen in the case of pill and injectables. The overall use of female methods in provinces with the highest male contraceptive use rates is more than one quarter smaller than that of the provinces with the lowest male contraceptive rates. On the other hand, provinces with a high rate of male contraceptive use exceed the other two groups with respect to all three male methods considered. Yet it is obvious that the much higher prevalence of the so-called *traditional method* in these provinces accounts for the bulk of the observed differences. This is well reflected in the finding that the average prevalence rate of modern methods as a whole is higher in the group of provinces with the lowest male method use rate than that for the provinces with the highest male contraceptive use rates. Yet due to the larger share of the traditional method in the previous group, its total contraceptive prevalence rate exceeds that of the latter group.

Discussion and Conclusions

The evidence presented in this paper and elsewhere (Aghajanian & Mehryar, 1999a, 199b; Mehryar et al, 1999; Mehryar et al, 2000) clearly indicate that since its official revival in 1989, the family planning program of Iran has taken remarkably great strides in reaching its main target group (currently married women aged 15-49 years) and in changing their contraceptive and fertility behaviors. According to the latest large, nationwide KAP surveys conducted in 1996 and 1997 by the Ministry of Health & Medical Education, over three-quarters of the currently married women were using a contraceptive. The results of the recently completed DHS2000 shows almost no change in the overall contraceptive prevalence rate. Moreover, despite continuing differences between urban and rural areas and variations across provinces, urban-rural and regional disparities in contraceptive use have been considerably narrowed. Thus, only 10 years after its revival the family planning program of the Islamic Republic of Iran has succeeded to raise the overall contraceptive prevalence rate of Iranian women to levels not yet achieved by most developing countries with much older population policies and family planning programs.

For both historical and practical reasons, the family planning program of Iran, like those of many other developing countries, has relied heavily on modern female methods. This is partly due to the view that women are the main victims of excess fertility and as such better motivated to control their fertility by accepting and using modern contraceptives. At the same time, there exist a larger number and variety of modern contraceptives for women than men. Moreover, as the Iranian family planning program puts its primary emphasis on integrating family planning with other maternal and child health services, female contraceptives also have a better chance of being included in the program and of being promoted by the predominantly female community health workers on whom the program relies so heavily. In fact, the predominance of female health workers at various

levels of the MCH and reproductive health services of Iran has been recognized as a potential barrier to the easy access of men to these services.

Nevertheless, the results of this study offer clear evidence that Iranian men have not shun away from taking responsibility for fertility regulation. This is partly rooted in the permissibility and tacit encouragement of using *Azl* (withdrawal) in Iranian and other Muslim cultures of the Middle East, at least since the emergence of Islam as the dominant religion of the area. The results of several KAP surveys carried out since mid-1970s show that the practice was -and has continued to be- widespread among Iranian couples. According to the most recent survey reviewed in this paper (DHSI2000) over a quarter (26%) of all Iranian couples and one-third of those using a contraceptive rely on withdrawal for fertility control. The practice is surprisingly more common among the urban, better educated and more modern sectors of the society where over forty percent of couples practicing family planning rely on this method for controlling their fertility.

The data presented in this paper also indicate considerable regional variation in the use of withdrawal and other two male methods offered by the program. An analysis of these variations suggest that the use of male methods is particularly common in both urban and rural areas of provinces that are known to contain a more homogenous Persian speaking majority and have benefited more of national investment in social and economic development during the past fifty years.

Even more surprising is the finding that the practice of male methods, particularly withdrawal, is positively associated with a wide array of economic and social development indicators. The prevalence of male methods is remarkably higher in the most developed provinces and much less common in the least developed, tribal provinces. On an individual basis too the results of a recent survey on contraceptive practices of a sample married women aged 15-49 in Shiraz City have revealed a strong correlation between measures of individual modernization and use of male methods (Table 8). As indicated in Table 8, the proportion of women relying on the three male methods rises steadily with a rise in formal education, being much more common among women with secondary (47.4%) and higher education (59.2%) than those with primary (34.9%) or no education (28.6%). It is also considerably higher among the economically active (53.4%) than the economically non-active (39.6%) women. There is a considerable difference between women born in an urban center (44%) and those born in rural areas (27.8). The findings of this survey are confirmed by those of three later surveys also conducted in urban and rural areas of Shiraz county (Mehryar, Mostafavi & Agha, 1998). Further analysis of the data also shows a negative correlation between the prevalence of male and female methods. Thus, provinces with relatively lower male method use rates demonstrate higher rates of female method use. Nevertheless, it is found that the provinces with higher male method use rates have substantially lower fertility rates. This rather unexpected finding may mean that the traditional male method widely used in Iran and some parts of Europe and Middle East, that is withdrawal, is probably more effective than commonly acknowledged. It is also worth noting that the positive association between male method prevalence and indices of socio-economic development are not so

Table 8. Proportion of Women Using Different Methods of Contraception by Socio- Demographic Characteristics, Shiraz, 1996.

Indicators of Socio-Economic Status	Current Users, Any Method	Norplant	Pill	IUD	Injection	Female Sterilization	Male Sterilization	Condom	Other Traditional Methods &
Level of Education									
Illiterate	69.3	0.0	20.0	5.7	0.0	44.3	4.3	4.3	20.0
Primary	75.6	0.3	19.5	15.1	3.1	27.1	5.8	9.2	19.9
Secondary, junior	82.8	0.0	22.3	17.3	2.5	16.8	6.4	16.3	19.3
Secondary, senior	85.6	0.3	23.7	17.9	0.3	12.7	4.5	15.1	27.8
Higher Education	84.4	3.7	13.0	18.5	0.0	14.8	3.7	14.8	40.7
Economic Activity									
Active	84.7	0.9	15.5	15.5	1.7	19.0	3.4	15.5	34.5
Inactive	79.5	0.4	21.9	16.0	1.6	21.1	5.5	12.2	21.9
Place of Birth									
Urban	80.1	0.5	21.5	16.0	1.4	18.3	5.4	13.6	25.0
Rural	79.2	0.0	18.8	15.0	3.0	35.3	4.5	7.5	15.8
Age Group									
15-19	62.0	0.0	29.0	25.8	0.0	3.2	0.0	19.4	25.8
20-24	62.2	1.1	30.4	21.7	4.3	2.2	0.0	16.3	28.3
25-29	85.3	1.2	30.2	22.2	3.7	3.7	4.3	11.7	23.5
30-34	89.1	0.0	19.9	21.4	2.0	22.4	4.1	12.8	18.4
35-39	84.4	0.0	20.1	8.9	0.0	30.2	10.1	14.0	17.3
40-44	86.4	0.6	14.5	10.1	0.6	34.6	6.3	10.1	25.8
45-49	68.7	0.0	8.9	7.8	0.0	30.0	5.6	10.0	37.8
Total	80.1	0.4	21.1	16.0	1.7	20.8	5.3	12.7	23.5

Source: Mehryar et al, 1997; Chasteland et al, 1997.

obvious in the case of female methods. In fact, when the provinces are classified into three groups in terms of the prevalence of female contraceptive rate, a negative trend emerges, with high female contraceptive prevalence provinces having a lower level of development as implied by such indices as male and female literacy, female labor force

participation, etc (See Figure 2). One possible explanation for this rather unexpected finding may be the heavier dependence of couples in less developed areas on government provided services which are predominantly female oriented. In support of this explanation, it may be noted that the provinces with lower levels of development have a lower rate of urbanization and, as indicated above, rural couples as a whole are less likely to use both traditional and modern male methods. One of the major achievements of the Iranian family planning program since its revival in 1989 is that it has succeeded in delivering services to traditionally neglected rural population and in gaining their trust and acceptance in a way that had not been done by its predecessor during its ten-year life.

12.0 References

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