Contraceptive Use and Induced Abortion in Japan: How Is It So Unique among the Developed Countries?

Ryuzaburo Sato Miho Iwasawa

Abstract

Although Japan is among countries of low fertility, that is common to the developed countries today, its situation of fertility control is very different from others. In this paper, we review the trends of contraceptive practice and induced abortion in postwar Japan, examine demographic characteristics of contraception users, and estimate the contraceptive prevalence rates for women of reproductive age for international comparison.

The transition from induced abortion to contraception began in the 1950s and ended in the 1970s, but more than a few abortions have been reported even after this period. The contraceptive behavior in Japan appears unique among developed countries, with generally lower rates of contraceptive prevalence, predominance of condom use, and very low use of medical methods. The age of wives, marital duration, parity, and the desire for the next child are associated with contraceptive use, and there exists an "unmet need" for family planning among Japanese couples.

Key Words: contraception, family planning, fertility control, induced abortion, reproductive health, Japan, international comparison

1. INTRODUCTION

Today, the fertility of most industrialized countries has fallen below the replacement level (fewer than 2.1 children per woman). Moreover, the total fertility rate (TFR) of some countries has dropped even under 1.3 (refer to Kohler, et al. 2002). In 2003, with the continuously decreasing TFR, Japan recorded the lowest level of 1.29, and joined the "lowest-low fertility" group of countries, which so far includes Italy, Spain and some of other Southern and Central and Eastern European countries and countries of the former USSR.

Researchers are searching for common causes

and making efforts to establish a comprehensive theory to explain the low fertility in these countries (for instance, refer to Caldwell and Schindlmayr 2003, and discussions of it). However, there are great differences in several demographic patterns between Japan and Western countries. One of the differences is in the pattern of fertility control. At a glance, the early legalization of induced abortion and very low rate of use of the pill and other medically provided methods of contraception in Japan and the late legalization of induced abortion and much higher rates of use of the medical methods of contraception in Western

countries form a contrast. Japan is a very unique country that has completed the fertility transition without relying on the pill and other highly effective contraception methods. On this point, the Second Demographic Transition theory, in which the introduction of new, highly efficient contraception is viewed as one of the important necessary factors (van de Kaa 2003), does not sufficiently explain the recent demographic changes in Japan. We need to study in more detail the demographic situation of fertility control and its impacts on fertility in Japan, which will make a contribution to establishing the grand theory of very low fertility in developed countries.

Our study has a twofold purpose. In the first stage, we collect data and analyze it on levels and trends of fertility control in Japan from the end of World War Two until the present day. In other words, we aim to describe how Japan is so unique in contraceptive use and induced abortion compared with other developed countries. In the second stage, we aim to examine the social, economic, cultural and historical conditions and related policies to which the peculiar pattern of fertility control has been attributed. In other words, we aim to make clear why Japan is so unique in contraceptive use and induced abortion among the developed countries.

In this paper, as part of the whole study plan, we will (1) review the trends of contraceptive practice and induced abortion in postwar Japan based on published data sources, (2) examine demographic characteristics of contraception users based on data from the Japanese National Fertility Survey, and (3) estimate the contraceptive prevalence rates for all women of reproductive age in Japan.

The Japanese National Fertility Survey (JNFS) is a series of nationally representative fertility

sample surveys conducted every five years by the National Institute of Population and Social Security Research. From the results of two recent rounds of the JNFS (in 1987 and 1997), we provide general features of contraceptive use among married Japanese women and changes over the past 10 years.

So far it has been usual to measure the contraceptive prevalence rate for only married couples with wives in reproductive age. There has been a growing interest in the contraceptive prevalence rate for all (including both married and single) women of reproductive age to compare the level of contraceptive use to other developed countries. Up to now, the JNFS has usually measured contraceptive prevalence rates for married women only, and it had previously given no information about single women's sexual and contraceptive behavior¹. The 1997 JNFS is a newly introduced questionnaire on single women's sexual experience and contraceptive use during their most recent act of sexual intercourse. Using the results, we estimate the contraceptive prevalence rate for single women, and by uniting these two rates (married plus single), we present here an estimation of the contraceptive prevalence rate for all Japanese women of reproductive age, which is beneficial for international comparison.

2. TRENDS OF CONTRACEPTIVE USE AND INDUCED ABORTION

1) Data sources

In Japan we have only three nationwide serial statistical data sources on contraception and induced abortion. First, the Ministry of Health, Labor, and Welfare reports every year the total number of registered induced abortions (Maternal Body Protection Statistics). Second, the National Survey on Family Planning, which has been con-

ducted almost every two years by the Mainichi Shimbun newspaper (from 1950-2000), provides us with time series data on the contraceptive prevalence (and methods) among married women and the percentage of women who have experienced induced abortions. Third, the Japanese National Fertility Survey, which is conducted by our institute, recently investigated the contraceptive prevalence (and methods) among married couples (data is available for the years 1987 and 1997). Hereafter, the three data sources are briefly explained.

(1) Maternal Body Protection Statistics (MBPS)

Under the Maternal Body Protection Law (formerly, the Eugenic Protection Law), a woman can seek an induced abortion in cases where she has health problems for physical or economic reasons, or she has been raped. The fact is though, induced abortions are performed on demand in Japan, because no proof is necessary for these reasons. Only the authorized OB/GY doctors can do this operation within 22 weeks (i.e., by 21 weeks in full) of gestation. Every doctor who performs an induced abortion is required to report it to the Ministry of Health, Labor and Welfare through the local health center. The ministry tallies the numbers and publishes an annual report, titled the Maternal Body Protection Statistics.

Since 2002, the ministry has reported the numbers and rates of induced abortions in the periods of the fiscal year. Accordingly, the reported numbers and rates for "2002" and "2003" correspond to those for the period April 2002 to March 2003 and the period April 2003 to March 2004, respectively.

(2) National Survey on Family Planning (NSFP)

The NSFP is a series of nationally representative

KAP (knowledge, attitude, and practice) surveys on family planning, which was conducted biennially by the Mainichi Shimbun (one of the major newspapers in Japan). This survey has a history of half a century from its first survey in 1950 to the 25th survey in 2000. Each time about 4,000 married women not older than 50 responded, and in recent surveys unmarried women of the same ages were added as subjects. The family planning survey came to an end with the 2000 survey and a new survey tilted the Survey on Population, Family and Generation (SPFG) was carried out in April 2004. The SPFG contains similar questions on contraceptive practice among married women, making it possible to follow the trend until 2004.

(3) Japanese National Fertility Survey (JNFS)

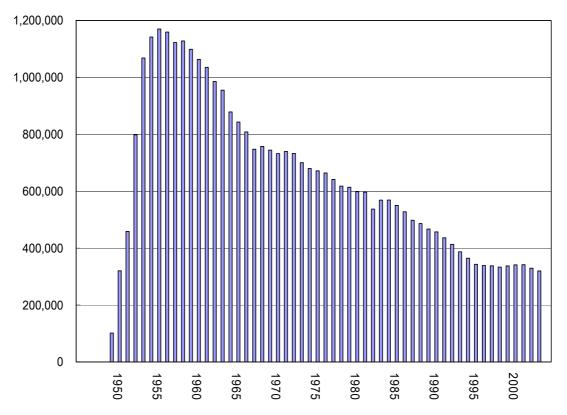
The JNFS is a series of nationally representative fertility sample surveys conducted every five years by the National Institute of Population and Social Security Research. From the results of two recent rounds of the JNFS (in 1987 and 1997), we can provide general features of contraceptive use among married Japanese women and changes over the past 10 years (the latest 2002 survey did not include questions on contraception). Each time, about 9,000 married women aged 15-49 responded.

2) Trend of induced abortions

(1) Annual numbers and rates for induced abortions (MBPS)

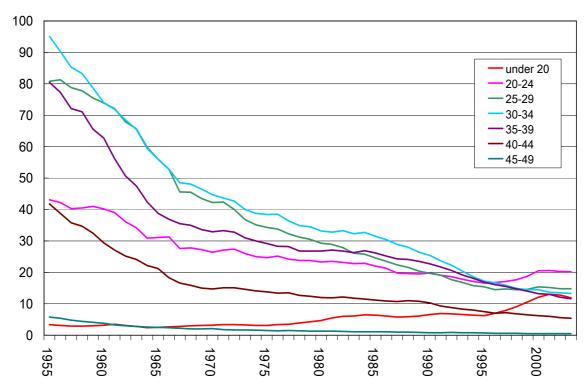
Figure 1 shows the trend of the annual number of induced abortion, from 1949 to 2003. The reported number was the largest in 1955 (1.17 million). Since that year, the number has almost continuously decreased until the middle of the 1990s. Recently it has remained at almost the same number (319,831 in the fiscal year of 2003).

Figure 1. Number of Induced Abortions, 1949-2003



Source: Maternal Body Protection Statistics

Figure 2. Induced Abortion Rate (per 1,000 women), by age group, 1955-2003

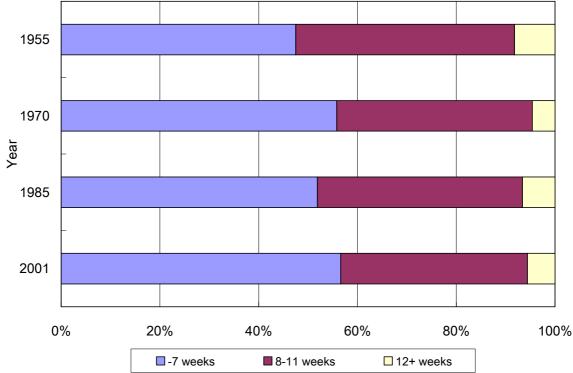


Source: Maternal Body Protection Statistics

Trends of age-specific induced abortion rates, from 1955 to 2003 are shown in Figure 2. For all age groups of women, the rates have almost continuously decreased, except for the rate for women younger than 20. This increasing trend of the teen abortion rate is one of the greatest concerns among adolescent health specialists. Another noticeable trend is the recent increase in the rate for women aged 20-24. Although the MBPS does not distinguish between married and unmarried

women, we can say that this trend is probably due to changes in sexual behavior among unmarried young women (the tendency to engage in sex earlier and have more sexual partners than before), because the proportion of never-married women among women aged 15-19 and 20-24 is very high in recent years (in 2000, 99.1% and 87.9%, respectively). (Refer to Goto, et al. 2000)

Figure 3. Percentage of Induced Abortions, by Period of Gestation



Source: Maternal Body Protection Statistics

Figure 3 shows when induced abortions were performed during the gestational periods. Since 1955 more than 90% of them have been performed within 12 weeks. At the present time, more than 50% of induced abortions are performed within 8 weeks of gestation.

(2) Experience and attitude with regard to induced

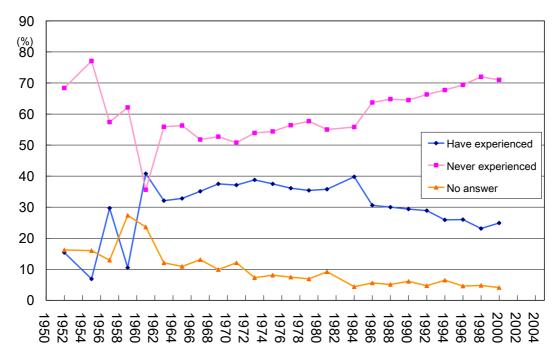
abortions (NSFP)

The trend in the proportion of married women of reproductive age who have experienced induced abortion generates a three-phase pattern (Figure 4). The percentage of those having had an induced abortion at least once was less than 20% in the NSFP in 1952. The percentage steeply increased, exceeding 40% in 1961, then it stabilized, re-

maining on almost the same level at nearly 40% between 1961 and 1984. Since 1986 it has been slightly decreasing. According to the last NSFP in

2000, about a quarter of respondents had experienced an induced abortion at least once.

Figure 4. Percentage of Married Women Who Have Experienced an Induced Abortion



Source: National Survey on Family Planning, Mainichi Shimbun

We can speculate that the steep increase between 1952 and 1961 was due to the easing of restrictions on the conditions permitting abortion in 1952, in addition, the availability of contraception was very low at that time. This sudden increase of abortions persuaded the government and non-governmental organizations to start family planning activities (Refer to Norgren 2001). We can say, the continued relatively stable level of abortion experience after 1963 was caused by the progression of the transition from abortion to contraception in the 1960s (see also Figure 6).

Figure 5 shows the trend in the attitude toward induced abortion among married women of reproductive age. Before the mid 1970s, the proportion of respondents who disapproved of induced abortions was higher than those who approved of

induced abortions unconditionally. Since the 1980s, the proportion of those who approved of induced abortions unconditionally has gradually increased to 23% in 2000.

The all time majority was those who approved of induced abortions conditionally, with an almost consistent 60% share. They were asked whether they approved of induced abortions on the three conditions: "when contraception fails," "when the mother lives in financial hardship," and "when the mother is not married or can't get married." 38.4%, 66.4%, and 81.0% of them respectively approved of abortions for each condition in 1998. (Refer to Atoh 1988, Muramatsu 1990, Hayashi 1996)

70
60
50
40
Conditionally
30
No answer

Figure 5. Attitude toward Induced Abortion among Married Women

Source: National Survey on Family Planning, Mainichi Shimbun

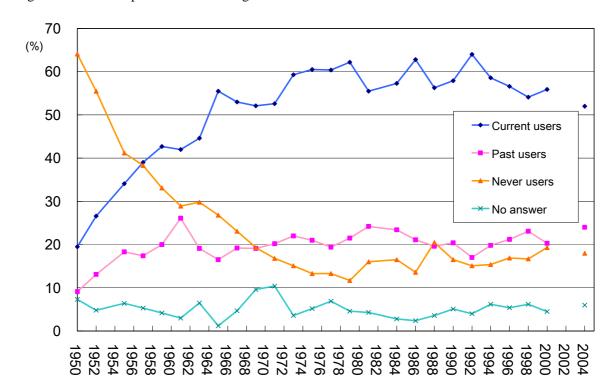


Figure 6. Contraceptive Practice among Married Women

Source: National Survey on Family Planning (1950-2000), and the Survey on Population, Family and Generation (2004), Mainichi Shimbun

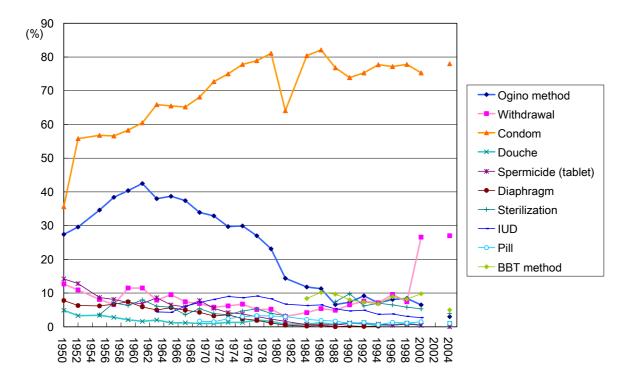
3) Trend of contraceptive practice

(1) Trend of contraceptive prevalence (NSFP)

The NSFP series provides us with the trend of contraceptive practice among married women of reproductive age (Figure 6). In this questionnaire the respondents are asked to choose: (1) they are currently using a method of contraception, (2) they have practiced contraception but currently don't, or (3) they have never practiced contraception. In the 1950 survey the proportion of current users was only about 20%, but it steeply increased to the level of about 60% by the early 1970s, then it stabilized, remaining at that level. Its recent downward trend from 59% in 1994 to 52% in 2004 attracts attention. One possible reason is a

change in the age-structure of marred women of reproductive age. The proportion of wives in their 20s and 30s, who are assumed to be more sexually active than wives in their 40s, has been decreasing remarkably due to later marriages in recent years. Moreover, we must consider a new view that sexless couples may be increasing in present-day Japan. According to a nationwide sexuality survey, named The Second Survey on Life and Consciousness of Men and Women, conducted in 2004, the proportion of married women who had not had sex during the past month of the survey was 17.6%, 33.3%, and 30.5% for those aged 20-24, 25-29, and 30-34, respectively (Kitamura 2005).

Figure 7. Contraceptive Methods among Current Users (Married Women)



Source: National Survey on Family Planning (1950-2000) and the Survey on Population, Family, and Generation (2004), Mainichi Shimbun

Figure 7 shows trends of contraceptive methods among married women of reproductive age who were currently practicing contraception at the time of the survey. We must take note of this question allowing multiple choices (except 1950). As shown in the figure, the proportion of condom

users was constantly predominant (the drop in 1981 may have been influenced by a very high rate of no answers in the survey of that year). The proportion of users of the Ogino method has been relatively high. On the other hand the proportion of medical methods such as the pill, IUDs and sterilization has been extremely low. The sudden

increase in the proportion for the withdrawal method in 2000 may be caused by the change of the word designating withdrawal in the questionnaire, from "Coitus interruptus" to "Extra-vaginal ejaculation (coitus interruptus)."

1990 1994 1996 1998 2000 0% 20% 40% 60% 80% 100%

Never users

Figure 8. Contraceptive Practice among Sexually Active Never-Married Women

Source: National Survey on Family Planning, Mainichi Shimbun

■ Past users

The NSFP had originally surveyed only married women not older than 50. Since the 1990 survey, unmarried women of the same ages have also been included in the survey (except 1992). Figure 8 shows the change of contraceptive practice among never-married women who have experienced sexual intercourse. The proportion of current users was less than 40% in 1990, sharply increasing to nearly 60%. In contrast, the proportion of never users, having been nearly 30% in 1990, decreased to only about 5% in 2000. This

■ Current users

means that the practice of contraception has rapidly pervaded among sexually active never-married women through the 1990s in Japan. (Refer to Kobayashi 1988, 1990a, 1990b; Kubo 1988; Hayashi 1998; Wagatsuma 1996,1998)

■ No answer

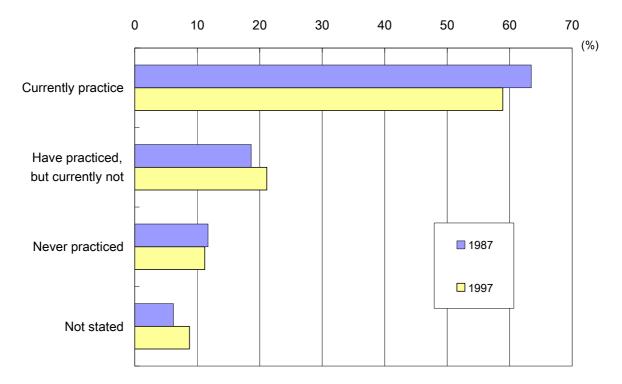
(2) Current level and pattern of contraceptive use (JNFS)

The 1987 and 1997 JNFS also provides data to describe the current level and pattern of contraceptive use among married women.

It was found that a total of about 60% of married women aged 15-49 were using some method of contraception, while about 20% of them had used contraception but were not using it at the time of the survey, and about 10% of them had never used any method of contraception (Figure 9). This means that about 80% of married couples practice contraception throughout their married

life. Comparing the contraceptive prevalence between 1987 and 1997, 58.9% in 1997 is about 5 percentage points lower than 63.5% in 1987. However, we cannot affirm that married couples' contraceptive prevalence is declining recently, as the percentage "not stated" has increased.

Figure 9. Contraceptive Practice among Married Women



Among the married women currently using some method of contraception, the proportion of those who were using condoms (73.9% in 1987, 75.2% in 1997) was overwhelmingly high, while the proportions using other methods such as spermicides (0.4%, 1.2%), periodic abstinence (13.7%, 8.6%), the IUD (4.8%, 2.7%), the pill (1.4%, 1.2%), withdrawal (15.5%, 20.6%), male sterilization (1.7%, 1.3%), and female sterilization (5.9%, 3.9%) were relatively low (multiple answers were given by respondents) (Figure 10).

In contrast to western countries, where the use

of medical methods (the pill, IUDs, sterilization, etc.) is popular, among Japanese couples non-medical methods (condom, withdrawal, periodic abstinence, etc.) are predominant. The total proportion of users of sterilization, the IUD and the pill is as low as around 10%. One noticeable change is an increase in the users of the withdrawal method (from 15.5% to 20.6%).

In general, the contraceptive levels and patterns among married Japanese couples shown from the 1987 and 1997 JNFS are similar to those from recent NSFP.

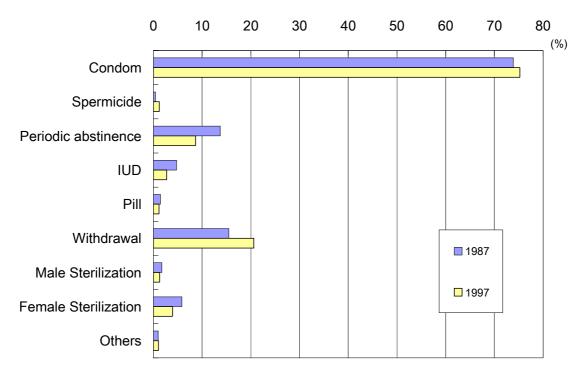


Figure 10. Contraceptive Methods among Current Users

(3) Combinations of Contraceptive Methods (JNFS)

We examined the combined use of contraceptive methods based on data of the JNFS. The percentage of married women currently using specified contraceptive method combinations is shown in Figure 11. Among married women currently using some method of contraception in 1997, 83% relied on one method, 13% used two methods simultaneously, and just 1% used three methods.

The majority of condom users relied on this method alone, and a portion of them used it in combination with withdrawal, periodic abstinence or other methods. Among those using the withdrawal method, about a half used only this method, and many others used it together with a condom, and a small portion of them used it with periodic abstinence. Among those practicing periodic abstinence, a few used only this method and many used it in combination with a condom or the with-

drawal method.

All users of male or female sterilization and almost all users of the IUD used the said method only. In summary, we can say that in Japanese users of non-medical methods whose contraceptive effect is uncertain (such as withdrawal, periodic abstinence) tended rather to use it in combination with condoms or other methods than to use that method alone.

3. DEMOGRAPHIC CHARACTERISTICS OF CONTRACEPTIVE USERS

We examined some demographic characteristics of contraception users based on data from the 1987 and 1997 JNFS. The following figures show the distribution of married women in 1997, by the situation of contraceptive practice and the specified group (a) and by method and the specified group (b).

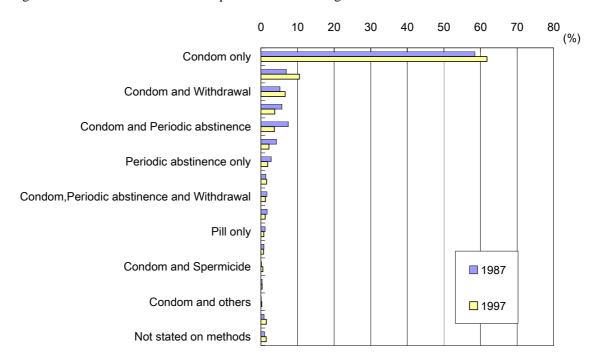


Figure 11. Combinations of Contraceptive Methods among Current Users

Figure 12a. Contraceptive Practice, by Age,1997

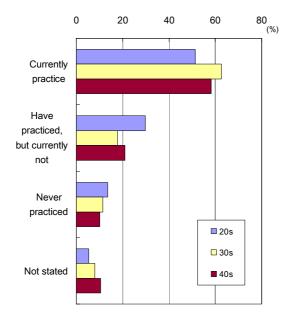
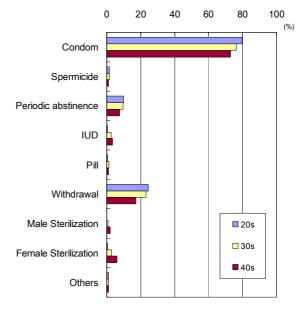


Figure 12b. Contraceptive Methods among Current Users, by Age,1997



1) Wife's age

The proportion of those currently using some method of contraception is highest when they are in their 30s (Figure 12a). The share of condom

users is consistently high through all age groups (Figure 12b). The shares for the withdrawal method and periodic abstinence, as well as condoms, drop when they reach their 40s. The shares

for the IUD and sterilization increase as age increases, but the levels are low as a whole. Compared to 1987, in 1997 the share for the withdrawal method increased for those in their 30s and

40s as well as those in their 20s (not shown in the figures).

Figure 13a. Contraceptive Practice, by Marital Duration,1997

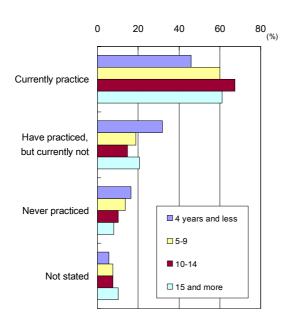
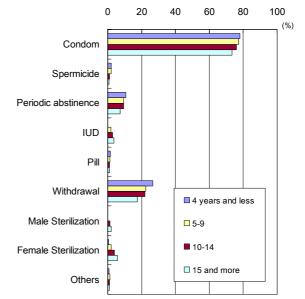


Figure 13b. Contraceptive Methods among Current Users, by Marital Duration, 1997



2) Marital duration

The proportion of current users of contraception is highest in the period 10-14 years after marriage (Figure 13a). The shares for condoms, the withdrawal method, periodic abstinence and the pill, with the highest level at 0-4 years after marriage, decrease as the marital duration increases (Figure 13b). On the other hand, the shares for the IUD and male and female sterilization increase as marital duration increases, with the peak at 15 and more years after marriage.

3) Parity

The proportion of current users increases as parity increases, from 29.2% at parity 0 to 71.7% at parity 3 and so on (Figure 14a). The shares of users

of the IUD and female sterilization increases remarkably after the couple have had two children (Figure 14b). The share for male sterilization increases after the couples have had three children.

4) Desire for the next child

The proportion of current users among married women who want one or more children is as high as 40.5%, while the proportion among those who want no more children is 68.0% (Figure 15a). The shares for condom, withdrawal and periodic abstinence are higher among those who want more children, while the IUD and male and female sterilization are used almost exclusively among those who want no more children (Figure 15b).

Figure 14a. Contraceptive Practice, by Parity, 1997

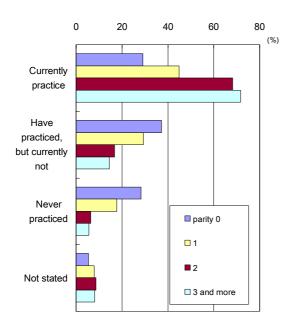
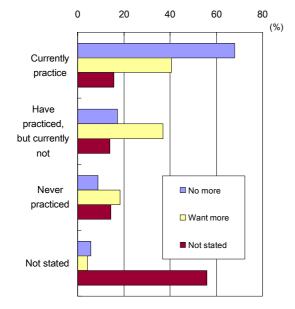


Figure 15a. Contraceptive Practice, by Desire for the Next Child,1997



5) Desired timing of the next birth

Figure 16a shows the distribution of married women who want one or more children by the situation of contraceptive practice and the desired timing of the next birth. The proportion of current users among those who want a child as soon as

Figure 14b. Contraceptive Methods among Current Users, by Parity,1997

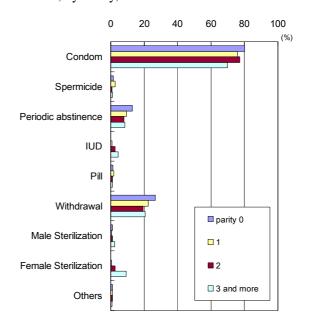
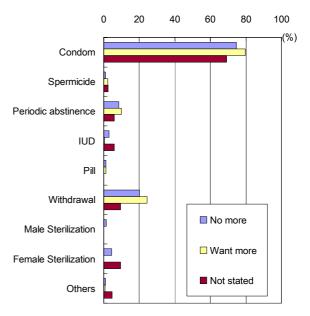


Figure 15b. Contraceptive Methods among
Current Users, by Desire for the Next Child, 1997



possible is as low as 19.7%, otherwise the proportion among those who want to postpone the next birth is 71.2%. Figure 16b shows the distribution of current users by the method and the desired timing of the next birth. Among contraception users who want a (another) child later, the use rate

for condom (81.2%), withdrawal (24.2%) and periodic abstinence (9.1%) is relatively high.

6) Attitude toward the next birth

By combining the data of the desire for the next child (Figures 15a and 15b) and the data of the desired timing of the next birth (Figures 16a and 16b), we classified married women into three groups: (1) those who want no more children or who want a (another) child later; (2) those who want a (another) child as soon as possible or who

are currently pregnant; and (3) those who have no idea on the timing of the next birth. The first group is the group which needs at least some form of contraception. Figure 17a shows that the proportion of current users for this group is as high as 68.3%. But even in this group, 26% are not currently using contraception. It suggests the existence of an "unmet need" for family planning among married Japanese couples.

Figure 16a. Contraceptive Practice, by Desired Timing of the Next Birth,1997

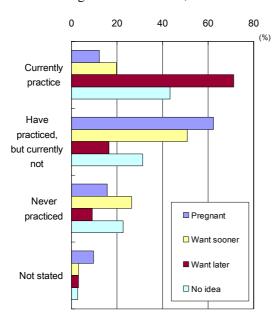


Figure 16b. Contraceptive Methods among Current users, by Desired Timing of the Next Birth,1997

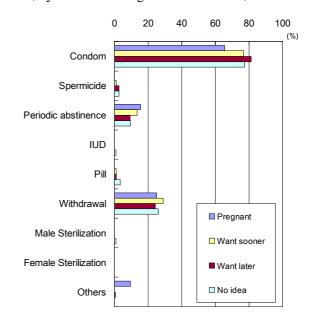


Figure 17b shows the distribution of current users by the method and the attitude toward the next child. The shares for the IUD, and male and female sterilization are higher among the first group than among the third group, but the levels of the use of these methods are very low.

7) Experience of induced abortions

The proportion of current contraception users is higher among those who have experienced an induced abortion (66.8%) than among those who have not (58.4%) (Figure 18a). While the proportion of condom users is higher among those who have not experienced an induced abortion, the proportion for withdrawal, the IUD, the pill and male or female sterilization is higher among those who have experienced an induce abortion (Figure 18b). The difference is particularly large in the case of married women currently using the pill (1.2% of those who have not experienced an in-

duced abortion, compared to 2.4% of those who have). One possible reason is that those who have bitter experiences with induced abortions are likely to seek reliable methods of contraception.

Figure 17a. Contraceptive Practice, by Attitude toward the Next Birth, 1997

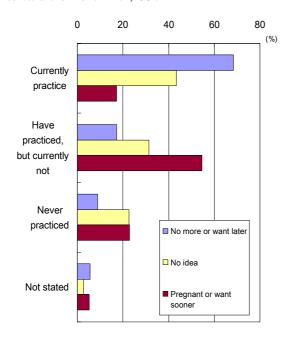
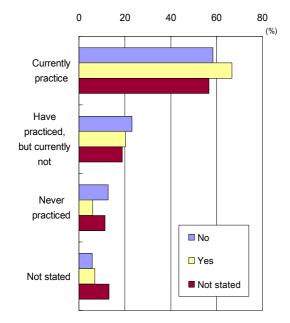


Figure 18a. Contraceptive Practice, by Experience of Induced Abortion, 1997



Another presumed reason is that sexually active women are more likely to have an induced abortion and are more likely to use contraceptive methods.

Figure 17b. Contraceptive Methods among Current users, by Attitude toward the Next Birth,1997

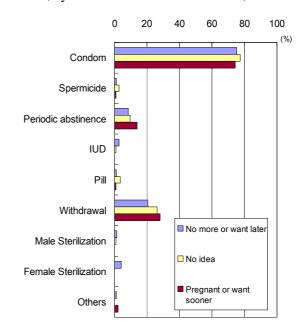
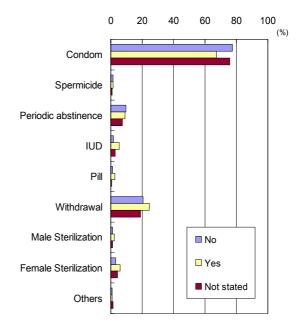


Figure 18b. Contraceptive Methods among Current Users, by Experience of Induced Abortion,1997

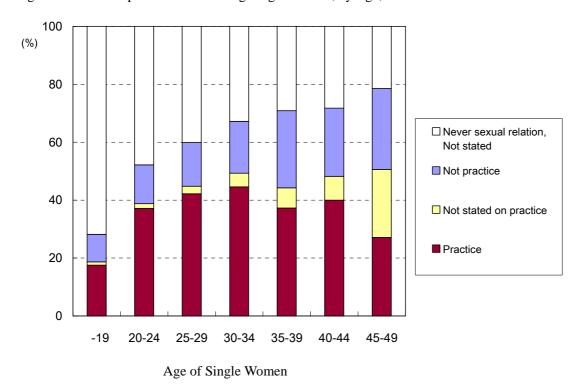


4. CONTRACEPTIVE PREVALENCE FOR ALL WOMEN OF REPRODUCTIVE AGE

We estimated the contraceptive prevalence rates

for all women of reproductive age in Japan based on the data from the 1997 JNFS.

Figure 19. Contraceptive Practice among Single Women, by Age,1997



1) Contraceptive prevalence among single women

The situation of contraceptive practice among single women at the time of survey was not questioned in the JNFS series, but the 1997 JNFS investigated single women's sexual experience and the contraceptive practice used during their most recent act of sexual intercourse. Using the contraceptive practice used during the most recent act of sexual intercourse as the contraceptive practice used at the time of survey, we estimated the contraceptive prevalence among single women.

Figure 19 shows the estimated contraceptive prevalence rate for the single women population by age group. It is only 17.5% among single women younger than 20, but it steeply rises for those in their 20s, reaching a peak of 44.6% for

those aged 30-34; after which it declines. The overall rate is 35.8%, but it may be overestimated, especially among older single women, because the women who practiced contraception in the past are not necessarily sexually active at present.

2) Contraceptive prevalence among married women

The contraceptive prevalence rate for married women by age group is shown again in Figure 20. The rate reaches a peak of 66.8% for those aged 35-39; after which it declines to 52.5% for those aged 45-49. The overall rate is 58.9%.

3) Contraceptive prevalence among all women of reproductive age

The estimated contraceptive prevalence rate for all

women by age group was calculated using the sum of the rate for single women and the rate for married women, both weighted using the population distribution by marital status in the 1995 census. The women who did not state whether they had experienced sexual intercourse or whether they had practiced contraception were excluded.

Figure 20. Contraceptive Practice among Married Women, by Age,1997

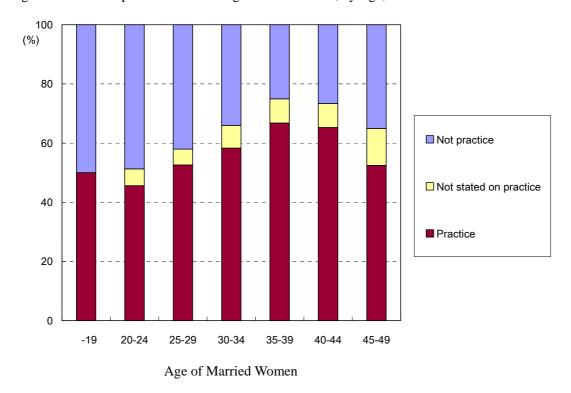
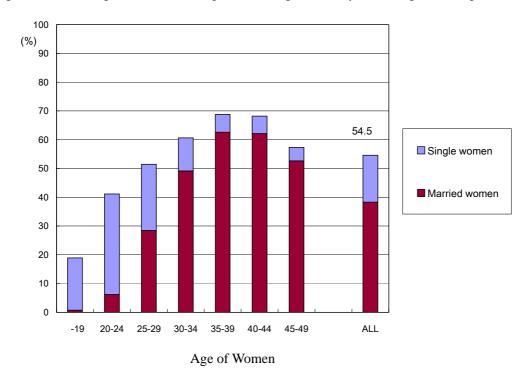


Figure 21. Percentage of Women of Reproductive Age Currently Practicing Contraception, 1997



As a result, the rate is less than 20% among women younger than 20, but it increases as age increases to a peak of nearly 70% for those aged 35-39; after which it slightly declines (Figure 21).

The overall rate is 54.5%. Because the rate for single women may be overestimated as mentioned above, the rate for all women may be overestimated.

100 90 80 70 60 50 40 30 20 10 0 United Belgium, Germany, Great Australia, Denmark, France, Canada, Japan, Britain. States, 1991 1992 1992 1986-87 1989 1995 1995 1995 1997 (20-40)(20-39)(18-44)(20-49)(15-44)(20-44)(15-44)(18-49)(18-49)

Figure 22. Percentage of Women Currently Practicing Contraception, Selected Industrialized Countries

Sources: Australia, Belgium, Denmark, Germany and Great Britain - United Nations (1996); France - Toulemon and Leridon(1998); United States - Piccinino and Mosher (1998); and Canada - Martin and Wu (2000). We added a bar for Japan to the bars of 8 other countries from figures of Martin and Wu (2000).

4) International comparison

Finally, we would like to compare the estimated level of contraceptive prevalence for all Japanese women of reproductive age (54.5%) with other countries. In a comparison of 8 industrialized countries (Belgium, Germany, Great Britain, Australia, Denmark, France, United States and Canada), Martin and Wu (2000) concluded that Canada's overall contraceptive prevalence is among the lowest in the industrialized world. In this paper, however, our estimation suggests that Japan's contraceptive prevalence is far lower than Canada (Figure 22). This is arguably due to the combination of three factors: (1) presumably lower rates of

having sexual intercourse among Japanese single women, (2) lower marriage rates among Japanese women of reproductive age, and (3) relatively low rates of contraceptive use among Japanese married couples. The cultural and social background behind the wife-husband partnership and man-woman relationships should be further examined.

5. CONCLUSION

Although the reported number of induced abortions seems to be underestimated because of losses in registration and insufficient statistics on contraceptive practice were available, we can still

get a good understanding of the levels and trends of contraceptive practice and induced abortion in Japan. And, in this paper, we have highlighted some current aspects of demographic patterns of contraceptive behavior among Japanese women of reproductive age.

First, we can see a transition from abortion to contraception, that is, from a pattern with a very high abortion level and a very low contraception level to a pattern with a relatively low abortion level and a relatively high contraception level. The data included in this report indicated that the transition began in the 1950s and ended in the 1970s.

Second, there are some problems associated with contraception and abortion levels and patterns of the post-transition phase in Japan. Although the abortion rates have dramatically decreased, its level is still not low, even now. Moreover, recent increases in abortion rates among women aged 15-19 and 20-24 is posing a new issue.

Third, although the contraceptive prevalence among married Japanese couples remains stable at a level of around 60%, the level is relatively low compared internationally. In this paper, we estimated the contraceptive usage rates for the single women population and presented the contraceptive usage rates for all women (single and married) by uniting the rates among single women and the rates among married women. This estimate suggested that Japan's overall contraceptive prevalence (less than 60%) is among the lowest in the industrialized world.

Furthermore, the use of medically provided contraception methods such as the pill, IUDs, and sterilization is very low. About 14% of married Japanese women currently using some method of contraception were using two or more methods simultaneously. Some users of non-medical

methods use them in combination with other methods. A wife's age, marital duration, parity, and desire for the next child are viewed as important determinants of contraceptive use. There exists an "unmet need" for family planning among married Japanese couples. These findings suggest the existence of more than just a few numbers of unplanned pregnancies in Japan². We should tackle these problems from the standpoint of reproductive health.

We can say that the Japanese contraceptive usage pattern is very unique in the world. The peculiar tendencies in contraceptive behavior among Japanese women of reproductive age as compared with other industrialized countries - generally lower rates of contraceptive prevalence, predominance of condom use, and very low use of medical methods - need to be further examined.

NOTES

- 1 In this paper, "married" means *currently married*, and "single" includes both *never married* and *formerly married*.
- 2 Iwasawa (2002) proposed a model to estimate the number of conceptions during the course of one year by all Japanese women of reproductive age, and suggested that the percentage of unintended pregnancies could be between forty and sixty percent and the amount of unintended births could be between thirty and fifty percent of all births in Japan in 1997.

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Ryuzaburo Sato

(National Institute of Population and Social Security Research, Tokyo. E-mail: ry-sato@ipss.go.jp)

Miho Iwasawa

(National Institute of Population and Social Security Research, Tokyo.

E-mail: iwasawa@ipss.go.jp)