

Abortion pattern changed during Family Planning Program in the past 30 years in China

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Background:

Given the tendency of fertility level in China in the past 30 years and the reproductive health program in a global context, it is important to identify changing levels and patterns of abortion in China, and taking abortion as an index to evaluate the family planning program and population policy in the past 30 years in China. This paper aims to analyze the total levels of abortion in China over time, noting the concomitant policy changes and other biological factors influencing fertility as described above, as a context for analyzing levels disaggregated by factors such as age, educational attainment, and residence, and so as to know the results of changes in past programme direction, and to recommend future changes.

Methods:

Data source

The main data came from four nationwide surveys conducted by Chinese National Population and Family Planning Committee: the National Reproduction and Contraception Sample Survey in 1988, the National Population and Reproductive Health Survey in 1997, and the National Family Planning and Reproductive Health Surveys in 2001 and 2006, which respectively included 578,952, 15,213, 39,530 and 33,257 women of reproductive age (15–49 years old). Although the sample sizes are different for the four surveys, they all employ the same sampling frameworks, using stratified, systematic and cluster sampling, so the data remain highly consistent with one another. The quality of the surveys in 1988 and 1997 is reported to be good [1, 2]. The women in the surveys have a similar demographic profile to the women of reproductive age enumerated in the National Population Censuses in 1990 and 2000, with respect to such factors as age structure, ethnicity, educational level and marital status. With respect to residence, however, there are a higher proportion of rural women in the surveys than in the census population, since the family planning programme is concentrated in rural areas, and therefore the surveys focuses data collection in those areas.

To minimize recall error, our analysis combined the 1988, 2001 and 2006 survey data, and took into account only pregnancies dating back to five years before the survey. For example, we constructed trends 1984–1987 by using 1988 survey data, and trends for 1997–2000 and 2001–2005 by using 2001 and 2006 survey data, respectively. To make a continuous yearly comparison, we took into account the pregnancies dating back to ten years before the 1997 survey, i.e., trends for 1988–1996 by using 1997 survey data. All four surveys collect information on pregnancy history only from married women including first marriage, remarriage, divorce and widowhood.

Discussion of indicators

We utilized three main indicators to describe abortion levels:

Absolute number of induced abortions is the number of abortions in women aged 15–49.

Abortion rate is defined as the number of abortions per 1000 women aged 15–49.

Total abortion rate (TAR) as suggested by Henshaw and coworkers [3]. This measure, a synthetic measure analogous with the total fertility rate (TFR), is the total number of abortions which a woman would experience if she were to go through her reproductive years experiencing prevailing age-specific abortion rates. TAR is significant in that it excludes the impact of age structure (but not temporal effects).

Findings:

1. Overall abortion levels in China fluctuated in the period 1970-1990, but have declined markedly since 1991, the total abortion rate declined from above 0.75 in 1980s to less than 0.35 in 2000s. This has occurred at the same time that reported fertility has declined.

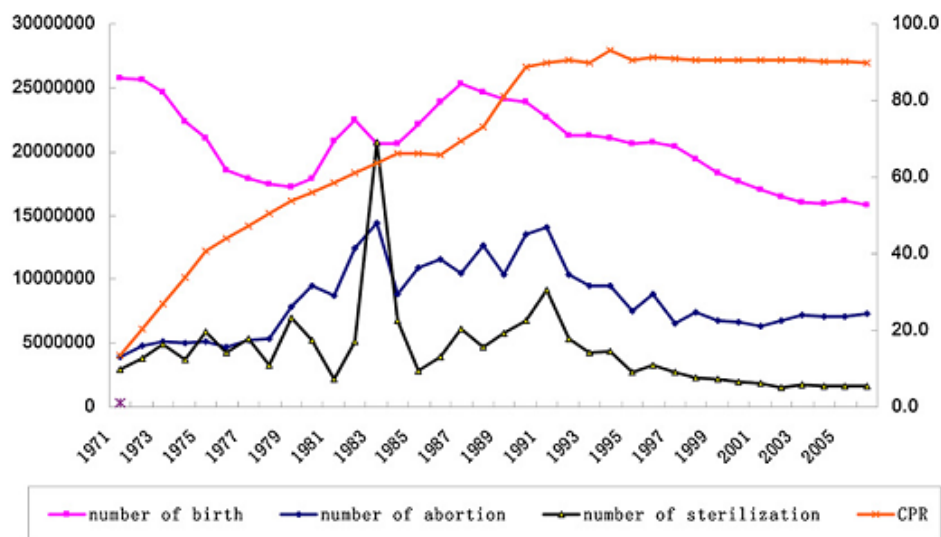


Figure 1 Birth, abortions and sterilizations in China, 1971-2006

2. The profile of women resorting to abortion has shifted from older, rural, less educated women, toward younger, urban, more educated women, at a rate beyond the change in composition of the population as a whole.

Year	Women of reproductive age (15-49)	Number of birth	Age at first marriage	Contraceptive methods						
				Male sterilizations	Female sterilizations	IUD	Norplan	Pill and injection	Condoms	Others
1990	205,984,328	23,906,996	22.12	11.8	37.4	40.6	-	5	3.7	1.5
1991	214,060,323	22,647,350	22.23	12.1	38.9	39	-	4.8	3.9	1.3
1992	219,524,536	21,249,053	22.53	12.1	39.6	39.1	-	4.1	3.9	1.2
1993	226,464,651	21,317,980	22.67	11.4	40.3	40	-	3.6	3.6	1.1
1994	224,752,337	21,095,480	22.73	11	40.2	40.7	0.2	3.2	3.8	1
1995	236,843,105	20,627,118	22.93	10.6	39.9	41.7	0.3	2.9	3.8	0.8
1996	239,386,174	20,673,999	23.2	10.2	39.5	42.5	0.4	2.8	3.8	0.8
1997	242,997,543	20,382,343	23.39	9.8	39.1	43.7	0.4	2.5	3.8	0.7
1998	245,174,837	19,423,863	23.57	9.6	38.7	44.6	0.4	2.4	3.8	0.6
1999	249,054,814	18,340,040	23.62	9.2	38.2	45.5	0.4	2.2	3.9	0.5
2000	250,821,028	17,714,909	23.14	8.9	37.6	46.3	0.4	2.1	4.2	0.5
2001	252,003,411	17,017,353	-	8.5	36.9	47.2	0.4	2.1	4.6	0.5
2002	253,443,670	16,465,944	-	8.2	36	48.1	0.4	2	4.9	0.5
2003	254,304,350	15,989,044	-	7.7	35.2	49.1	0.4	1.9	5.3	0.4
2004	255,399,635	15,928,762	-	7.4	34.6	49.8	0.4	1.7	5.7	0.5

Table 1 Total number of women, births, contraception and marriage in China, 1990-2004.

3. The contraceptive prevalence remained very high (above 90%) while contraceptive method mix has shifted, in particular from sterilization toward IUDs. However, the provider-controlled pattern was predominant regardless of whether women were free to choose their own contraceptives. The user-controlled methods were preferred by young, urban women, strikingly with no or only one child.

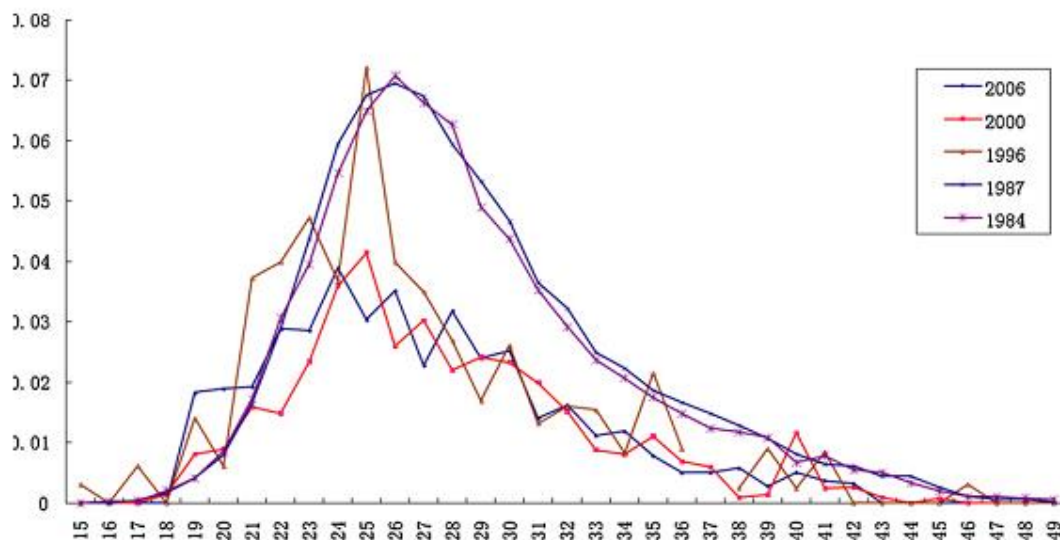


Figure 2 Age-specific abortion rate in China, 1984, 1987, 1996, 2000 and 2006.

Table 2 Total abortion rate by educational level

Education	Total abortion rate		
	1987	1996	2000
Illiterate	0.435	0.283	0.164
Elementary school	0.709	0.552	0.335
Junior high school	1.001	0.559	0.358
Senior high school	1.158	0.602	0.529
College or above	1.071	0.541	0.657

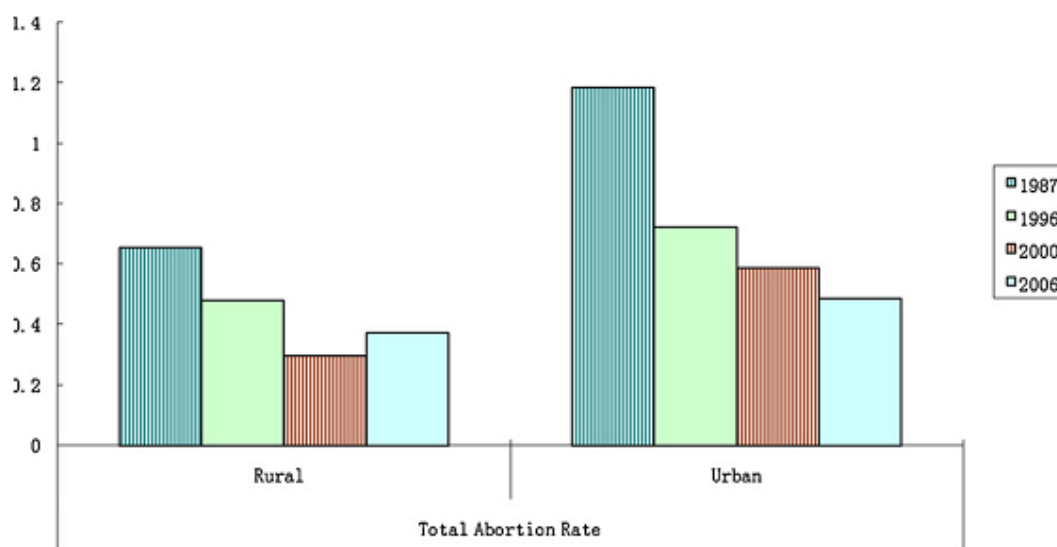


Figure 3 Total abortion rate in rural and urban China, 1987, 1996, 2000 and 2006

Discussion and conclusions:

The research confirms that abortion, as reproductive health indicator, has changed in major ways in the last 30 years, in parallel with changes in policy. In particular, policy has shifted from encouragement of abortion as a method for regulation fertility, to a policy where it is discouraged. The changes consistent with a gradual shift in the Chinese family planning programme, increasingly meeting the principles of the International Conference on Population and Development, which calls for making contraception accessible, hereby helping women, including unmarried women, avoid recourse to abortion, and giving them more autonomy in factors affecting their reproductive health. However, abortion of adolescence and abortion with contraception failure and no use need to be paid more attention.

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