

Unintended pregnancy and induced abortion in China: a systematic review of studies from women's pre-marital medical examination

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Abstract

Background

Female premarital examination is a legal requirement before marriage in China, and some Chinese researchers have carried out surveys at facilities providing these certificates.

Methods and Results

We explored unmet need for reproductive health services by systematically reviewing all available studies in this setting. 8 papers in cities showed over 54% of unmarried women living in the urban areas had experienced sexual intercourse, and many (11.5% - 31.8%) had been pregnant. Almost all the women who had been pregnant reported undergoing an induced abortion. One rural study showed low pregnancy and abortion rates.

Conclusion

This study suggests a large unmet need for temporary methods of contraception in urban areas of China.

Background

In the past two decades, China has experienced dramatic social changes associated with rapid economy growth and political reform. Traditional attitudes towards sex,

marriage and family have changed, and pre-marital sex is more acceptable (Liang *et al.* 2002). Reproductive health care is available through government services, but the current National Family Planning Programme targets married couples and the young have little access to information or advice about contraception, although contraceptive tools and induced abortion are widely available (Tu *et al.* 1998). Against this background, we wanted to assess whether current reproductive health services were meeting the needs of unmarried women in China.

All women intending to marry are bound to take a premarital medical examination at designated health facilities, usually maternal and child health (MCH) centres, by law, as Therese Hesketh introduced in her paper published in BMJ recently (Hesketh 2003). Some Chinese researchers have carried out studies of women attending premarital examinations with data on reproductive health needs. This is unique population based data on reproductive needs in young Chinese women. We therefore systematically sought and summarized these studies to assess the adequacy of current family planning services in meeting the needs of unmarried women for temporary methods of contraception.

Methods

Inclusion criteria: Any paper reporting studies from the premarital examination that included questions about a prior induced abortion and appeared to be population-based (reporting on all women attending the clinic).

Search strategy: We searched the Chinese Biomedical Literature Index from 1978 and 2002, using the following free text terms: “unmarried pregnancy”; “induced abortion” and identified 37 papers requiring more careful scrutiny. We searched PUBMED (no time limits) and EMBASE (1980 to 2002), using a variety of terms (China or Chinese AND adolescent or teenager or young AND reproductive health or induced abortion or premarital medical examination or pregnancy), and found no relevant studies.

Study selection and data extraction: Two researchers viewed the papers independently, applied the inclusion criteria and extracted data on the proportion with a history of induced abortion. If available, we extracted data on the number reporting previous pregnancy or sexual intercourse.

Description of studies

All 37 potentially relevant papers were published in Chinese. Three were case series, 2 were qualitative studies, and 1 was a literature review, and therefore these six papers were excluded. Of the remaining 31 papers, 14 did not distinguish premarital from other women attending the clinic; of the remaining 17, 8 did not report on a history of induced abortion. This left 9 papers meeting our inclusion criteria (Zhao *et al.* 2000; Wang 2001; Shi *et al.* 2000; Li 2001; Ma & Wang 2001; Liu & Dai 2002; Wang & Tang 2001; Wu 2000; Wang *et al.* 2001).

Eight of the included studies were in urban areas, and one was in a rural area (table), covering five provinces. All studies reported on all of the women attending premarital

examination, apart from one study in Shanghai (Xuhui 2001) which selected only recent rural migrants. All papers specified that the interviewees were women attending for the premarital medical examination. Six out of eight studies reported that the researchers used a specially designed questionnaire to interview these women. The other two studies reported that the researchers used standardised premarital medical examination forms to compile the data.

Results

Sexual activity was reported in 6 of the 8 urban studies: this was greater than 54% in all studies; in the one rural study, the level was much lower (20%, n=5,960). A history of premarital pregnancy was sought in 3 of the eight urban studies. This ranged from 12 to 48%. Several studies commented that most of these pregnancies were unintended, and no contraceptive measures were used, but no quantitative data on this were systematically collected or reported.

A history of induced abortion was sought in all the 8 urban studies, and ranged from 11 to 52%, with 5 of the 8 studies reporting that 25% or more of the women attending had a history of induced abortion. Induced abortion was rarely reported in the large rural study (0.8%).

Three studies (all urban) reported both pregnancy and induced abortion history. They show that almost all the women who become pregnant before marriage had an abortion (table).

Discussion

Since the premarital examination is legally required in China, these studies are likely to represent the population living in the catchment area of the MCH centres, and are not a selected group. All the studies are conducted in more developed areas of China. Although there is only one rural study, it was a large sample, and shows low reported sexual activity and induced abortion. The levels for both sexual activity and induced abortion are consistently high in the urban studies, including one study of rural migrants in Shanghai.

These data show premarital sex is more common in some urban areas than we expected, and that abortion is the main response. This is an invasive procedure not without risk and can lead to problems with fertility in later life. The data indicate a large unmet need for reproductive health services for women prior to marriage in China.

Conclusions

China has been changing quickly, but services and social responses to these changes are slower. There is a concerted response required to describe this problem more fully and introduce strategies to help mitigate the effects (Wang *et al.* 2002; Xu *et al.* 1998). This includes introduction of appropriate information about contraceptive methods to school children and young people; provision of user-friendly contraceptive advice and services, targeted particularly the young women.

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Table 1. Sexual activity, pregnancy and induced abortion among the Chinese pre-married women participating in premarital medical examinations from all included studies

Place	Province	Study site	Women	Sexual activity	Pregnancy	Induced abortion	Observa-tion period	Reference No.
			N	n (%)	n (%)	n (%)		
Urban	Shanghai	Xuhui District; 2000	788	599 (76.0)	251 (31.8)	215 (27.30)	1999	4
		Xuhui District; 2001†	145	126 (86.9)	70 (48.3)	50 (34.5)	1999	5
		Baoshan District; 2000	550	298 (54.2)	66 (12)	63 (11.5)	1995-96	6
	Jiangsu	Xinghua City; 2001	1,068	836 (78.3)	NA	419 (39.2)	2000	7
	Shandong	Tengzhou City; 2001	758	622 (82.1)	NA	149 (19.7)	1998	8
		Qingdao City; 2001	2,403	NA	NA	561 (23.3)	2000	9
	Zhejiang	Jiaxing City; 2001	208	157 (75.5)	NA	80 (38.5)	2000	10
	Fujian	Nanping City; 2000	2,790	NA	NA	1,527 (52.4)	1998-99	11
Rural	Shandong	Gaotang County; 2001	5,960	1,192(20.0)	NA	45(0.8)	1999-2000	12

† Study of recent rural migrants

NA data not available

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