



Sexual dysfunction after a first trimester induced abortion in a Chinese population

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Abstract

Objective: To evaluate the short-term effect of a first trimester induced abortion on sexuality in a Chinese population.

Study design: This is a cross-sectional study. One hundred and four women attending the post-abortion clinic 3–4 months after a first trimester induced abortion were recruited. They completed a self-administered questionnaire anonymously. The associations of various factors with sexual behavior after abortion were analyzed by the Chi-square test.

Results: More than 30% of the women reported a reduction in both frequency of vaginal intercourse and sexual desire. Their partners also had a reduction in sexual desire. The reduction of vaginal intercourse is more significant among young, unmarried women and those not having sterilization ($P = 0.01$). In addition, the prevalence of reduction in sexual desire and enjoyment among those women who had repeated abortion was significantly higher ($P < 0.01$).

Conclusion: The sexuality of both women and their partners are affected after abortion. It may be due to both psychological trauma and the worry of another unwanted pregnancy. Proper counseling may relieve their anxiety and improve sexual lives.

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1. Introduction

Induced abortion is one of the most commonly performed gynaecological operations. Approximately 26 million legal and 20 million illegal abortions were performed worldwide in 1995 alone [1], and as much as 24.5% of all recognized pregnancies were terminated [2]. Induced abortion is one of the safest medical procedures when properly performed, with a case-fatality rate of less than 1 death per 100,000 procedures [3], and an overall immediate complication rate of about 9.05 per 1000 procedures [4]. On the other hand, many studies have suggested that induced abortion may be associated with long-term physical and psychological complications, including increased risk of preterm labor in subsequent pregnancies, depression and suicide [5,6]. As

much as 30% of women undergoing induced abortion had severe emotional distress [7].

Only a few studies have investigated the impact of induced abortion on couple relationships or sexual functioning. Limited data suggest that induced abortion might have negative effects on marital relationships or sexual function in up to 20% of women [6]. In China, about 10 million induced abortions are performed annually [8]. Approximately 26% of Hong Kong married women have experience of abortion [9]. Cheng et al. reported that the most frequent cause of abortion in China was contraceptive failure (71.9%) and about 30% of these unplanned pregnancies were due to non-use of contraception [10]. It is similar to western countries [11,12]. However, there is a lack of data about the influence of abortion on sexuality in the Chinese population. It is well-known that there is a large difference in sexual attitude between Chinese and Caucasian populations based on studies among non-pregnant women [13–16]. Chinese people are more conservative both in

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sexual attitudes and premarital sexual experience, the effect of induced abortion on sexuality among Chinese might be different as well. The aim of this study was to evaluate the sexuality of Chinese women after a first trimester induced abortion.

2. Material and methods

Women attending the post-abortion follow-up clinic in a university teaching hospital in Hong Kong were invited to participate in this observational study. All of them had a first trimester surgical termination of pregnancy 12–16 weeks before the follow-up visit. Only Chinese women who requested induced abortion for ‘psycho-social reasons’ were recruited. Those who had induced abortion for fetal abnormalities or serious maternal medical diseases were excluded.

These women were invited to complete a self-administered questionnaire at the post-abortion follow-up clinic. They were assured that the survey was anonymous and their responses were kept confidential. The original questionnaire was a modified version of the Pregnancy and Sexuality questionnaire [17], which has been modified and translated into a Chinese version with approval. It was developed as an objective self-reporting instrument designed to identify the domain of sexual behavior. The questionnaire consists of 24 items and included the following information:

- demographic characteristics;
- their contraceptive practices before and after abortion;
- their sexual attitudes (sexual desire, enjoyment and orgasm) before and after abortion;
- the change in frequency of various sexual activities after the index abortion including fantasy, kissing, foreplay, breast fondling, masturbation, intercourse, anal and oral sex;
- the change in sexual attitudes of their partners perceived by the women after induced abortion;
- the influence of induced abortion on their daily and sexual lives;
- the time to resumption of intercourse.

The study was approved by the Clinical Research Ethics Committee of the local institute.

All statistical analyses were performed using the Statistical Package for Social Sciences for Windows Version 10.0 (SPSS Inc., Chicago, Illinois, USA). Chi-square test was used to assess the association of various factors with sexual behavior after abortion. A *P*-value < 0.05 was considered as statistically significant.

3. Results

During the study period, nine women defaulted the post-abortion follow-up. Among them, the mean age was

22.8 ± 7.0 years. Six were nulliparous and approximately half of them were unmarried. Five women had history of abortion and one had no contraceptive practice before abortion. A total of 108 women were invited to participate. Four women refused to participate while 104 agreed and completed the questionnaire. The demographic characteristics of the women were shown in Table 1. There were eight teenagers. More than 40% had previous history of induced abortion.

Twenty-one (20.2%) women had sterilization performed together with the induced abortion. Among those without sterilization, significantly more women used highly effective contraceptive methods including combined oral contraceptive pills (COCP), condom or intra-uterine contraceptive devices (IUCDs), after the induced abortion compared with before (74.1% versus 56.8%, *P* = 0.02).

Only 18 women (17.3%) believed that sexual activities could be resumed within 4 weeks after an induced abortion, while 37 women (35.6%) claimed that they should abstain from such activities for at least 6 weeks. There was no significant difference on timing of resumption of sexual activities among the women, neither single or married, with

Table 1
Demographic characteristics of the 104 subjects

Age	30.1 ± 7.7
Nulliparous	25 (24.0)
Marital status	
Single	31 (29.8)
Married	67 (64.4)
Divorced	5 (4.8)
Religion	
Christian	11 (10.6)
Buddish	19 (18.3)
No religious belief	71 (68.3)
Education level	
Secondary school	54 (52.0)
University	39 (37.5)
None	1 (1.0)
Previous history of abortion	42 (40.4)
Major contraceptive methods before abortion	
Nil	12 (11.5)
Rhythm method	21 (20.2)
Coitus interruptus	8 (7.7)
COCP	12 (11.5)
Condom	44 (42.3)
IUCD	5 (4.8)
Major contraception after abortion	
Nil	4 (3.8)
Rhythm method	3 (2.9)
Coitus interruptus	1 (1.0)
COCP	18 (17.3)
Condom	28 (26.9)
IUCD	14 (13.5)
Female sterilization	21 (20.2)

Data are presented in mean ± standard deviation and number (%). COCP, combined oral contraceptive pill; IUCD, intra-uterine contraceptive device.

Table 2
Changes of various sexual activities after induced abortion

	Increased frequency	Decreased frequency
Fantasy	1 (1.0)	20 (19.2)
Kissing	7 (6.7)	22 (21.2)
Masturbation	0 (0)	16 (15.4)
Forplay	3 (2.9)	13 (12.5)
Vaginal intercourse	5 (4.8)	32 (30.8)
Anal sex	0 (0)	8 (7.7)
Breast fondling	2 (1.9)	11 (10.6)
Oral sex	0 (0)	9 (8.7)

The data represented the number of the women (%).

sterilization or not, nor with or without history of repeated abortion ($P > 0.05$).

Eighty-one women (77.9%) had coitus at least once per week before the index induced abortion. Approximately 57% of them remained no change whereas 41% had less coitus after abortion. However, for those having less coitus (less than once per week) before, more women reported a decrease in coital frequency after the index abortion (70% versus 41%, $P = 0.02$).

After the index induced abortion, 77 women (74.0%) had resumed vaginal intercourse at the time of follow-up, 4 (3.8%) had anal sex, 9 (8.7%) had oral sex and 57 (54.8%) had other forms of sexual contact including kissing, foreplay and breast fondling. Overall, 32 women (30.8%) reported reduction in the frequency of vaginal intercourse after abortion, while 5 (4.8%) reported an increase. The changes in other types of sexual activities after abortion were shown in Table 2.

Those who were not married had a significantly lower percentage of resumption of vaginal intercourse at the time of follow-up compared with those who were married (61.1% versus 80.6%, $P = 0.03$). Similarly, women less than 25 years old, unmarried and those did not have sterilization reported a significant higher reduction in the frequency of vaginal intercourse after abortion (48.5% versus 22.9%; 47.2% versus 22.4%; 36.1% versus 9.5%; P -values = 0.01).

A reduction in sexual desire and sexual enjoyment was reported in 35 (33.7%) and 28 women (26.9%) respectively, while an increase was reported in 6 (5.8%) and 4 (3.8%), respectively; 17.6% of women perceived that their partners had reduction in sexual desire. Twenty-five (24.0%) of them had a reduction in frequency of orgasm. The decrease in sexual desire was significantly more common in women with a history of previous abortion than those having the first episode of abortion ($P = 0.01$) and reduction in sexual enjoyment was significantly more in those who were not sterilized (33.3% versus 5%, $P = 0.01$).

The majority of women (67.3%) were more worried about getting pregnant than before, and 50.0% of women perceived that their partners had similar worry. Even among those who had female sterilization or used a highly effective contraception, still 47 and 77%, respectively had increased worry about becoming pregnant again compared with before

abortion. About one-quarter (28.8%) of women reported that abortion did influence their relationship with their partners and sexual life. Seventeen percent considered that they were less attractive after the induced abortion.

4. Discussion

The impact of induced abortion on sexuality has been only evaluated in a few studies [18–22] and these were limited to non-Chinese populations. The Chinese population is known to be conservative towards sexual behavior [23–25]. Our study showed that a first trimester surgical abortion was associated with significant short-term sexual dysfunction. A significant proportion (8–30%) of women had reduction in various kinds of sexual activities after abortion. The most affected one was vaginal intercourse. Besides the frequency of the sexual activities, sexual desire and enjoyment were also affected in one-third of the women. Similar change in sexual attitude was observed in their male partners too. It reflected that abortion did seriously influence the sexuality of the couples.

Vaginal intercourse had the highest reduction rate among all kinds of sexual activities after abortion. The most likely reason was the fear or worry of having another unwanted pregnancy. This worry affected more than half of the women and their partners and likely is the major reason affecting their sexual function. Similar to the findings of Pasini [21], among those women who had history of repeated abortion, their sexual desire was more negatively affected after the index abortion, though the frequency of various sexual activities was similar to those who had their first abortion. The long-term effect on sexual function of the women with repeated abortion requires further investigation.

A seemingly logical conclusion from the findings of our study was that improvement in proper counseling on post-abortion contraception should improve their sexual lives by alleviating their fears of having another unwanted pregnancy. In our routine practice, thorough counseling on different types of contraceptive methods was offered to all women when they attended our clinic for termination of pregnancy. However, our study also showed that the majority of women had either female sterilization or a reliable method of contraception after abortion; yet there were still 47 and 77% of these two groups of women who had increased worry about pregnancy compared with before abortion. Therefore, the fear of another unwanted pregnancy appeared not solely because of inadequate counseling on contraception but also a psychological response, which may not be possible to be reduced or prevented by further or better counseling on contraception.

Guilty feeling may be one of the reasons that hindered a couple from sexual activity after induced abortion. Guilt is a common psychological response among couple who had undergone an induced abortion. The reported prevalence rate was up to 35% [22]. Some couples considered the joy of

sexual act was the origin of their need to destroy a new life. This may explain why sexual activities that do not cause pregnancy were also reduced, such as masturbation and fantasy. In addition, a proportion (17%) of the women also felt less attractive after abortion. These reflected the certain degree of psychological trauma was caused by the induced abortion. Further psychotherapy may be useful in preventing the occurrence of sexual dysfunction after induced abortion.

In conclusion, this study illustrated the presence of dysfunction in sexual attitude and behavior among Chinese women after induced abortion, which is similar to the Caucasian population. However, the limitation of this study is the recall bias as the women were asked to compare the change of their sexual practice when attending the post-abortion follow-up. Further prospective studies with longer follow-up are needed to evaluate the long-term psychosexual sequelae related to induced abortion.

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