CONTRACEPTIVE USE BEHAVIOUR AMONG NEVER MARRIED YOUNG WOMEN WHO HAVE UNWANTED PREGNANCY: An Exploratory Study in Beijing, CHINA

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Wu Jiuling
In the context of an increasing incidence of unwanted pregnancy and induced abortion among never-married young women in China, a cross-sectional study aimed at identifying contraceptive use behavior (CUB) during the past 12 months and its determinants among never-married young women who had unwanted pregnancy in Beijing was conducted in 1999-2000. A modified model based on the phase 4 of the PRECEDE – PROCEED was applied as a conceptual framework of this study. The results of this study were drawn from the structured questionnaire survey among a sample of 306 young women, aged 18-24 who had unwanted pregnancy and were seeking pregnancy termination at selected hospitals in Beijing, supplemented by in-depth interviews with 8 subjects.

The findings of this study indicated that only one-eighth (13%) of the women insisted on contraceptive use every time, one-third (33.7%) used contraceptives most of the time, and almost an equal proportion (26.4%, 26.8% respectively) occasionally or never used contraceptives. In addition, the methods used most often were condom (49%), withdrawal (27.7%) and the rhythm method (15.6%), whereas, the use of pills was very low (5%) among 224 women who had used contraceptives during the past 12 months. One of the most important reasons, cited by 73.1 percent of women who had never used contraceptives, was that they did not think about getting pregnant when they engaged in sexual activities.

The results of logistic regression analysis revealed that knowledge about contraception, boyfriend's approval of contraceptive use, perceived susceptibility to pregnancy, perceived availability of contraceptive service and discussion of contraception with boyfriend were important indictors of young women’s CUB. Also, the qualitative study found that knowledge about pregnancy, responsibility for contraceptive use and counseling service were the factors affecting women’s CUB.

These findings demonstrate that the modified model of the PRECEDE – PROCEED are useful in terms of understanding the young women’s CUB. Furthermore, the results indicate that there is an urgent need for regular and effective sex education among young women and men, and for the provision of counseling service prior to and post-abortion at hospitals in order to reduce the repetition of abortion.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CUB</td>
<td>Contraceptive use behavior</td>
</tr>
<tr>
<td>ECP</td>
<td>Emergence contraceptive pills</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug Administration</td>
</tr>
<tr>
<td>SA</td>
<td>Surgical abortion</td>
</tr>
<tr>
<td>MA</td>
<td>Medical abortion</td>
</tr>
<tr>
<td>Ocs</td>
<td>Oral contraceptive pills</td>
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<tr>
<td>STDs</td>
<td>Sexually transmitted diseases</td>
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CHAPTER I
INTRODUCTION

1.1 Rationale for the Study

1.1.1 Unwanted Pregnancy and Induced Abortion among Never-Married Young Women Are Global Problems

Unwanted pregnancy among never-married young women is a worldwide problem that affects women, their families and the whole society. Unwanted pregnancy can result from contraceptive failure, non-use of contraceptive methods, and rape. Unwanted pregnancy among never-married young women often leads to safe or unsafe abortions that can result in serious, long-term negative health effects, including infertility and maternal death.

Although the exact rate of unwanted pregnancy and abortion among never-married young women is usually unknown and unavailable, much of the research indicates that unwanted pregnancy rates were quite high in many developing countries and in some developed countries as well. Direct collection of abortion data is problematic, and the information obtained is usually grossly underreported, because both women and abortion providers are reluctant to discuss the subject (Barreto et al., 1992).

According to recent WHO reports on induced abortions (1994), twenty million unsafe abortions are estimated to occur annually, about 18 million of them taking place in developing countries. The international center on adolescent fertility shows that it can be conservatively estimated that 1 to 4.4 million abortions per year take
place among adolescent women in developing countries (Center for population opinions international center on adolescent fertility, 1992).

In most Western European and English-speaking countries, about half of induced abortions are obtained by young, unmarried women who are seeking to delay the first child birth (Henshaw SK, 1990). In the U.S.A., teenagers have one of the highest pregnancy rates in the Western world—twice as high as in England and Wales, France and Canada and 3 times as high as in Sweden. Each year more than one million teenagers become pregnant. The pregnancy rate is 113 per 1000 women aged 15-19. Eight in 10 teenage pregnancies are unintended and 36 percent end in an abortion (Forrest, J.D., 1990; The Alan Guttmacher Institute, 1993)

In Cuba, where abortion is legal, adolescents account for about one-third of all abortions. In India, about 8% of officially reported abortions are performed on adolescents. In South Africa, the adolescent pregnancy rate is estimated to be 330 per 1000 women under 19 years of age (U.S.A., 1995). In Sub-Saharan Africa, Ajayi et al. (1991) reports that in Kenya, one-third of those aged 16-19 had sought an induced abortion. Mirembe (1994) documents that 68% of abortion patients at a local teaching hospital in Uganda were 15-19 years of age and 79% were still in school.

However, in the literatures, many studies reveal that the rate of contraceptive use is quite low among unmarried adolescents, especially in developing countries. Many adolescents do not seek medical advice regarding contraception until they have been sexually active or have had at least one pregnancy.

AnnK. Blanc’s survey (1998), showed that in developing countries, less than 10% of unmarried, sexually active adolescents report using condoms. In sub-Saharan Africa, for example, the DHS data shows that a large proportion of adolescents are
sexually active before marriage, while current use of a method exceeds 10% only among single women in Botswana, Nigeria and Zimbabwe (Institute for Research Development /Macro International, DHS, 1992).

1.1.2 Consequences of Induced Abortion

Induced abortion is just a back up method for birth control. Currently, surgical and medical induced abortion are the two major methods used worldwide for termination of first trimester pregnancy. Each method has its own strong and weak points. These methods might cause light or severe side effects and complications. The worst case scenario is that unsafe abortion can lead to maternal death.

With regard to surgical abortion (vacuum aspiration method), the examples in several countries of Sub-Saharan Africa reveal that adolescents represent between one-fourth and one-third of women suffering from abortion-related complications; in Kenya and Nigeria, they make up more than half of women with the most severe abortion complications. Even where abortion is legally available, young women may face an increased risk of complications if they delay obtaining an abortion, as some do because they do not recognize or they deny the early signs of pregnancy, or they lack the resources to pay for an abortion. (The Alan Guttmacher Institute, 1998)

In the U.S.A., Tietze (1972) reports that the proportion of complications is 11 percent among 72,988 abortions. The major complications were the retention of the placenta or placental or decidual tissue (2,730 cases). Fever of 38.0°C or more was reported in an almost equal number of cases (2700). Haemorrhage during the operation or postabortal bleeding was usually associated with abortion by suction. Endometritis was by far the most frequently reported form of pelvic infection.
In China, many research results indicate that surgical abortion causes a series of complications. For example, Zhang D.S.H. (1989) reports that the rate of complication occurring during surgical abortion is 2.1%. Short-term complications after abortion, light pelvic infection, occurred at a rate of 6.4% while long-term complications, menstrual imbalance, occurred at the rate of 10.2%. A significant relationship between secondary infertility and abortion was found by Zhu YD in 1991.

Medical abortion (MA) is a method of using the medicines Mifepristone and Prostaglandin to terminate pregnancy. It has been researched and used in more than twenty countries for the early termination of intrauterine pregnancy since the middle of 1980s. More than 3 million women in Europe and China have used Mifepristone combined with a low dose of Prostaglandin to achieve abortion safely and effectively (Maureen P, 1999). The rate of complete abortion is over 90 percent, but the rate of incomplete abortion and abortion failure is about 6-10%, and there is a potential risk of shock or excessive bleeding because of incomplete abortion (Wu SM, 1994). Specific symptoms and side effects, including nausea, vomiting, cramping, pain, diarrhea and bleeding, were far more frequent among the medical abortion patients than among the surgical abortion patients. Bleeding is the typically heaviest during the expulsion of the fetus and failure to take the complete medical regime requires a supplemental treatment of surgical interventions (Beverly Winikoff, 1997).

Medical abortion represents a revolution in gynaecological medicine. Many aspects of service delivery remain to be studied, discussed and refined. Although the medical abortion appears to be reasonably safe for women, medical abortion ought to be offered only where there is adequate access to laboratory and surgical facilities and
where losses to follow-up are systematically minimized in order to reduce the potential for continued pregnancy resulting in congenital abnormality (Ellen R., 1996).

1.1.3 Situation in China

Never-Married Population Setting

Data from the 1990 census of China shows that among those aged 15 and older, 25 percent have never been married. A higher proportion of men than women (29 percent and 21 percent, respectively) have never married. Never-married persons between the ages of 15 and 30 are more than 194 millions (Rose M.L., 1996).

The proportion of the never married will increase in the future along with the increasing in educational attainment and delay in marriage. After the UN Fourth World Conference on Women, for example, the Chinese government has carried out its commitments to eliminate illiteracy among young and middle aged women by the year 2000, reduce the drop-out rate among school aged girls and increase the proportion of women receiving secondary and higher education. As a fertility-reduction measure, the 1980 Chinese Marriage Law raised the minimum age of marriage from 18 to 20 for women and from 20 to 22 for men. Delay in marriage potentially can increase exposure to premarital sexual activity.

Family Planning Program and Abortion Policy

The Family Planning Program was instituted in the early 1970s. There is now a widespread service delivery network throughout the country based on two parallel systems: family planning departments at all levels of government administration and
at all levels of the health service such as hospitals and maternal and child health centers. The government at various levels has paid a considerable amount of attention to providing birth control devices for married couples. Thus, various safe, effective and convenient contraceptives are easily accessible and available to married men and women without charge (Xiao Yang et al, 1995). However, the government's influence and assistance rarely focuses on the unmarried people.

In contrast to most countries, induced abortion is legal in China. The Chinese Government endorses the use of induced abortion as a method of birth control. Safe abortion services are widely available on request as a backup for contraceptive failure and ending a pregnancy is not life threatening.

**Social and Cultural Setting**

Chinese culture is deeply influenced by the philosophy and teaching of Confucianism, which rigidly defines social expectations and relationships, especially those between men and women. Historically, the Chinese government was lax in enforcing rules and regulations on sexuality, but in the twelfth century, the Sung Dynasty started to enforce restrictions on sexuality and the sexual life of people. The pattern of enforcement that began in the Sung Dynasty continued even during the rule of the Ming Dynasty as well. For instance, during these dynasties’ rule writing about sex and public discussion of sexuality were forbidden (Ruan F.F., 1991).

After the founding of new China in 1949, the government introduced strict laws to ban all sexually explicit materials throughout the country. Also, there have been severe restrictions on social activity, which includes or implies sexual expression of any kind. Especially, during the Cultural Revolution (1966-1976), any discussion
or activity relating to sex was decried as "bourgeois" or "lustful" and "decadent.” Proposals for sex education were condemned as resulting from the corrosive influence of bourgeois ideas (Ruan F.F., 1991). However, in 1980, due to the ending of the Cultural Revolution and the memory of Chou-En-Lai’s supports, a few authors and publishers produced materials on the subject of sexuality solely for educational purposes. Thus, for the first time Knowledge of Sex was published by Medical House, and the first high school sex education courses were introduced in 1981 in Shanghai (Ruan F.F., 1991).

Therefore, based on the stated cultural setting, knowledge about sexuality is generally poor among the whole population, and premarital sexual behavior and pregnancy outside of marriage are socially and culturally disapproved and stigmatized. Premarital pregnancy brings disgrace and disastrous consequences to families, such as suicide attempts on the part of the pregnant woman or as in the past, families being banished by villagers. Now, most never married young women by hiding their real ages or name are likely to choose induced abortion as a way of ending pregnancy.

Incidence of Unwanted Pregnancy and Contraceptive Use among Never Married Young Women

As a result of the reasons mentioned above, the incidence of unwanted pregnancy and premarital pregnancy among never-married young women is impossible to obtain in China. No direct evidence can be gleaned from national surveys since pregnancy and contraceptive histories are not collected from never-married women.
Wu Jiuling

Introduction

However, the incidence of premarital pregnancy can be estimated roughly through two indirect sources: (1) examining the registration records for induced abortion in the hospitals; (2) examining hospital delivery records for intervals shorter than the normal interval (<37 weeks without any pregnancy complications) between marriage and first birth in the hospital.

A study by Wu ZC, et al, (1992) reports that in five sample areas in Shanghai between 1982 and 1988, the abortion rate among single women aged 15-19 increased from five procedures per1000 women to 56 per 1000, and Ma GT’s study (1992) shows that the proportion of induced abortion among never married young women was increasing year by year. The proportion was 25.4 % in 1990, 25.7 % in 1991 and 26.4 % in 1992. Luo and his colleagues’ (1995) prospective clinical study of 4000 women aged 18-40 between the years 1990- 1991 in six counties in Sichuan Province finds that 457 unmarried women (11 percent) underwent an induced abortion. A survey of premarital physical examinations among unmarried young people in Shanghai in 1995 showed that the ratio of premarital induced abortion was 35.7% (Li D.M., et al 1998).

The situation of contraceptive use among unmarried young women in China is not better than that of other developing countries. Premarital contraceptive practice is poorly understood and rarely considered by either governments or unmarried young people. Several studies show that the ratio of contraceptive use is less than 1/3 among unmarried young women sampled for the studies. (Zhen YL, 1992, Wang, 1995) Li DM.’s study (1998) shows that 78.6% of 1010 unmarried young women who had an induced abortion did not use any contraceptive methods prior to current pregnancy and 26.7 % of cases didn't know how to prevent pregnancy.
Therefore, the evidence of the increase of induced abortion and low contraceptive use among unmarried young people suggests that never married young women should be regarded as a special risk group. Exploring the reasons for the increase in unwanted pregnancy among never married young women should become an urgent agenda for us.

1.2 Problem Statement

The Chinese government placed an early emphasis on the eradication of socially transmissible diseases, particularly those with transmission routes. In this way, the Chinese government tried to eradicate all venereal diseases from the country. (Ruan F.F. 1991; Gil V.E. 1991)

However, premarital sexual activities and sexual transmitted diseases have been increasing since China liberalized its economic reform policies and economic development in the 1980's. As a result of an open economy, all aspects of Chinese society began to change rather rapidly and with these transformations, traditional attitudes toward sexuality also changed.

In addition, new economic strategies have encouraged large-scale population mobility. Migration from rural areas to cities in order to search for jobs has a great impact on the lifestyle of young people, including their sexual behavior. A further consequence of migration is the break down of traditional kinship systems, which are now losing their power for controlling the young generation. Therefore, attitudes toward premarital sexual behavior have been silently changing among the new generation.

For example, Zhen's study (1992) reveals that almost half among 1202
respondents thought that premarital sex is acceptable and they didn't care about having premarital sexual behaviour. Another investigation in Beijing shows that premarital sex is very common among urban young people receiving physical examinations before marriage: among 3034 respondents, 46% of males and 45% of females admitted having premarital sexual relations (Zhang JY. et al., 1996).

Under the pressure of the Chinese social and cultural setting, it is an inevitable consequence that unsafe premarital sex among never-married young women will lead to unwanted pregnancy and induced abortions. Many previous studies (the above mentioned) have revealed that the rate of induced abortion among never married young women has been obviously increasing.

Unwanted pregnancy and induced abortion among never married young women not only have an impact on young women's psychological health, but also cause a series of social problems. In terms of a married woman, her reaction to an unwanted pregnancy and her decision-making process are shaped by a set of factors and a support system, such as family or public services, that are completely different from that of an unmarried young woman. Also, unmarried young women will experience completely different emotional and social pressures than married women. Pregnancy among unmarried women is more disruptive, and more socially and economically costly than pregnancy among married women (Trent, K & Griner, E. 1991). Teenage pregnancy often causes interruption or discontinuation of education, and leads to social and economic problems for the mother and her child (Friedman, 1989), such as difficulty in finding a job, malnutrition of the child, and increasing burden to society at large. Unsafe abortion among unmarried young women could lead to maternal death. In addition, the complications related to induced abortion
among unmarried young women are often more serious than those of married women because of unmarried young women often delay seeking health consultation and treatment under the social and psychological pressure, so the consequence will be more harmful to their reproductive health in the future.

In China, surgical and medical abortion are the two main methods of induced abortion. Although it is easy for young people to have any kind of induced abortion and safe abortion services are widely available without threatening life, some abortion complications still affect young people’s reproductive health.

For example, psychological stress is one of the main problems. Young and unmarried women who have unwanted pregnancy not only fear social and public discrimination, but also worry about family and doctors' indifference. As a result, they often have an abortion in silence or in private clinics and don't take proper rest. Fearing the pain of surgical abortion is another psychological stress. Furthermore, problems of a physical nature, such as uterine trauma, retention of placental tissue, injury to intestines, haemorrhage, irregular menstruation, pelvic infection, and especially, repeat abortion, could cause infertility related to salpingitis or spontaneous abortion.

Since the end of the 1980's, the government and agencies supported by the Ford Foundation and WHO have been paying more attention to unmarried adolescents and youth sexual and reproductive health. Several small-scale surveys on the consequences of premarital sexual activities and contraceptive use, as well as related factors, have been conducted locally in several bigger cities of China.

One study examined induced abortion among unmarried women in Shanghai, China (Wu ZC. 1992). This was a pilot study conducted in five sample
areas in Shanghai and it analyzed the trend in abortion rate among single women aged 15-19 between 1982 and 1988. Another survey was conducted on the sexual experience of unmarried women and prevention strategies for reducing premarital induced abortion in Shanghai (Gao E.S., 1992). Psychosomatic influences and the health care needs of unmarried young women obtaining an abortion was the subject of another study (Wang L.H., 1994). A study on sexual knowledge, attitude and abortion experience of unmarried young people was conducted in Beijing (Zhang JY., 1996), and an analysis on the trend and consequence of premarital pregnancy and affecting factors was carried out in seven provinces in China (Xu li, 1998). These studies demonstrated that the knowledge about contraception is poor among young people, and that premarital sexual activities and induced abortion are prevalent.

However, these studies simply emphasized description of the local situation of sexual knowledge, attitude, practice, and patterns of contraceptive use prior to current pregnancy and abortion. Very few studies have been conducted in the field of analyzing and identifying the psychosocial factors associated with sexual behavior and contraceptive use behavior among never-married young women, and especially few studies emphasize the history of contraceptive use behavior among never-married young women. Therefore, with quantitative and qualitative methodology, this study is going to identify and analyze comprehensively the psychosocial factors related to contraceptive use behavior among never-married young women who have an unwanted pregnancy. It is hoped that the result may aid in reproductive health education programs to change young people’s sexual and contraceptive behavior, with the aim of reducing the occurrence of unwanted pregnancy and promoting young people’s reproductive health in the future.
1.3 Research Objectives

1.3.1 General Objective

The ultimate goal of this research is to explore the factors affecting contraceptive use behavior, resulting in unwanted pregnancy among never-married young women who have an induced abortion. Furthermore, the information would contribute to the development and implementation of reproductive health programs that address the needs of never-married young people, specifically concerning their contraceptive behavior, in order to prevent the occurrence of unwanted pregnancy and abortion.

1.3.2 Specific Objectives

(1) To explore contraceptive use behaviors among never-married young women who have unwanted pregnancy and are seeking pregnancy termination.

(2) To determine important psychosocial factors affecting contraceptive use behaviors.

(3) To investigate demographic characteristics of never-married young women who have unwanted pregnancy and the background of their parents, and to assess the influence of these characteristics on their contraceptive use behaviors.

(4) To describe their previous experiences of induced abortion and investigate its influence on contraceptive use.
CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter is a review of a theory model related to psychosocial factors for health promotion and some findings from previous studies. Also, the hypothesized conceptual framework used in this study is displayed at the end of this chapter.

2.1 A Review of the Precede-Proceed Model

The Precede-Proceed Model is a theoretically robust model that addresses a major acknowledged need in health promotion and health education: comprehensive planning. It is robust in the sense that it applies to health promotion in a variety of situations (Lawrence W. G and Marshall W. Kreuter, 1991). In this model, PRECEDE and PROCEED work in tandem, providing a continuous series of steps or phases in the planning, implementation and evaluation process (Fig. 1).

The PRECEDE framework takes into account the multiple factors that shape health status and helps the planner arrive at a highly focused subset of those factors as targets for intervention. The PROCEED framework provides additional steps for developing policy and initiating the implementation and evaluation process.

Throughout the work with PRECEDE and PROCEED, two fundamental propositions are emphasized: (1) health and health risks are caused by multiple factors; and (2) because health and health risks are determined by multiple factors, efforts to affect behavioral, environmental, and social change must be multidimensional or

The PRECEDE-PROCEED model includes 9 phases: social diagnosis, epidemiological diagnosis, behavioral and environmental diagnosis, educational and organizational diagnosis, administrative and policy diagnosis, implementation, process evaluation, impact evaluation, and outcome evaluation.

The conceptual framework for this study is based on the PRECEDE framework phase 4, educational and organizational diagnosis. It consists of three factors that seem to have a direct impact on the target behavior and environment: Predisposing factors, Enabling factors and Reinforcing factors. Any given behavior can be explained as a function of the collective influence of these three types of factors.

Predisposing factors are those antecedents to behavior that provide the rationale or motivation for the behavior, including a person's or population's knowledge, attitudes, beliefs, values, and perceptions that facilitate or hinder motivation for change.

Enabling factors (skills, resources, or barriers) are the antecedents to behavior that facilitate a motivation to be realized, which include the availability, accessibility, and affordability of health-care and community resources. The enabling factors can help or hinder the desired behavioral changes as well as environmental changes and they can be viewed as vehicles or barriers, created mainly by societal forces or systems.

Reinforcing factors are factors subsequent to a behavior that provide the continuing reward or incentive for the behavior and contribute to its persistence or repetition. Reinforcing factors include social support, peer influences, and advice and feedback from health-care providers. Social benefits, physical benefits, tangible rewards,
and imagined or vicarious rewards all reinforce behavior. Also, these factors include adverse consequences of behavior, or "punishments," that can lead to the extinction of a positive behavior.

According to this theory, in normal situations, a person's action will follow the sequence. First, there is an initial reason, impulse, or motivation (predisposing factor) to pursue a given course of action. This first factor may be sufficient to start the behavior, but it will not be sufficient to complete it unless the person has the resources or skills needed to carry out the behavior. Second, the motivation is followed by deployment or use of resources to enable the action (enabling factor). This usually results in the behavior, followed by a reaction to the behavior, which is emotional, physical, or social (reinforcing factor). Reinforcement strengthens behavior, future resources and motivation. The ready availability of enabling factors provides cues and heightens awareness and other factors predisposing the behavior.

As promoting contraceptive use among never-married young women belongs to the health education domain, this model was modified to be used in this study in order to identify and analyze the factors affecting contraceptive use behavior.
Fig. 1. Phase 4 of PRECEDE addresses the resources required to influence the predisposing, reinforcing, and enabling factors which influence or support behavioral and environmental change (quoted from the PRECEDE-PROCEED model).

2.2 A Review of Relevant Research Finding

2.2.1 Psychosocial Factors

Knowledge Related to Pregnancy and Contraceptives and Severity of Induced Abortion Many studies have found that knowledge about pregnancy, contraceptive methods and induced abortion among unmarried young people was the factor related to their contraceptive behavior and that lack of this knowledge might be one of the major
reasons for poor contraceptive use.

Gorgen's study (1993) showed that adolescents were insufficiently or not at all informed about how their bodies function, about the risk of pregnancy, and about ways to avoid pregnancy. A similar situation was found in Wang L.H.'s survey of 100 unmarried young girls seeking pregnancy termination in China (1995). This study found that 43 percent of the respondents didn't know how the pregnancy occurred, and 54 percent didn't know how to use condoms. Another study, by Zhen Z.Z. (1996) found a similar situation. This study cited that 31 percent of the respondents did not know how to prevent pregnancy.

In Xiao Y.'s study (1992), only 4 percent of the 200 respondents who were seeking termination of pregnancy fully understood the severity of induced abortion.

**Attitude toward Contraceptive Use and Premarital Pregnancy** Research on attitudes has been performed in several studies, most of which showed that there was a strong relationship between young people's attitudes toward contraception and their actual contraceptive use behavior.

Some people, for example, felt that condoms were unnatural and would reduce pleasure or sensation (Agyei et al., 1992, Feldman et al., 1997 and Xiao Y. 1995). Also, Xiao Y.'s survey in Beijing (1995) revealed that some males refused to use condoms because they thought that it seemed like a loss of face for a man to use contraceptives. Others thought that taking responsibility for contraception was not the business of men.

In Chen HX.'s study (1997), among the respondents who were seeking an abortion for the first or second time, it was found that the respondents' primary reason for
not using contraception was because it was too much trouble and too time consuming to use contraception. This was similar to the finding in Keith’s research (1991). The result of this reason showed that women who rejected contraceptive devices as messy and inconvenient were more likely to have never used contraception or to have used it only occasionally (32.6 percent as compared to 67.2 percent who accepted contraceptives).

In addition, some studies showed that reluctance to use modern methods stemmed from a fear that the contraceptive pill might produce damaging side effects, such as infertility and that forgetting to take the pill was a serious risk (Pick de Weiss et al., 1991; Gorgen et al., 1993).

Attitude toward premarital pregnancy is also related to contraceptive use behavior. In Shanghai, Gao ES.’s study (1997) found that the rate of contraceptive use (23.18%) among respondents who thought premarital pregnancy could affect a person’s reputation was significantly higher than the rate among those who thought pregnancy could not affect their reputation (11.63%).

However, Dai JM.’s study (1995) showed that 81% of the 4307 respondents who had an induced abortion held a liberal sexual concept. Only seven percent of the cases thought that premarital pregnancy could have an impact on their marriage life in the future.

Perceived Susceptibility to Pregnancy Perceived low susceptibility to pregnancy is another important factors leading to faulty decision-making about sexual activity and to non-decision-making about contraceptive use.

As shown in the study by Paul S. (1993), a substantially higher proportion (61.3
percent) of women who perceived the risk of pregnancy than of those (38.7 percent) who did not show such awareness. Reported using contraceptives every time or most of the time In Wang L.H.’s study (1995), 40 percent of the respondents among the non contraceptive use group believed that they would be lucky in avoiding pregnancy, even though they knew about contraception.

**Perceived Severity of Induced Abortion** Low perceived severity of the side effects and complications of induced abortion weakens the resolve of young women to prevent pregnancy. Several studies showed that almost 40 percent of the respondents did not know the side effects and complications of induced abortion on health and most respondents thought that induced abortion is an acceptable measure (Ma GT 1992; Zhen YL., 1992; Ding JH.,1998). Jones’s study (1983) cited that respondents considered abortion as a backup measure if they became pregnant. Also, Gao’s research (1997) found that the greater the perceived influence of abortion on health, the higher the rate of contraceptive use.

**Perceived Barriers of Availability and Accessibility to the Contraceptive Service**

Perceived barriers to contraception service are a primary problem. In some sub-Saharan Africa countries, adolescents are often alienated from the limited medical services available to them by the negative attitudes they perceived among the staff at health facilities (McCaulley and Salter,1995). Young women feel neither accepted, nor treated in a friendly manner, nor treated as adults by the clinic staff. Even where facilities are accessible, they are embarrassed to go to family planning clinics.

Another important barrier for unmarried adolescents and young women is the
perception that obtaining contraception is very shameful. In addition, the cost of contraception is a barrier to prevent young women from engaging in safe sexual activity (Amara, 1991, Zhen XY. 1996).

Beliefs in Folk Methods as a Means of Avoiding Pregnancy Insufficient knowledge and misconceptions are likely to distort adolescent and young women's beliefs about their probabilities of becoming pregnant. Kiragu and Zabin's (1995) study of adolescents in Kenya found that many adolescents believed they could avoid pregnancy by folk measures, such as washing their genital area, jumping up and down after intercourse and having sex standing up. Similar misconceptions were found in Paul's study in the U.S.A (1993). This study revealed that some respondents believed they could avoid pregnancy by taking a warm shower after having sex.

Motivations for Having Sex The need for affection and a strong emotional relationship is an important motivation for initiating sexual activity. It has been suggested that girls who have poor relationships with their parents, have more difficulty negotiating contraceptive use with their partners. (Berglund et al., 1997)

Paul S.(1993) pointed out that some women were motivated by the desire to experience casual lovemaking, hitherto the prerogative of men. The force that propelled them into casual and impersonal sex was not sexual craving, but rather their need to prove independence in sexual decisions, free from the worry about the consequences, or the inconvenience of contraception. Also, some girls engaged in sexual exchanges in order to achieve or maintain an upscale life-style or for the longer-term objectives of establishing contacts with wealthy or prestigious people, which may be beneficial in the
long run, and of obtaining assistance with finding a good job. (Meekers and Calves, 1997)

In Sub-Saharan Africa, for example, some schoolgirls enter into sexual relationships with older, wealthy men who can assist them with school-related expenses or the purchase of material goods (Schoepf, 1994). In these situations, girls often lack the power for negotiating contraceptive use with their partners.

Women under pressure from boyfriends or partners to have sex are more at risk to have unsafe sexual activities or non-decision-making about contraceptive use. A study by Preston-Whyte (1994) revealed that the reason for having sex among some adolescents was to satisfy the boyfriend's sexual demand in order not to be abandoned, or to prevent their partners from seeking other sexual outlets.

**Boyfriend's Influence on Contraceptive Use Behaviors.** Several studies showed that one of the reasons for non-contraceptive use was partner's disapproval of contraceptive use. Complaints about condoms included decreased physical satisfaction during intercourse, the disruption caused by putting on a condom, and problems with condom breakage and slippage. In addition, men viewed contraception as the women's responsibility and they easily suggested to women to have an induced abortion as a backup method for terminating pregnancy, even though some women had experienced more than two occurrences of induced abortion (Paul, S. 1993, Xiao Y., 1995, Chen HX. 1997).

Stability of the partners' relationship seems to encourage the use of birth control devices. A number of studies confirm the positive influence of stable relationships on the frequency of contraceptive use (Anderson et al., 1978; Bachrach 1984; Friedlander et al.
1984). In the study by Paul S (1993), nearly half of the women who had known their sexual partners for one year or more practised contraception every time or most of the time they engaged in sex, whereas the women who occasionally or never used birth control had dated their partner for less than six months.

Discussion about contraception before intercourse often promoted contraceptive use, but David's study (1994) showed that both young men and women who engaged in casual relationships reported that they felt awkward bringing up the subject of contraception and were uncomfortable discussing contraception. On the other hand, male involvement in contraception was markedly different in long-term relationships, these types of relationships were often characterised by more involved discussions about contraception.

**Communication with Parents on Contraception** Good communication with parents is very important for the development of adolescents and young people's behaviors. However, the evidence from many studies has shown that young people have poor communication with parents and lack instruction from their parents about sexual issues and contraception.

In Staffan's study (1997), for example, it was shown that unwanted pregnancy in adolescents was obviously associated with poor communication between mother and daughter, especially in single parent families. Parents' attitudes toward premarital sexual behavior have been shown to influence their child's behavior. In Zhen YL.'s study (1992), almost 60 percent of the respondents had never discussed sexual issues with their mother and 80 percent had never discussed these issues with their fathers. Also, Daniele (1998)
cited that one-third of the women in his/her study discussed sex or contraceptive methods with female peers, but only 20 percent did so with boyfriends and 17 percent did so with family members.

A number of studies revealed that the major source of information about contraception among respondents was from books and that less than 10 percent of sexual information came from parents (Zhen XY., 1994, Dai JM., 1994, Daniele B. 1998 and Ding JH. 1998).

**Peers’ Influences on Contraceptive Use** Perceptions about what their peers are doing and what is accepted in their peer groups, rather than perceptions about the opinions of parents and other family members, may be more strongly related to young people’s motivations to engage in sexual activity or risk-taking. (Barker and Rich, 1992). A study done by Levis (1994) found that the best predictors of sexual behavior for both young men and women are associated with their peers’ attitudes toward sexuality. Gao E.S.’s research (1997) found that peers’ contraceptive use behaviors significantly influenced respondents’ behavior. There was a higher rate of contraceptive use among the group who knew peers who used contraception.

### 2.2.2 Social Demographic Factors

Demographic characteristics have always been evaluated in research on human sexual behavior including adolescent sexual activity. Many research reports indicate that age, educational level, occupation and residence have significant independent effects on sexual and contraceptive use behavior.

In a survey of 3034 unmarried young people in Beijing, which was conducted by
Zhang JY. et al. (1996), the results indicated that there was significant association between knowledge about sex and contraception and contraceptive use behavior and the level of education. Lower levels of education were associated with lower levels of knowledge and lower utilization of contraception. Wang L.H.'s study (1995) also found similar results.

A significant association between occupation and the number of abortions was found in Ma GT.'s study in China (1992) (sample n= 3010 respondents who sought pregnancy termination). According to this study, the number of abortions (more than three times) was highest in the unemployed group. Another study done by Chen HX. (1997), revealed that the rate of repeat abortion was more than three times higher among manual laborers than among non-manual laborers.

A number of studies (Zhen YL., 1992; Gao. ES., 1997; Staffan. 1997) revealed that the background of parents and the parents' relationship are important factors related to unwanted pregnancy among unmarried young women. Some studies have shown that the higher the education of the parents, the lower the occurrence of sexual activity and unwanted pregnancy among their children. In Staffan's research (1997), it was shown that teenage girls with unwanted pregnancies were twice as likely to come from divided homes when compared to other girls, and it was shown that unwanted pregnancy was overwhelmingly associated with absent fathers and broken families.

2.2.3 Abortion Experience

A study of the effects of induced abortion on subsequent contraception in Korea found that the proportion of women using contraception among women who had had
three abortions increased to 65.2 percent compared to 25.6 percent among women who had had one or two previous abortions. (Park, 1986)

The availability of induced abortion may affect the adoption of certain contraceptive methods. Choe et al. (1989) analyzed data from the Korean Contraceptive Prevalence Survey of 1979, and found that the experience of induced abortion was a significant covariant for choosing the pill or withdrawal method.

However, Kristina H.'s report from an interview study in Stockholm (1994) showed that the use of contraceptives was similar among first-time aborters and repeat aborters, but 70 percent in both groups having been temporarily without contraceptives at the time of conception. The same result has been shown in Oslser M's research (1992).

2.3 Conceptual Framework of the Study

2.3.1 Hypothesized Conceptual Framework:

On the basis of the Precede-Proceed Model and the previous relevant research findings, a hypothesized conceptual framework (fig.2) is formulated to study psychosocial factors affecting contraceptive use behavior among never-married young women. The framework of this study makes the assumption that contraceptive use behavior is directly determined by (1) Psycho- Social and Cultural Factors and indirectly determined by (2) Social Demographic Factors and (3) Person’s Experience of Induced Abortion through the aforementioned factors.

Psycho-Social Factors Psycho-social factors can directly influence
contraceptive use behavior among never-married young women (Amara, 1991, Byrne, 1983). They include the following three factors in this framework:

1. **Predisposing Factors**: Knowledge about pregnancy, contraception and negative impact of abortion on health; Perceived susceptibility to pregnancy; attitude toward premarital pregnancy and contraception; motivation for having sex.

2. **Enabling Factors**: Perceived accessibility to contraceptive service.

3. **Reinforcing factors**: Partner’s influence on contraception in terms of cooperation, relationship and pressure from boyfriend; Communication with parents about contraception, relationship between respondents and their parents; Peers’ influence in terms of discussion about the experience of pregnancy, contraception, and choice of methods for ending pregnancy within the same gender group.

**Social Demographic Factors** Social demographic factors indirectly influence contraceptive use behavior. These factors describe a person’s background such as education, occupation and residence and parents’ background such as education and relationship status.

**Person’s Experience of Previous Induced Abortion** contraceptive use behavior also can be indirectly influenced by this factor. This factor includes frequency of induced abortion, interval of two times abortions, complications after having an abortion and feeling about previous abortion.
Figure 2. Hypothesized Conceptual Framework

(Modified PRECEDE-PROCEED Model to Explain CUB)
2.3.2 Hypothesis

In order to determine important psychosocial factors affecting contraceptive use behaviour and to help develop reproductive health education program to reduce unwanted pregnancy, the following hypotheses have been tested:

(1) Respondents with a lower level of knowledge about pregnancy, contraceptive methods and severity of induced abortion are less likely to use contraception.

(2) Respondents who believe it is difficult to become pregnant are less likely to use contraception.

(3) Respondents who believe that folk methods to prevent pregnancy are effective are less likely to use contraception.

(4) Respondents who have relatively liberal attitudes toward premarital pregnancy are less likely to use contraception.

(5) Respondents with negative attitudes toward contraception are less likely to use contraception.

(6) Respondents who don’t perceive contraceptive service to be easily available and accessible are less likely to use modern contraception.

(7) Respondents who have sex with their boyfriend because of feeling lonely, worrying about abandonment by their boyfriends and earning money are less likely to use contraception.

(8) Respondents who do not have their partner’s approval for contraceptive use are less likely to use contraception.
(9) Respondents who have an unstable relationship with their boyfriend are less likely to use contraception.

(10) Respondents who have poor communication with parents and receive less information about sexuality are less likely to use contraception.

(11) Respondents who receive less information about contraception from female peers are less likely to use contraception.
CHAPTER III
RESEARCH METHODOLOGY

3.1 Research Design

This is a cross-sectional research aimed at deeply exploring the contraceptive behavior of never married young women who have unwanted pregnancy. Both quantitative and qualitative methods were used to conduct the study. Quantitative data was collected by structured questionnaire investigation, and this data was used to test the hypothesis of this study. Qualitative data was collected by in-depth interview, and the data was employed to enhance the understanding of the never married young women's contraceptive use behavior. This chapter explains how the data were collected, organized, and analyzed.

3.2 Research Sites and Target Population

Beijing, as a municipality, was selected as the study site. According to administrative areas, there are eight districts with different characteristics in Beijing city. The study was conducted in four hospitals located in Dongcheng, Xicheng and Xuanwu districts, which are larger districts with bigger or mid scale maternal and children hospitals, or comprehensive hospitals. Each hospital has an induced abortion department. Maternal and Children Hospital in Beijing Medical University in Xicheng district,
Xuanwu Hospital in Xuanwu district, Renmin Hospital in Beijing Medical University in Xicheng district and The Sixth Renmin Hospital in Beijing in Dongcheng district were selected as sites for this study, according to the annual number of induced abortions among these hospitals.

The target population was selected according to the following criteria: (1) the women were living as residents in Beijing; (2) the women came to the hospital requesting pregnancy termination; (3) the women were under 24 years of age and never married.

### 3.3 Sample Size

The appropriate sample size was assigned on the basis of a 95 percent confidence level. A sample size was drawn from four hospitals based on the following formula (Hardon et al, 1995):

\[
N = \frac{Z^2(p^*q^*)}{d^2}
\]

- \(N\): estimated sample size
- \(Z\): significance level at 0.05 is 1.96
- \(p\): the rate of unwanted pregnancy among never married young women
- \(q\): \(q = 1 - p\)
- \(d\): degree of accuracy desired, usually set as 0.05

The average rate of unwanted pregnancy among never-married young women is impossible to obtain, but the proportion of unwanted pregnancy can be estimated indirectly from several surveys on induced abortion among unmarried women. It was estimated that the proportion of induced abortion among unmarried young women was
25-45 percent (Ma GT.1992, Lie DM.1998). The rate used in this formula is 25 percent.

\[ 1.96^2 \left( \frac{0.25 \times 0.75}{0.05^2} \right) \]

\[ N = \frac{1}{0.05^2} = 288 \]

Therefore, a minimum of 288 cases should be included in the sample for the quantitative study. Considering the loss of respondents which includes refusing the interview or skipping a large number of questions) because of some sensitive questions, 15 percent of the minimum sample size was added into the sample (45 cases). Therefore, 335 cases were finally interviewed in the quantitative study. In addition, another 8 cases (including five cases who had experienced induced abortion for the first time, and three cases who had experienced more than one abortion) were chosen for in-depth interview.

3.4 Research Instrument and Pre-test

3.4.1 Research Instrument

Two primary methods were used to collect data in this study.

1. A structured interview questionnaire with closed-ended questions was used to collect quantitative data. The questionnaire was designed based on the conceptual framework and it encompassed all variables listed in the framework. The questionnaire consisted of seven sections (Appendix I) as follows:

   (1) Social demographic characteristics of the respondents and their parents’ background;

   (2) Knowledge about pregnancy, contraceptives and induced abortion;
(3) Perceived susceptibility to pregnancy, perceived availability and accessibility to contraceptive service and severity of induced abortion outcome;

(4) Attitude toward premarital pregnancy and contraceptive use;

(5) Beliefs about preventing pregnancy;

(6) Sexual history and contraceptive behavior including boy friend’s cooperation, peers’ influence and communication with parents on contraceptive issues;

(7) Abortion experience of respondents;

2. In-depth interview was used to help understand and explore deeply the respondents’ contraceptive behavior, in order to supplement the survey findings. Therefore, eight in-depth interviews were undertaken using an interview guideline with open-ended questions (appendix II) after the survey with the structured interview questionnaire was completed. The guideline for the in-depth interview focused on why the respondents did not use contraception when they had sex; why they experienced contraceptive failure; what were the major barriers for them to use contraception; and their perception and attitude toward contraceptive use in terms of the social and cultural context.

3.4.2 Pre-test

In order to evaluate the questionnaire and to improve its validity as much as possible, a pre-test was conducted by the researcher prior to data collection. The pre-test of the structured questionnaire was carried out with 10 unmarried young women who were seeking the termination of pregnancy in four hospitals and the in-depth interview was conducted with 2 young women to check the appropriateness of the questionnaire.
After the pre-test, the questionnaire and interview guideline were revised and reconstructed for final data collection.

### 3.5 Definition and Measurement of Variables

#### 3.5.1 Operational Definition of Variables

**Contraceptive use behavior** refers to whether the respondents have ever used any contraceptive method. Contraceptive methods include condom, pill, jelly or cream, rhythm method, withdrawal, emergency pill and injection.

**Knowledge about pregnancy, contraceptive methods and severity of induced abortion** refers to whether respondents understood the facts about how pregnancy occurs, the number of contraceptive methods the respondents recognized and how to use these methods and whether they have heard about surgical or medical abortions.

**Attitudes toward contraception** refers to respondents’ evaluation of the contraceptives, which is classified as positive, negative or neutral.

**Attitudes toward premarital pregnancy** refers to respondents’ opinions about the permissibility or acceptability of premarital pregnancy, which is classified as liberal, neutral or conservative attitudes.

**Perceived susceptibility to pregnancy** refers to the subjective assessment of the respondents to their probability of becoming pregnant if they didn’t use a contraceptive method when they engaged in sexual intercourse. The level of assessment
Perceived severity of induced abortion refers to the severity of induced abortion (surgical and medical abortion) outcomes in terms of abortion-related complications as perceived by respondents. The level of perceived severity of abortion was classified into low, medium, and high categories.

Perceived availability and accessibility to contraceptive services refer to respondents' perception of whether modern contraceptives are accessible to them in terms of psychological stress, services sources, and travel time to obtain services.

Belief in folk methods refers to whether respondents believed in some folk methods which are not effective for preventing pregnancy.

Motivations for having sex: refers to respondents' purpose for having intercourse. The motivation for having sex was measured by affection, curiosity, physical need, loneliness, worrying that their boyfriend might abandon them and earning money.

Boyfriend's co-operation on Contraceptive use refers to whether respondents discuss contraceptives with boy friends and whether boyfriends approve or disapprove of contraceptive use.

Relationship with boyfriend refers to the stability of the relationship between respondents and their partners. The relationship was measured by the duration of the relationship.

Communication with parents: refers to whether respondents discuss contraception with their parents.
Peers’ influence on contraceptive use refers to whether respondents have discussed contraception with their close girlfriends and have received some suggestions from them.

Abortion experience refers to the frequency and methods of induced abortion which the respondents have experienced, the interval between repeat abortions, complications after having an abortion and the feelings about the previous abortion.

Age refers to respondent’s age reported in years.

Occupation is classified into three groups according to respondent’s economic status in China: unemployed, employed, student.

Education level refers to respondents’ highest level of school or college completed. The level of formal education of the respondent at the time of interview was measured as: primary school, junior high school, senior high school and college/university and the level of education was classified into three groups: low group including primary school and junior high school, moderate group (senior high school) and high group (college/university).

Living Arrangement refers to where the respondent usually lives. It was classified as living alone, living with boyfriend, with same sex friend, or with parents/relatives.

Parents’ education level refers to parents’ highest level of education completed. The measurement is the same as respondents’ education level.

Parents’ relationship refers to the type of relationship between father and mother. This variable includes five categories: married and living together; divorce;
3.5.2 Variables and Measurement

In this study, the respondents’ level of knowledge about pregnancy, contraception and severity of induced abortion, perceived susceptibility to pregnancy and to severity of induced abortion outcome, perceived availability and accessibility to contraceptive service, and attitude toward premarital pregnancy and contraceptives were measured by a series of questions concerning each topic. Each response (Agree, Not sure Disagree,) was given a score, as shown in Appendix III. After the data collection was completed, the respondents’ answers were then tabulated and given an overall score for each topic. Finally, overall scores for each topic were categorized into ordinal groups according to Mean (X) and Standard Deviation (S.D.) as follows:

- Low score is less than Mean - Standard deviation;
- Medium score is between Mean and Standard deviation;
- High score is more than Mean + standard deviation.

Therefore, according to the objectives of this study, the variables can be measured as follows:
List of Variables and Levels of Measurement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Levels of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable:</strong></td>
<td></td>
</tr>
<tr>
<td>Contraceptive use behavior</td>
<td>Dichotomy: Used, never used</td>
</tr>
<tr>
<td>during past 12 months</td>
<td></td>
</tr>
<tr>
<td><strong>Independent Variable:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Age</td>
<td>Interval: age by year</td>
</tr>
<tr>
<td>2. Education</td>
<td>Nominal: primary school, Junior high school, senior high school, university/college</td>
</tr>
<tr>
<td>3. Occupation</td>
<td>Nominal: unemployed, student, employed</td>
</tr>
<tr>
<td>4. Living Arrangement</td>
<td>Nominal: alone, with boyfriend, with same sex friend, with parents/relatives</td>
</tr>
<tr>
<td>5. Education of mother</td>
<td>Nominal: no education, primary school, Junior high school, senior high school, university</td>
</tr>
<tr>
<td>6. Parents relationship</td>
<td>Nominal: married and living together, divorced; separated; remarried and other.</td>
</tr>
<tr>
<td>7. Knowledge about pregnancy</td>
<td>Ordinal: poor, fair, good</td>
</tr>
<tr>
<td>8. Knowledge about contraceptives</td>
<td>Ordinal: poor, fair, good</td>
</tr>
<tr>
<td>9. Knowledge about induced abortion</td>
<td>Dichotomy: heard, never heard</td>
</tr>
<tr>
<td>10. Attitude toward contraceptives</td>
<td>Ordinal: negative, neutral, positive</td>
</tr>
<tr>
<td>11. Attitude toward premarital pregnancy</td>
<td>Ordinal: conservative, neutral, liberal</td>
</tr>
<tr>
<td>12. Perceived susceptibility to pregnancy</td>
<td>Ordinal: low, moderate, high</td>
</tr>
<tr>
<td>13. Perceived severity of complications of induced abortion</td>
<td>Ordinal: incorrect, uncertain, correct</td>
</tr>
</tbody>
</table>
### List of Variables and Levels of Measurement (Continued)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Levels of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Perceived availability of contraceptive service</td>
<td>Ordinal: difficult, less difficult, easy</td>
</tr>
<tr>
<td>15. Perceived accessibility to contraceptive service</td>
<td>Ordinal: more barriers, moderate, few</td>
</tr>
<tr>
<td>16. Belief in folk methods</td>
<td>Ordinal: low, medium, high</td>
</tr>
<tr>
<td>17. Motivation for having sex</td>
<td>Nominal: affection, curiosity, physical need, loneliness earning money</td>
</tr>
<tr>
<td>18. Boyfriend’s co-operation</td>
<td>Dichotomy: approval, disapproval</td>
</tr>
<tr>
<td>19. Relationship with boyfriend</td>
<td>Dichotomy: unstable (&lt; 12 months), stable (&gt; 12 months)</td>
</tr>
<tr>
<td>20. Discussion of contraception with parents</td>
<td>Dichotomy: No, Yes</td>
</tr>
<tr>
<td>21. Discussion of contraception with peer</td>
<td>Dichotomy: No, Yes</td>
</tr>
<tr>
<td>22. Feeling about previous abortion</td>
<td>Nominal: no bad feeling, relief, fear, worry, shame, regret</td>
</tr>
<tr>
<td>23. Complication after previous abortion</td>
<td>Nominal: Haemorrhage, infection, abdominal pain, no symptom</td>
</tr>
</tbody>
</table>

### 3.6 Data Collection

**Interviewer Training:** Two female midwives and four gynaecologists from four hospitals were chosen as interviewers to complete the quantitative data collection. They were trained by the researcher to understand the study purpose clearly and to grasp the skills of interviewing. After the training, they were skillful with the structure and
contents of the questionnaire, and qualified to be a research assistant. Every research assistant interviewed at least 2 cases under the observation of the researcher at the selected hospital.

**Data Collection:** The data was collected by face to face interviews which were carried out by six interviewers and the researcher after the structured questionnaire and in-depth interview guideline preparation were pre-tested and revised. Thus, 335 never married young women who required the termination of unwanted pregnancy in the hospital were interviewed and completed the structured questionnaire from 15th September to 30th November 1999. After completing the questionnaire interview, qualitative information with eight cases was collected by the researcher herself during January 2000. For each case, after receiving an agreement from the respondents, a tape-recorder was used.

**Survey Management:** The respondents of the study were interviewed after they had visited the doctors and decided to terminate the conception or during the waiting time before they had the surgical or medical abortion. Because the questionnaire involved some sensitive questions and the respondents were never married young women, the interview was held in a quiet room with the door closed and without any other irrelevant persons. Before starting the interview, the assistant researcher explained the purpose of the study and promised that the information in the questionnaire would be kept strictly confidential and could only be used for the study purpose. The researcher frequently went to the research sites with the interviewers during the period of data collection as a
supervisor to solve the problems arising in the interview at hand. All of the questionnaires were checked by the researcher to ensure that no error had occurred. If any logistic error occurred in one questionnaire, this questionnaire was discarded and another new one added because the population in the sample is a special group. After completing an induced abortion, generally, they would not come back to the hospital again.

3.7 Data Process and Analysis

3.7.1 Data Processing

After 335 respondents were interviewed, the researcher checked the completeness of all the questionnaires. Eight questionnaires were incompletely with more than two questions unfilled. Also, 21 cases were pregnancies which involved young women who had had sexual activity with their boyfriend only one time. Considering that a respondent's single sexual experience cannot represent one person's contraceptive behavior, these 21 cases were excluded. Finally, the numbers of qualified questionnaires was 306.

All the completed questionnaires were coded, then all the data was entered into a data file of SPSS/PC+. The entered data was screened and logistically checked for consistency before data analysis.

3.7.2 Data Analysis

Quantitative Data

Based on the measurement level of each variable in the questionnaire, the
following statistical methods were applied in order to match the objectives and test the hypothesis of this study:

**Descriptive analysis:** Percentage distribution, mean of the score and standard deviation were used to describe social demographic characteristics of the respondents and their parents' background, and the psychological factors related to contraceptive behavior, including knowledge about pregnancy, contraceptives and induced abortion, perceived susceptibility to pregnancy, perceived availability and accessibility to contraceptive service and severity of induced abortion outcome, attitude toward premarital pregnancy and contraceptive use, beliefs about preventing pregnancy, sexual history and contraceptive use, and abortion experience of respondents.

**Logistic regression:** A multivariate logistic regression model was used to examine or determine the effects of psychosocial factors on contraceptive use. Also, the backward stepwise (wald) method in the logistical regression models was used with the significance level of 0.05. All results were interpreted and presented in the forms of tabulated description.

**(2) Qualitative analysis:**

Qualitative data from in-depth interviews was reported using a case study format. In order to compare and supplement quantitative data, these data were sorted, and described as a group in order to obtain a more comprehensive view of the study issue.
3.8 Ethical Considerations of the Study

Premarital pregnancy is still an extremely sensitive issue to the respondents, even though the concept of premarital sexual activity among young people has been changing silently in Chinese society today. Therefore, it was necessary to consider the ethical issues when conducting this study.

(1) The researcher had the respondents’ informed consent before the interview began.

(2) The researcher explained about the objectives of the study to respondents, in order to prevent psychological stress.

(3) All personal information such as their name, home address, work place and telephone number was not solicited and all collected data were kept very confidential.

(4) The respondents were allowed to drop out at any time without an obligation, when ever she felt uncomfortable.

(5) During the interview, the respondents were respected and thanked for their contribution to this study.

(6) Respondents had the right to ask some questions such as how to prevent pregnancy again and what care should be taken after having an induced abortion and they received some counselling from the interviewers and the researcher, who displayed a good attitude and did not charge a fee for this consultation.
CHAPTER IV
RESULTS OF STUDY

The results of this study consist of three parts. The first part aims to describe 306 respondents’ socio-demographic characteristics, psycho-social cultural factors including three aspects (predisposing, enabling and reinforcing factors), their contraceptive use behaviour (CUB) and previous experience of abortion. The second part attempts to explore some important psychosocial factors associated with contraceptive behaviour of never married young women who have unwanted pregnancy. The third part focuses on describing the findings from 8 case studies.

4.1 Characteristics of the Respondents

4.1.1 Socio-Demographic Characteristics

The sample of this quantitative study is 306 never married young women who have unwanted pregnancy and are seeking pregnancy termination in Beijing, the capital of China. The social demographic characteristics of the respondents are described in Table 4.1 The average age of the 306 young women is 21.7 years old and the age range is 18 to 24 years. More than half of the respondents (60.8%) are 20 to 22 years old and only 4.9 percent are under the age of 20.

The highest level of education completed ranges from primary school to university. Nearly half (47.7%) of the respondents have graduated from senior high school and more than one third (36.6%) are studying or have finished courses at the
university or college level. Only 1.6 percent are at the level of primary school. It means that most of the respondents have a high level of education.

Regarding occupation, almost an equal percentage of the respondents are unemployed and students (14.7%, 16% respectively), while more than two thirds of the respondents (69.3%) are employed. With regard to living arrangement, one fourth of the respondents are living with a boyfriend (23.9%) or living alone (9.5%). It indicates that the respondents have a relatively good chance of having sexual activity with boyfriends.

Table 4.1 Socio-Demographic Characteristics of the Respondents

<table>
<thead>
<tr>
<th>Socio-Demographic Characteristics</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18---19</td>
<td>15</td>
<td>4.9</td>
</tr>
<tr>
<td>20---22</td>
<td>186</td>
<td>60.8</td>
</tr>
<tr>
<td>23---24</td>
<td>105</td>
<td>34.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>306</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>21.7</td>
<td><strong>S.D.</strong> 1.4</td>
</tr>
<tr>
<td><strong>Highest Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>5</td>
<td>1.6</td>
</tr>
<tr>
<td>Junior high school</td>
<td>43</td>
<td>14.1</td>
</tr>
<tr>
<td>Senior high school</td>
<td>146</td>
<td>47.7</td>
</tr>
<tr>
<td>University / College</td>
<td>112</td>
<td>36.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>306</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Living Arrangement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alone</td>
<td>29</td>
<td>9.5</td>
</tr>
<tr>
<td>With boyfriend</td>
<td>73</td>
<td>23.9</td>
</tr>
<tr>
<td>With same sex friend</td>
<td>90</td>
<td>29.4</td>
</tr>
<tr>
<td>With parents / relatives</td>
<td>114</td>
<td>37.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>306</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>45</td>
<td>14.7</td>
</tr>
<tr>
<td>Employee</td>
<td>212</td>
<td>69.3</td>
</tr>
<tr>
<td>Student</td>
<td>49</td>
<td>16.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.1.2 Parents' Background

Parents' background in terms of mother's education, status of parents' marriage and parents' relationship is surveyed in this study (Table 4.2). Most of the respondents' mothers have a high level of education, graduating from senior high school and university (52.3%), or junior high school (34.6%). Furthermore, the majority of the respondents (87.6%) report that their parents are currently married or living together, whereas, the minority of them (10%) come from families in which the parents are divorced or separated. The parents' relationship is reported as very good / good among 81 percent of the respondents. In sum, the majority of the respondents come from the families with a good background.

Table 4.2 Background of the Respondents' Parents

<table>
<thead>
<tr>
<th>Parents' Background</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother's highest level of Education:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education</td>
<td>11</td>
<td>3.6</td>
</tr>
<tr>
<td>Primary school</td>
<td>29</td>
<td>9.5</td>
</tr>
<tr>
<td>Junior high school</td>
<td>106</td>
<td>34.6</td>
</tr>
<tr>
<td>Senior high school/University</td>
<td>160</td>
<td>52.3</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
<tr>
<td>Status of parents' marriage:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married / living together</td>
<td>268</td>
<td>87.6</td>
</tr>
<tr>
<td>Divorce / separated</td>
<td>31</td>
<td>10.1</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
<td>2.3</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
<tr>
<td>Parents' relationship:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good/ good</td>
<td>229</td>
<td>81.5</td>
</tr>
<tr>
<td>General</td>
<td>44</td>
<td>15.7</td>
</tr>
<tr>
<td>Bad / very bad</td>
<td>8</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.1.3 Respondents’ Experience of Previous Induced Abortion

Women with previous abortion experience are reported to have a greater motivation for using contraception (Park, 1986). In this study, previous experience of induced abortion is measured by four items: (1) Number of previous abortions, (2) Types of induced abortion, (3) Complications after having an abortion and (4) Feeling after having an abortion.

As shown in Table 4.3, nearly two-thirds of all respondents (63.7%) did not have a previous abortion. But among the 111 respondents (36.3%) who have experienced a previous induced abortion, less than one-tenth (8.5%) have had more than one previous abortion; around 60 percent have had medical abortions, while 43.2 percent have had surgical abortions. Regarding complications after having an abortion, over half of the respondents (53.2%) reported that they did not suffer any symptoms, but some of the respondents have suffered one or more complication, such as prolong bleeding, abdominal pain, irregular menstrual cycle and pelvic infection.

The feelings of the respondents after having an abortion vary among respondents. For example, less than one-fourth (22.7%) of the respondents thought that they do not have any bad feeling about it and about 13 percent feel they were relieved that the pregnancy had been terminated. However, some of the respondents had one or more psychological stress, for instance, the same proportion of respondents (45%) report that they regret not having used a contraceptive or that they feared surgical pain.
Table 4.3 Respondents' Previous Experience of Induced Abortion

<table>
<thead>
<tr>
<th>Previous Experience of Induced Abortion</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numbers of previous Abortion</strong> (N=306)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>195</td>
<td>63.7</td>
</tr>
<tr>
<td>1</td>
<td>85</td>
<td>27.8</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>6.5</td>
</tr>
<tr>
<td>≥ 3</td>
<td>6</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Types of induced Abortion</strong> (N=111)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Abortion</td>
<td>68</td>
<td>60.4</td>
</tr>
<tr>
<td>Surgical</td>
<td>47</td>
<td>43.2</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>6.3</td>
</tr>
<tr>
<td><strong>Complications after having abortion</strong> (N=111)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No symptoms</td>
<td>59</td>
<td>53.2</td>
</tr>
<tr>
<td>Prolong bleeding</td>
<td>20</td>
<td>18.0</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>16</td>
<td>14.4</td>
</tr>
<tr>
<td>Irregular menstrual cycle</td>
<td>10</td>
<td>9.0</td>
</tr>
<tr>
<td>Pelvic infection</td>
<td>6</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Feeling after having abortion</strong> (N=111)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No bad feeling</td>
<td>25</td>
<td>22.7</td>
</tr>
<tr>
<td>Regretted not having used</td>
<td>50</td>
<td>45.0</td>
</tr>
<tr>
<td>Contraception</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feared surgical pain</td>
<td>50</td>
<td>45.0</td>
</tr>
<tr>
<td>Worried that someone would</td>
<td>17</td>
<td>15.5</td>
</tr>
<tr>
<td>Find out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felt relieved that the pregnancy had</td>
<td>15</td>
<td>13.5</td>
</tr>
<tr>
<td>Been terminated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felt shameful</td>
<td>14</td>
<td>12.7</td>
</tr>
<tr>
<td>Other feelings</td>
<td>7</td>
<td>6.4</td>
</tr>
</tbody>
</table>

* multiple response is possible
4.1.4 The Situation of Contraceptive Use

Among the 111 respondents who have previous abortion experience is shown in the Table 4.4. Generally, the most effective contraceptive methods include condom, pill and emergency contraceptive pill (ECP) and less effective methods include rhythm, withdrawal and jelly. During the previous 12 months, about half of the respondents used the most effective methods. At the time prior to their current pregnancy, only nine percent still used the same methods, while nearly 60% of them did not use any contraceptives at all. This finding indicates that CUB pattern of respondents is unstable, mainly changing from highly effective methods to a non-use situation, which might have contributed to their current unwanted pregnancy.

Table 4.4 Contraceptive Used by Respondents Who Have Previous Induced Abortion during the Past 12 Months and Prior to Current Pregnancy (N=111)

<table>
<thead>
<tr>
<th>Type of contraceptive methods</th>
<th>During past 12 months (%)</th>
<th>Prior to current pregnancy (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most effective methods</td>
<td>50.5</td>
<td>9.0</td>
</tr>
<tr>
<td>Less effective</td>
<td>36.9</td>
<td>31.5</td>
</tr>
<tr>
<td>Non - use</td>
<td>12.6</td>
<td>59.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.2 Psychosocial Factors

4.2.1 Knowledge about Pregnancy, Contraception and Induced Abortion

Knowledge about Pregnancy

Knowledge about possibility of pregnancy was investigated by using five occurrence of as show in Table 4.5. The result shows that most of the respondents (84.3%) have basic knowledge about the occurrence of pregnancy. A great majority of respondents know that pregnancy is impossible if a sperm doesn’t meet an egg after having intercourse. However, only less than half of the respondents (47.1%) believed that getting pregnant would be impossible if the couple has intercourse during the woman’s safe period of the month. It suggests that another half of the respondents did not know the rhythm method is a natural contraceptive method. Meanwhile, nearly one-third of the respondents believe (7.5%) or are not sure (22.5%) that it is possible for a woman who has never-menstruated to get pregnant when she has sex with a man. This indicates they lack the basic knowledge of the condition leading to pregnancy. These results suggested the reasons why the respondents have poor perceived susceptibility to pregnancy.
Table 4.5 Respondents’ Knowledge about Pregnancy

<table>
<thead>
<tr>
<th>Knowledge about Pregnancy</th>
<th>True</th>
<th>Not Sure</th>
<th>False</th>
<th>Total (N=306)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Getting pregnant would be</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Possible:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If a woman sleeps with a man, but not having intercourse</td>
<td>2.0</td>
<td>3.6</td>
<td>94.4</td>
<td>100.0</td>
</tr>
<tr>
<td>If a woman, who has never menstruated, has intercourse with a man</td>
<td>7.5</td>
<td>22.5</td>
<td>69.9</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Getting pregnant would be</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impossible:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If a woman who has a regular menstrual cycle has intercourse with a man during her safe period of the month</td>
<td>47.1</td>
<td>22.9</td>
<td>30.1</td>
<td>100.0</td>
</tr>
<tr>
<td>If a woman has intercourse with a man who withdraws before ejaculation</td>
<td>49.3</td>
<td>16.0</td>
<td>34.6</td>
<td>100.0</td>
</tr>
<tr>
<td>If the sperm doesn’t meet the egg, after having intercourse</td>
<td>84.3</td>
<td>10.8</td>
<td>4.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Knowledge about Pregnancy</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>66</td>
<td>21.6</td>
</tr>
<tr>
<td>Fair</td>
<td>176</td>
<td>57.5</td>
</tr>
<tr>
<td>Good</td>
<td>64</td>
<td>20.9</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean=3.5  SD=1.2  Minimum=0  Maximum=5

In order to evaluate the respondents' level of knowledge about pregnancy, a total knowledge score from five questions were calculated and reclassified into three groups as low, moderate and high according to the mean and standard deviation of the total scale shown in the lower part of Table 4.5. The standardized knowledge score has been given in Appendix III. This result shown in the lower part of Table indicates...
that most of the respondents have basic knowledge about pregnancy, but the number of the respondents with good knowledge accounts for only one-fifth of all respondents.

**Knowledge about Contraception**

The knowledge about contraception is measured in two parts. One part is whether respondents have ever heard the name of several contraceptive methods and the second part is whether they know how to correctly use these contraceptive methods. The results in Table 4.6 show that although most of the respondents had heard the names of common contraceptives, in fact, they do not know how to use most of these contraceptives correctly, even for the highly effective ones such as condoms and pill. Regarding the emergency contraceptive pill (ECP), only about one fourth know how to correctly use it. This finding might suggest that health education about family planning has already been effective in popularizing the names of contraceptives, but has not yet achieved success in teaching the correct usage of contraceptives.

A total knowledge score about correctly using contraception was obtained and categorized into three groups as shown in the lower part of the Table. Using the mean value to analyze how much most respondents know about contraception, the results show that the percentage of unmarried young women who had an unwanted pregnancy and have poor knowledge about contraception (30%) is double that of women who have good knowledge (15%).
Table 4.6 Respondents' Knowledge about Contraception (N=306)

<table>
<thead>
<tr>
<th>Types</th>
<th>Heard by Name</th>
<th>Know How to Use Correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Condom</td>
<td>296</td>
<td>96.7</td>
</tr>
<tr>
<td>Pill</td>
<td>281</td>
<td>91.8</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>189</td>
<td>61.8</td>
</tr>
<tr>
<td>Rhythm method</td>
<td>172</td>
<td>56.2</td>
</tr>
<tr>
<td>ECP</td>
<td>131</td>
<td>42.8</td>
</tr>
<tr>
<td>Jelly or Cream</td>
<td>83</td>
<td>27.1</td>
</tr>
<tr>
<td>Injection</td>
<td>49</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Level of Knowledge about Correct Use of Contraceptives

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>94</td>
<td>30.7</td>
</tr>
<tr>
<td>Fair</td>
<td>164</td>
<td>53.6</td>
</tr>
<tr>
<td>Good</td>
<td>48</td>
<td>15.7</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean=1.3  SD=1.2  Minimum=0  Maximum=5

Knowledge about Severity of Induced Abortion

Surgical abortion and medical abortion are the two different methods of induced abortion involved in this survey. Table 4.7 shows that less than one-third of respondents (29.1%) have never heard about the severity of complications of surgical abortion and about one fourth (26.5%) have never heard about severity of complications of medical abortion.

In sum, about half of the respondents in this study have fair knowledge about pregnancy and how to correctly use contraceptives. Most of the respondents have heard about both surgical abortion and medical abortion, however, knowledge about pregnancy and contraceptive is still poor among one-fifth (21.6%) and one third (30.7%) of respondents respectively (see Table 4.5 & 4.6).
Table 4.7 Respondents’ Knowledge about Severity of Induced Abortion

<table>
<thead>
<tr>
<th>Items</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Ever Heard about Severity of surgical abortion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>89</td>
<td>29.1</td>
</tr>
<tr>
<td>Yes</td>
<td>217</td>
<td>70.9</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
<tr>
<td>B. Ever Heard about Severity of medical Abortion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>81</td>
<td>26.5</td>
</tr>
<tr>
<td>Yes</td>
<td>225</td>
<td>73.5</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.2.2 Perceived Susceptibility to Pregnancy

Perceived susceptibility to pregnancy represents the respondents’ perception of risk of pregnancy and suggests the likelihood that contraception will be used. It was measured by the six statements shown in Table 4.8. More than half of the respondents (51.3%) believed that they would not get pregnant when they have sex because they did not get pregnant previously, even though they did not use contraception, while about one fourth (23.5%) did not think that they would get pregnant after having intercourse only one or two times. It is noted that more than one fourth of the respondents (27.8%) lacked the consciousness of susceptibility to pregnancy because they never thought that the intercourse would lead to pregnancy when they had unprotected sex. It might be possible to conclude that many respondents might rely on their luck to determine the possible outcome of sexual intercourse, or simply do not think about possibility of getting pregnant. It means that they perceive low risk of pregnancy and hence, might ignore the use of contraceptives when they have unprotected sex.
A total score of the respondents' perceived susceptibility to pregnancy is presented in Table 4.8. It reveals that a proportion of young women who have high perception of susceptibility to pregnancy (26.1%) is higher than those who have low perception (14.4%).

Table 4.8 Respondents' Perceived Susceptibility to Pregnancy

<table>
<thead>
<tr>
<th>Perceived susceptibility to Pregnancy</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Total (N=306)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I didn't get pregnant the last time, when I had sex without contraception.</td>
<td>51.3</td>
<td>2.3</td>
<td>46.4</td>
<td>100.0</td>
</tr>
<tr>
<td>It’s possible to be pregnant from the first time of intercourse.</td>
<td>68.3</td>
<td>9.5</td>
<td>22.2</td>
<td>100.0</td>
</tr>
<tr>
<td>I am too young, so it is not easy for me to get pregnant.</td>
<td>9.2</td>
<td>2.3</td>
<td>88.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Having intercourse only one or two times, pregnancy would not be possible.</td>
<td>72.9</td>
<td>3.6</td>
<td>23.5</td>
<td>100.0</td>
</tr>
<tr>
<td>I always felt pregnancy would not happen to me</td>
<td>25.5</td>
<td>3.6</td>
<td>70.9</td>
<td>100.0</td>
</tr>
<tr>
<td>I never thought about getting pregnant when I had sex at that time</td>
<td>27.8</td>
<td>0</td>
<td>72.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Level of Perceived Susceptibility To Pregnancy

<table>
<thead>
<tr>
<th>Level of Perceived Susceptibility To Pregnancy</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>44</td>
<td>14.4</td>
</tr>
<tr>
<td>Moderate</td>
<td>182</td>
<td>59.5</td>
</tr>
<tr>
<td>High</td>
<td>80</td>
<td>26.1</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean =14.2   SD=3.2   Minimum = 6   Maximum =18

With regard to the relationship between respondents' level of education (see chapter III) and perceived susceptibility to pregnancy, the results (Appendix VII) show that in the group of respondents who perceived low susceptibility to pregnancy,
the proportion of those who have a low level of education is higher than those who have a moderate and high level. In other words, the proportion of the respondents who have low perceived susceptibility to pregnancy obviously decreases with the increase of the level of education. It reveals a positive relationship between the level of education and perceived susceptibility to pregnancy.

4.2.3 Perceived Severity of complications of Induced Abortion

Perceived severity of induced abortion is investigated by 13 items. The first seven items in Table 4.9 measure the perception of severity of surgical abortion, while the remaining six items in Table 4.9 concern medical abortion.

As shown in Table 4.9, in terms of surgical abortion, among 217 cases, about one third are not aware that surgical abortion could lead to secondary infertility or lead to problems during delivery in the future if the woman has had multiple abortion, because their answers are "not sure" or "disagree". It means that they do not perceive long-term complications of surgical abortion. Meanwhile, about one fifth think that surgical abortion could lead to fever. It suggests that they do not have adequate understanding about short-term complications of surgical abortion.

It shows the scores concerning the perceived severity of complications of surgical abortion (Table 4.9). It is found that only about one fifth of the respondents (21.2%) correctly perceived the severity of complications of surgical abortion. However, over half of the respondents’ scores are at the "uncertain" level of perception of severity of surgical abortion.
Table 4.9 Respondents’ Perceived Severity of Complications of Surgical Abortion (N=217)

<table>
<thead>
<tr>
<th>Perceived Severity of Surgical Abortion</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>It can be done multiple times because it has no side effect on health</td>
<td>2.8</td>
<td>1.8</td>
<td>95.4</td>
<td>100.0</td>
</tr>
<tr>
<td>It may lead to infertility in the future</td>
<td>64.5</td>
<td>26.3</td>
<td>9.2</td>
<td>100.0</td>
</tr>
<tr>
<td>It may lead to problems during delivery if a woman has had multiple abortions</td>
<td>62.2</td>
<td>32.7</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>It may cause prolonged bleeding</td>
<td>43.3</td>
<td>47.0</td>
<td>9.7</td>
<td>100.0</td>
</tr>
<tr>
<td>It will not cause fever</td>
<td>12.4</td>
<td>67.7</td>
<td>19.8</td>
<td>100.0</td>
</tr>
<tr>
<td>It may cause abdominal pain or upper genital tract infection</td>
<td>52.5</td>
<td>42.4</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>It will not influence a woman’s menstrual cycle</td>
<td>27.2</td>
<td>46.5</td>
<td>26.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Level of Perceived Severity of Surgical Abortion

<table>
<thead>
<tr>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>21</td>
</tr>
<tr>
<td>Uncertain</td>
<td>150</td>
</tr>
<tr>
<td>Correct</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
</tr>
<tr>
<td>Mean =16.9</td>
<td>SD=2.0</td>
</tr>
</tbody>
</table>

In regards to medical abortion (MA), although 74.7 percent of the total 225 respondents disagree with the statement that medical abortion has few side effects or complications on health, the results in Table 4.10 show that the respondents don’t thoroughly understand the possible complications. For example, the most common complication of medical abortion is prolonged bleeding, but only 42.2 percent of the respondents acknowledge this complication, while more than two-fifth (47.1%) give
complications on health, the results in Table 4.10 show that the respondents don’t thoroughly understand the possible complications. For example, the most common complication of medical abortion is prolonged bleeding, but only 42.2 percent of the respondents acknowledge this complication, while more than two-fifth (47.1%) give an uncertain opinion. In addition, more than one third of the respondents think that MA will terminate pregnancy simply and quickly. Also, Table 4.10 shows that only one–fourth correctly perceived the severity of medical abortion.

Table 4.10  Respondents’ Perceived Severity of Complications of Medical Abortion (N=225)

<table>
<thead>
<tr>
<th>Perceived Severity of Medical Abortion</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is a simple and quick method to discharge a “child”</td>
<td>36.0</td>
<td>18.2</td>
<td>45.8</td>
<td>100.0</td>
</tr>
<tr>
<td>It will not lead to infertility</td>
<td>15.6</td>
<td>50.2</td>
<td>34.2</td>
<td>100.0</td>
</tr>
<tr>
<td>It may cause prolonged bleeding</td>
<td>42.2</td>
<td>47.1</td>
<td>10.7</td>
<td>100.0</td>
</tr>
<tr>
<td>It may cause abdominal pain or upper genital tract infection</td>
<td>31.6</td>
<td>59.1</td>
<td>9.3</td>
<td>100.0</td>
</tr>
<tr>
<td>It is a pain-free method</td>
<td>24.4</td>
<td>15.1</td>
<td>60.4</td>
<td>100.0</td>
</tr>
<tr>
<td>It has few side effects on health</td>
<td>5.8</td>
<td>19.6</td>
<td>74.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Perceived Severity of Medical Abortion</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>40</td>
<td>17.8</td>
</tr>
<tr>
<td>Uncertain</td>
<td>124</td>
<td>55.1</td>
</tr>
<tr>
<td>Correct</td>
<td>61</td>
<td>27.1</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean= 13.8     SD= 2.3     Minimum=7     Maximum=18
Wu Jiuling

who perceived high severity of complications of surgical abortion only account for less than one fifth (19.8%) and those who perceive high severity of medical abortion include about one eighth (12.3%). It indicates that although respondents have experienced an abortion, they do not strongly perceive the severity of complications of induced abortion.

In short, These results indicate that most respondents don’t thoroughly understand the severity of complications of induced abortion and don’t perceive the potential risks of induced abortion. It might be one of the reasons why they did not use contraceptives when they had sex.

4.2.4 Attitude toward Premarital Pregnancy and Contraception

Attitude toward premarital pregnancy is measured by eight items in Table 4.11. From an individual view, their attitudes are relatively liberal regarding premarital pregnancy because nearly three-fourths (73% - 74.2%) of respondents agree with the first three items in the Table 4.11. Specifically, they agree that other people should not blame a young woman for premarital pregnancy, and, if people have fallen in love or have a commitment to marry, then premarital pregnancy could be acceptable. Also, nearly two-thirds (61.4%) disagree that premarital pregnancy would have negative consequences for their marriage in future. From the consideration of social stress, however, about two thirds (54% - 70%) think their reputation and their family’s reputation would be affected by premarital pregnancy, and a pregnant girl would be looked down on by the family or society. It indicates that respondents have certain contradictory attitudes toward premarital pregnancy.
The total score of the respondents’ attitude toward premarital pregnancy shows that the proportion of those with a liberal attitude (30.4%) toward premarital pregnancy is a little higher than those with a conservative attitude (25.5%).

Table 4.11 Respondents’ Attitude toward Premarital Pregnancy (N=306)

<table>
<thead>
<tr>
<th>Attitude toward Pregnancy</th>
<th>Agree</th>
<th>Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other people should not blame a young woman for premarital pregnancy</td>
<td>74.2</td>
<td>25.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Premarital pregnancy can be acceptable, if the partners fall in love</td>
<td>72.9</td>
<td>27.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Premarital pregnancy can be acceptable, if the partners have a commitment to marry</td>
<td>72.9</td>
<td>27.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Premarital pregnancy will lead to a bad reputation for the woman</td>
<td>69.9</td>
<td>30.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Premarital pregnancy will not lead to bad reputation for the woman</td>
<td>34.0</td>
<td>66.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Pregnant young woman will be looked down upon by the family or society</td>
<td>54.2</td>
<td>45.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Premarital pregnancy will result in bad consequences for their marriage in the future</td>
<td>38.6</td>
<td>61.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Premarital pregnancy should be acceptable because it can promote the relationship with boy friend</td>
<td>27.8</td>
<td>72.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Level of Attitude toward Premarital Pregnancy

<table>
<thead>
<tr>
<th>Level of Attitude toward Premarital Pregnancy</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative</td>
<td>78</td>
<td>25.5</td>
</tr>
<tr>
<td>Neutral</td>
<td>135</td>
<td>44.1</td>
</tr>
<tr>
<td>Liberal</td>
<td>93</td>
<td>30.4</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean =12.2  SD=2.2  Minimum=8  Maximum=16
4.2.5 Attitude toward Contraceptive Use

As shown in Table 4.12, most of the respondents (77.8%) think that the pill has side effects on health and nearly 40 percent perceive that using contraception for a long term would cause infertility in the future. It indicates that they have some misunderstanding about the pill and contraceptives. In other words, information about the benefits of the pill and other contraceptives has not been disseminated properly. The result also show that some of the respondents have a negative attitude toward condom use in terms of reducing sexual pleasure (37.6%) and feeling uncomfortable during intercourse (31.4%). The total score obtained by summing the responses of eight items and reclassifying them is shown at the lower part of Table 4.12. It shows that most of the respondents tend to have neutral or positive attitude toward contraceptive use.

Table 4.12 Respondents' Attitude toward Contraceptive Use

<table>
<thead>
<tr>
<th>Attitude toward Contraceptive Use</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Total (N=306)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pills have no side effects on health</td>
<td>5.2</td>
<td>17.0</td>
<td>77.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Condoms can reduce sexual pleasure</td>
<td>37.6</td>
<td>29.1</td>
<td>33.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Even if contraception is used long-term, it will not cause infertility in the Future</td>
<td>28.1</td>
<td>34.6</td>
<td>37.3</td>
<td>100.0</td>
</tr>
<tr>
<td>It is too troublesome and time consuming to use contraception</td>
<td>34.0</td>
<td>10.8</td>
<td>55.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Condoms make you uncomfortable during Intercourse</td>
<td>31.4</td>
<td>34.3</td>
<td>34.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.12 Respondents’ Attitude toward Contraceptive Use (Continued)

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>You feel shameful for using contraception</td>
<td>18.0</td>
<td>76.8</td>
</tr>
<tr>
<td>Using contraception implies you have had sexual experience</td>
<td>8.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Your boyfriend will doubt your commitment to him if using contraception</td>
<td>7.2</td>
<td>5.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Attitude toward contraceptives</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>45</td>
<td>14.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>208</td>
<td>68.0</td>
</tr>
<tr>
<td>Positive</td>
<td>53</td>
<td>17.3</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean =17.6   SD=3   Minimum=8   Maximum=24

4.2.6 Belief in Folk Methods to Prevent Pregnancy

The beliefs in folk methods to prevent pregnancy are measured by five items (Table 4.13). In general, over 60 percent of the respondents don’t believe that the folk methods listed in Table 4.13 could prevent pregnancy after unprotected intercourse. However, nearly 40 percent of respondents believed that standing up right or squatting to make the sperm fall down could prevent pregnancy. It suggests that these women do not understand the basic mechanism of pregnancy.

The belief score is the sum of the points that the respondents earned. As shown in Table 4.13, about 17 percent of the respondents tend to believe most of the folk methods. It appears that they might ignore the modern contraception.
Table 4.13 Respondents' Beliefs in Folk Methods to Prevent Pregnancy

<table>
<thead>
<tr>
<th>Belief in Folk Methods</th>
<th>Believe</th>
<th>Not Sure</th>
<th>Don’t believe</th>
<th>Total (N=306)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>After having sex:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standing up right/ squatting to make the sperm fall down</td>
<td>39.2</td>
<td>22.5</td>
<td>38.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Urinating immediately</td>
<td>19.3</td>
<td>19.6</td>
<td>61.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Using douche</td>
<td>10.8</td>
<td>19.3</td>
<td>69.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Washing genital area with Soap / herbs</td>
<td>3.6</td>
<td>17.3</td>
<td>79.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Taking hot shower</td>
<td>3.3</td>
<td>14.7</td>
<td>82.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Belief in Folk Methods</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>82</td>
<td>26.8</td>
</tr>
<tr>
<td>Moderate</td>
<td>171</td>
<td>55.9</td>
</tr>
<tr>
<td>High</td>
<td>53</td>
<td>17.3</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean=7.5   SD=2.2   Minimum =5   Maximum =15

4.2.7 Motivation for Having Sex

As the act of contraception is intimately linked with sexuality, motivation for having sex would be an important factor in successful contraceptive activity. Table 4.14 displays the respondents' motivation for sexual activity. Over 80 percent of respondents reported that they had a sexual relationship with a boyfriend because of their affection while physical need is another motivation cited by nearly one-quarter of the respondents. Less than one-tenth had sex with a boyfriend because of other motivations, such as curiosity, loneliness, earning money etc.
Therefore, it can be concluded that the vast majority of the respondents think that they engage in a sexual relationship with their boyfriend because of their affection.

Table 4.14 Respondents’ Motivation for Having Sex

<table>
<thead>
<tr>
<th>Item of Motivation *</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affection</td>
<td>253</td>
<td>82.7</td>
</tr>
<tr>
<td>Physical need</td>
<td>80</td>
<td>26.1</td>
</tr>
<tr>
<td>Curious</td>
<td>30</td>
<td>9.8</td>
</tr>
<tr>
<td>Felt lonely</td>
<td>15</td>
<td>4.9</td>
</tr>
<tr>
<td>Worrying about abandonment</td>
<td>8</td>
<td>2.6</td>
</tr>
<tr>
<td>For earning money</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

* Multiple response is possible

4.2.8 Perceived Availability and Barriers of Accessibility to Contraceptive Service

It has been shown in many previous studies that the availability and accessibility to contraceptive service are closely associated with the prevalence rate of contraceptive utilization. In this study, perceived availability of contraceptive service is simply measured by two items, namely, knowledge of a location where contraceptives can be obtained and perception of ease in obtaining the contraceptive. As Table 4.15 displays, most respondents have favourably perceived the availability of contraceptive service. About 91 percent know where they could get contraceptive service and nearly 80 percent perceive that it is easy to obtain contraception. It means that contraceptive service is relatively popular in China. From the score shown in the lower part of the Table, a similar conclusion can be drawn.
Table 4.15 Respondents' Perceived Availability of Contraceptive Service

<table>
<thead>
<tr>
<th>Perceived Availability of Contraceptive Service</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Total (N=306)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know where contraceptive services are available</td>
<td>90.8</td>
<td>0</td>
<td>9.2</td>
<td>100.0</td>
</tr>
<tr>
<td>It is easy to obtain contraceptives because they are available everywhere</td>
<td>78.1</td>
<td>11.4</td>
<td>10.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The level of perceived availability of contraceptive service:

- Difficult to obtain: 50 (16.3%)
- Less difficult to obtain: 22 (7.2%)
- Easy: 234 (76.5%)

Total: 306 (100.0%)

Mean = 4.6, SD = 0.8, Minimum = 2, Maximum = 5

The perceived barriers of accessibility to contraceptive service are expressed by four other items as shown in Table 4.16. A few respondents perceive external barriers of accessibility to contraceptive service. Nearly one-sixth think that travelling to obtain contraception is time consuming. Less than one-tenth of the respondents feel that the price of contraception is too expensive. However, about two-thirds perceive psychological barriers of accessibility to contraceptive service. For example, they feel ashamed or embarrassed to buy contraceptives at hospitals, drug stores and big department stores or to consult with health personnel.
Table 4.16 Respondents' Perceived Barriers of Accessibility to Contraceptive Service

<table>
<thead>
<tr>
<th>Perceived Barriers of Accessibility to Contraceptive Service</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Total (N=306)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is time consuming to travel in order to obtain this service</td>
<td>15.7</td>
<td>13.1</td>
<td>71.2</td>
<td>100.0</td>
</tr>
<tr>
<td>The price of contraception is too expensive</td>
<td>8.8</td>
<td>39.5</td>
<td>51.6</td>
<td>100.0</td>
</tr>
<tr>
<td>It is shameful to buy contraceptives at hospitals, drug stores and big department stores</td>
<td>63.4</td>
<td>3.6</td>
<td>33.0</td>
<td>100.0</td>
</tr>
<tr>
<td>I feel embarrassed when I consult the hospital about contraception</td>
<td>63.4</td>
<td>0.3</td>
<td>36.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Level of Perceived Barriers of Accessibility

<table>
<thead>
<tr>
<th>Level of Perceived Barriers of Accessibility</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many barriers</td>
<td>62</td>
<td>20.3</td>
</tr>
<tr>
<td>Moderate barriers</td>
<td>193</td>
<td>63.1</td>
</tr>
<tr>
<td>Few barrier</td>
<td>51</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean =8.4 SD=2.1 Minimum=4 Maximum=12

The total score summing from the four items is reclassified into three groups. The results show that one-fifth perceive many barriers to accessibility to contraceptive service.

In conclusion, most of the respondents do not perceive that contraceptive service is unavailable, but most of the respondents have perceived some barriers, such as psychological barriers to access contraceptive service.
4.2.9 Influence on Contraceptive Use from Boyfriend, Peers and Parents

In this study boyfriend's influence on contraceptive behavior is measured by three items: relationship with boyfriend, boyfriend's approval for contraceptive use, and discussion of contraception with boyfriend, while peer's and parents' influence are simply measured by whether or not respondents had a discussion about contraception with peers or parents.

Stability in the relationships seems to encourage the use of contraception (Paul, 1993). In this study, the stability of the relationship is gauged by the duration of time the sexually active couple have dated each other. As shown in table 4.17, nearly three-fourths of the respondents were in a stable relation with boyfriends because they had known their boyfriends for one year or more. Only one-quarter had been together for less than one year before the woman became pregnant. Regarding boyfriend's approval for contraceptive use, the majority of the respondents' boyfriends agree to use contraception. Only 14 percent refused to use contraception. Also, the majority of respondents (87%) could discuss contraception with boyfriends, as compared with peers (57%) and with parents (10.8%). This indicates that communication with parents about contraception rarely happened.
Table 4.17 Influence on Contraceptive Use from Boyfriends, Peers and Parents

<table>
<thead>
<tr>
<th>Items</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Relationship with boyfriend</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unstable</td>
<td>76</td>
<td>24.8</td>
</tr>
<tr>
<td>Stable</td>
<td>230</td>
<td>75.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>306</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td><strong>B. Boyfriend's approval for contraceptive use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disapprove</td>
<td>30</td>
<td>14.0</td>
</tr>
<tr>
<td>Approve</td>
<td>185</td>
<td>86.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>215</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td><strong>C. Discussion of Contraception</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With boyfriend</td>
<td>266</td>
<td>86.9</td>
</tr>
<tr>
<td>With peers</td>
<td>174</td>
<td>56.9</td>
</tr>
<tr>
<td>With Parents</td>
<td>33</td>
<td>10.8</td>
</tr>
</tbody>
</table>

* Multiple response is possible

4.3 Respondents' Contraceptive Behavior During Past 12 Months and Prior to Current Pregnancy

4.3.1 Status of Contraceptive Use

The status of contraceptive use among respondents during the past 12 months is classified into four groups according to the frequency of contraceptive use as follows: (1) every time, (2) most of the time, (3) occasionally and (4) never. As shown in Table 4.18, it is found that about three-fourths (73.2%) of the respondents had used contraceptive methods during the past 12 months, but only slightly more than one-eighth (13%) insisted on contraceptive use every time. However, the percentage who never used any method accounts for about one-fourth (26.8%).
Table 4.18 Status of Contraceptive Use Among Respondents During the Past 12 Months

<table>
<thead>
<tr>
<th>Use Status</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Time</td>
<td>40</td>
<td>13.1</td>
</tr>
<tr>
<td>Most of the time</td>
<td>103</td>
<td>33.7</td>
</tr>
<tr>
<td>Occasionally</td>
<td>81</td>
<td>26.4</td>
</tr>
<tr>
<td>Never</td>
<td>82</td>
<td>26.8</td>
</tr>
<tr>
<td>total</td>
<td>306</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.3.2 Types of Contraceptives Used by Respondents During the Past 12 Months

224 respondents had used contraceptives during the past 12 months. Some respondents had used one or more contraceptives, so the three major methods that they had used are ordered according to their preference (first choice, second choice and third choice).

As Table 4.19 shows, in terms of the first choice of contraceptive methods, nearly half of the respondents chose condom. Withdrawal is the second favoured choice (27.7%) while the rhythm method is third (15.6%). However, only 141 of the respondents report that they had used other methods as a second choice. It is found that condom (34.8%), withdrawal (23.4%), and rhythm method (22.7%) are the first three methods chosen. Regarding the contraceptives that the respondents have used as a third choice, only 48 respondents answered this question. The methods chosen are ordered as condom (29.2%), ECP (25%), rhythm method (22.9%) and withdrawal...
It can be said that condom, withdrawal, and rhythm method are most favoured by the respondents.

### Table 4.19 Types of Contraceptives Used by Respondent during the Past 12 Months

<table>
<thead>
<tr>
<th>Types</th>
<th>First Choice (N=224)</th>
<th>Second Choice (N=141)</th>
<th>Third Choice (N=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom</td>
<td>49.1</td>
<td>34.8</td>
<td>29.2</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>27.7</td>
<td>23.4</td>
<td>18.8</td>
</tr>
<tr>
<td>Rhythm</td>
<td>15.6</td>
<td>22.7</td>
<td>22.9</td>
</tr>
<tr>
<td>Pill</td>
<td>3.1</td>
<td>5.7</td>
<td>2.1</td>
</tr>
<tr>
<td>ECP</td>
<td>3.1</td>
<td>9.9</td>
<td>25.0</td>
</tr>
<tr>
<td>Jelly</td>
<td>1.3</td>
<td>3.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### 4.3.3 Reasons for Not Using Contraception

As Table 4.20 shows, 82 respondents who had never used any contraceptives gave one reason, 52 respondents gave two reasons and 20 respondents reported three reasons for not using contraception. The three most important reasons were ranked by the respondents according to their perceptions. Regarding the most important reason for not using contraception, most of the respondents (73.1%) reported that they did not think about getting pregnant when they had sex. It reflects that most of the respondent had a low perception of susceptibility to pregnancy. Among 52 respondents, not think about getting pregnant, having sex impulsively, worrying about side effects of pills and boyfriend's disapproval of contraceptive use are the main "more important" reasons. Regarding the least important reasons, worrying about side effects of pills is still cited by some young women. In short, among several reasons for not using contraceptives, lack of thought about getting pregnant, acting on sexual
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impulse, not properly understanding side effects of the pill and the power of boyfriend are the major reasons.

Table 4.20 Reasons for Not Using Contraceptives During the Past 12 Months

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Most Important (N=82)</th>
<th>More Important (N=52)</th>
<th>Least Important (N=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I never thought about getting pregnant at that time</td>
<td>73.1</td>
<td>17.3</td>
<td>10.0</td>
</tr>
<tr>
<td>Don’t know what the contraceptives are</td>
<td>6.1</td>
<td>5.8</td>
<td>0</td>
</tr>
<tr>
<td>It is shameful to get contraception</td>
<td>6.1</td>
<td>9.6</td>
<td>10.0</td>
</tr>
<tr>
<td>Having sex was unplanned, so contraceptives were unavailable at that time</td>
<td>3.7</td>
<td>13.5</td>
<td>5.0</td>
</tr>
<tr>
<td>Using a condom makes sexual activity unnatural</td>
<td>3.7</td>
<td>7.7</td>
<td>10.0</td>
</tr>
<tr>
<td>Boyfriend’s disapproval of contraceptive use</td>
<td>3.7</td>
<td>11.5</td>
<td>0</td>
</tr>
<tr>
<td>Worrying about side effects of pills</td>
<td>2.4</td>
<td>13.5</td>
<td>25.0</td>
</tr>
<tr>
<td>I have sex for pleasure and am not concerned about pregnancy</td>
<td>1.2</td>
<td>1.9</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know which is the best contraceptive</td>
<td>0</td>
<td>7.7</td>
<td>0</td>
</tr>
<tr>
<td>Difficult to obtain contraceptives</td>
<td>0</td>
<td>1.9</td>
<td>10.0</td>
</tr>
<tr>
<td>It is troublesome to use contraceptives</td>
<td>0</td>
<td>9.6</td>
<td>15.0</td>
</tr>
<tr>
<td>Don’t know where contraceptive can be obtained</td>
<td>0</td>
<td>0</td>
<td>5.0</td>
</tr>
<tr>
<td>It is easy to have an abortion</td>
<td>0</td>
<td>0</td>
<td>5.0</td>
</tr>
<tr>
<td>Because condoms and pills are expensive</td>
<td>0</td>
<td>0</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.3.4 Situation of Contraceptives Use and Reasons for Contraceptive Failure Prior to Current Pregnancy

A total of 96 respondents had used a contraceptive method prior to their current pregnancy (in Table 4.21). The most effective methods, the condom and pill, were only used by about 15 percent and one percent respectively, while most of them used the least effective methods—rhythm (50%) and withdrawal (25%). Also, it was found that less than one -tenth used ECP. Regarding the reasons for contraceptive failure, more than half of the respondents did not know the reason for getting pregnant (55.2%) and one-third could not calculate their safe period correctly. It suggests that the reasons for unwanted pregnancy are related to the use of less effective contraceptive methods, which are difficult to manage.

Table 4.21 Types of Contraceptives Used and Reasons for Contraceptive Failure by Respondents Prior to Current Pregnancy (N=96)

<table>
<thead>
<tr>
<th>Items</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Types of Contraceptives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhythm</td>
<td>48</td>
<td>50.0</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>24</td>
<td>25.0</td>
</tr>
<tr>
<td>Condom</td>
<td>14</td>
<td>14.6</td>
</tr>
<tr>
<td>ECP</td>
<td>8</td>
<td>8.3</td>
</tr>
<tr>
<td>Pill</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Jelly</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Reasons of Failure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td>53</td>
<td>55.2</td>
</tr>
<tr>
<td>Rhythm counted incorrectly</td>
<td>32</td>
<td>33.3</td>
</tr>
<tr>
<td>Condom broke</td>
<td>6</td>
<td>6.3</td>
</tr>
<tr>
<td>Forgot to take pill</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.4 Distribution of Psychosocial Factors and Contraceptive Use Behavior (CUB)

4.4.1 Predisposing Factors and CUB

The results in Table 4.22 show the association between predisposing factors and respondents' contraceptive use behavior (CUB). The predisposing factors include knowledge about pregnancy, contraception, and induced abortion; perceived susceptibility to pregnancy and perceived severity of complications of induced abortion; attitude toward premarital pregnancy and contraception; belief in folk methods and motivation of having sex.

Knowledge about Pregnancy, Contraception and Induced abortion

The following four important knowledge variables, pregnancy, contraception and surgical and medical abortion are presented to show their association with contraceptive use. It is apparent that most of the respondents with fair or good knowledge about contraceptives practiced CUB (85-94%), while most of those with poor knowledge never practiced CUB (about 60%). Similar trends are observed in knowledge about pregnancy, and knowledge about severity of induced abortion (surgical and medical) related to contraceptive use. This indicates that improvement of these knowledge, especially the knowledge about contraceptives, may play an important role in increasing contraceptive use.
Perceived Susceptibility to Pregnancy

Almost all of those who perceive a high susceptibility to pregnancy used contraceptives (98.8%), while one-quarter of those with perceived moderate susceptibility and three-fourths of those with perceived low susceptibility to pregnancy never used them. Therefore, it can be said that the use of contraceptives will increase considerably if health education can effectively increase perceived susceptibility to pregnancy.

Perceived Severity of Complications of Induced Abortion

Unexpectedly, whether the perceived severity of surgical abortion is high, moderate or low, the proportions of those who had never used contraception seem similar (about 20%). In terms of the level of perceived severity of medical abortion (MA), however, about one third (35%) of the respondents with a low perceived severity did not use contraceptives, as compared with about 18 percent of those with a moderate or high perceived severity. It seems that perceived severity of induced abortion is not a sensitive indicator to predict contraceptive use in general, partly because the respondents lack the relevant knowledge about severity of induced abortion, as mentioned before.

Attitude toward Premarital Pregnancy

As regards to attitude toward premarital pregnancy, the rates of never-use of contraceptives is similar between groups with conservative attitudes and liberal attitudes. It appears that attitude toward premarital pregnancy might not appreciably influence contraceptive use a lot among the respondents.
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Attitude toward Contraceptive Use

In terms of attitude toward contraceptive use, over 90 percent of respondents with a positive attitude had used contraceptives, compared with about 70 percent with a neutral or conservative attitude. However, the problem is that most respondents held a neutral or negative attitude. It indicates that change of attitude from neutral and negative to positive regarding contraceptive use is a practical challenge in terms of promoting contraceptive use.

Belief in Folk Methods to Prevent Pregnancy

Regarding the belief in folk methods to prevent pregnancy, the more belief in folk methods, the less use of modern contraceptives, as shown in Table 22. In other words, belief in folk methods plays a certain negative role in contraceptive use.

Motivation for having sex

As for motivation for having sex, the findings show that the proportion of the respondents who had never used contraceptives is higher in the group of the respondents who had sex because of a purpose other than affection (37.7%) compared to those whose motivation is their affection (24.5%). Thus, young women with affectionate motivation for having sex are more likely to use contraceptives.

In sum, the results show that contraception is used less by the respondents who had: low knowledge about pregnancy, contraceptives and severity of induced abortion; low perceived susceptibility to pregnancy, low perceived severity of complications of medical abortion; and had a negative attitude toward contraceptives.
Table 4.22 Predisposing Factors and CUB by Respondents During the Past 12 Months

<table>
<thead>
<tr>
<th>Predisposing Factors</th>
<th>CUB (%)</th>
<th>Total % (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Used</td>
<td>Never used</td>
</tr>
<tr>
<td><strong>Knowledge about contraceptive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>41.5</td>
<td>58.5</td>
</tr>
<tr>
<td>Fair</td>
<td>85.4</td>
<td>14.6</td>
</tr>
<tr>
<td>Good</td>
<td>93.8</td>
<td>6.3</td>
</tr>
<tr>
<td><strong>Knowledge about pregnancy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>57.6</td>
<td>42.4</td>
</tr>
<tr>
<td>Fair</td>
<td>75.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Good</td>
<td>84.4</td>
<td>15.6</td>
</tr>
<tr>
<td><strong>Knowledge about Surgical Abortion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never heard</td>
<td>61.8</td>
<td>38.2</td>
</tr>
<tr>
<td>Previously heard</td>
<td>77.9</td>
<td>22.1</td>
</tr>
<tr>
<td><strong>Knowledge about Medical Abortion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never heard</td>
<td>56.8</td>
<td>43.2</td>
</tr>
<tr>
<td>Previously heard</td>
<td>79.1</td>
<td>20.9</td>
</tr>
<tr>
<td><strong>Perceived susceptibility to pregnancy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>25.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>73.6</td>
<td>26.4</td>
</tr>
<tr>
<td>High</td>
<td>98.8</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Perceived severity of surgical abortion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>81.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>76.7</td>
<td>23.3</td>
</tr>
<tr>
<td>High</td>
<td>80.4</td>
<td>19.6</td>
</tr>
<tr>
<td><strong>Perceived severity of medical abortion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>65.0</td>
<td>35.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>82.3</td>
<td>17.7</td>
</tr>
<tr>
<td>High</td>
<td>82.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>
### Table 4.22 Predisposing Factors and CUB by Respondents During the Past 12 Months (Cont.)

<table>
<thead>
<tr>
<th>Attitude toward to Premarital Pregnancy</th>
<th>Conservative</th>
<th>Neutral</th>
<th>Liberal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70.5</td>
<td>29.5</td>
<td>100.0 (78)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>76.3</td>
<td>23.7</td>
<td>100.0 (135)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>71.0</td>
<td>29.0</td>
<td>100.0 (93)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitude toward to contraceptive use</th>
<th>Negative</th>
<th>Neutral</th>
<th>Positive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67.4</td>
<td>35.6</td>
<td>100.0 (45)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70.7</td>
<td>29.3</td>
<td>100.0 (208)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90.6</td>
<td>9.4</td>
<td>100.0 (53)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Belief in folk method</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>78.0</td>
<td>22.0</td>
<td>100.0 (82)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>71.9</td>
<td>28.1</td>
<td>100.0 (171)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>69.8</td>
<td>30.2</td>
<td>100.0 (53)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Motivation of having sex</th>
<th>Affection</th>
<th>Non-affection</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75.5</td>
<td>24.5</td>
<td>100.0 (253)</td>
</tr>
<tr>
<td></td>
<td>62.3</td>
<td>37.7</td>
<td>100.0 (53)</td>
</tr>
</tbody>
</table>

#### 4.4.2 Enabling and Reinforcing Factors and Contraceptive Use Behavior (CUB)

**Perceived Availability and Perceived Barrier of Accessibility to Contraceptive Service**

The data in Table 4.23 show that about half (50%-54%) of the respondents who perceived a difficult or less difficult availability of contraceptive service had never used contraceptives as compared with 8.8 percent of those who perceived an easy
availability to contraceptive services. In terms of perceived barriers accessibility to contraceptive service, the rates of never-use contraceptives increase from 20% to 27% and to 32%, when the respondents perceive less, moderate and many barriers of accessibility to contraceptive service. In short, the greater the perceived difficulty of availability or the greater of the perceived barriers of accessibility to contraceptive service, the less use of contraceptives. It suggests that the improvement of perceived availability and accessibility to contraceptive service can increase the use of contraceptives, which underlies the importance of how to improve these perceptions in practice.

**Boyfriend’s Influence**

As Table 4.23 indicates, three variables measuring boyfriend’s influence on CUB are obviously found to be significant in this study. 37 percent of respondents who have an unstable relationship with boyfriend, compared with 24 percent who had a stable relationship, report never using contraceptives. In terms of whether they have discussed contraceptives with boy friends, three-fourths of respondents who have never discussed contraceptives never used contraceptives as compared with one-fifth of those who have done it. In addition, the findings show that among the group of respondents, who have never used contraceptives, the proportions of respondents whose boyfriends disapprove of contraceptives (40%) is much higher than those in the group whose boyfriends approve of contraceptive use (6.5%). In summary, respondents are less likely to use contraceptives when they have an unstable relationship, no discussion of contraceptives, and boyfriend's disapproval of contraceptive use, with their boyfriends. It suggests that boyfriends could have a
negative influence on the contraceptive use of the respondents.

Peer Influence and Communication with Parents

Regarding the discussion of contraceptives with peers or with parents, those who do not discuss contraception with peers are less likely to use contraceptives (65%) than those who do it (about 80%), and those who do not discuss contraception with parents are also less likely to use contraceptives (about 70%) than those who do it (about 90%). The results show that discussion with peer and with parents might have positive influence on contraceptive use.

It can be concluded that contraceptives are used less by those who: perceived availability of contraceptive services to be difficult and perceived many barriers of accessibility to contraceptive service; have unstable relationship with their boyfriend, and do not discuss contraception with boyfriend, peers and parents.

Table 4.23 Enabling, Reinforcing Factors and CUB by Respondents during Past 12 Months

<table>
<thead>
<tr>
<th>Enabling and Reinforcing Factors</th>
<th>CUB (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Used</td>
<td>Never used</td>
</tr>
<tr>
<td>Perceived availability to contraceptive service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td>46.0</td>
<td>54.0</td>
</tr>
<tr>
<td>Less difficult</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Easy</td>
<td>81.2</td>
<td>8.8</td>
</tr>
<tr>
<td>Perceived barrier of accessibility to Contraceptive service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many barriers</td>
<td>67.7</td>
<td>32.3</td>
</tr>
</tbody>
</table>
Table 4.23 Enabling, Reinforcing Factors and CUB by Respondents during Past 12 Months (Continued)

<table>
<thead>
<tr>
<th></th>
<th>Moderate barriers</th>
<th>Less barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable relationship with boyfriend</td>
<td>63.2</td>
<td>36.8</td>
</tr>
<tr>
<td>Unstable</td>
<td>76.5</td>
<td>23.5</td>
</tr>
<tr>
<td>Stable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion of contraception with boyfriend</td>
<td>25.0</td>
<td>75.0</td>
</tr>
<tr>
<td>No</td>
<td>80.5</td>
<td>19.5</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boyfriend’s approval for contraceptive use</td>
<td>60.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Disapprove</td>
<td>93.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Approve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion of contraception with peers</td>
<td>65.2</td>
<td>34.8</td>
</tr>
<tr>
<td>No</td>
<td>79.3</td>
<td>20.7</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion of contraception with parents</td>
<td>71.1</td>
<td>28.9</td>
</tr>
<tr>
<td>No</td>
<td>90.9</td>
<td>9.1</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.5 Logistic Regression Analysis of Some Factors Affecting Contraceptive Use Behavior

One of the important purposes of this study is to identify the determinants of respondents’ CUB among never-married young women and to find some factors affecting respondents’ CUB. Bivariate techniques can only be used to test whether there is a relationship between two variables, however, CUB is influenced by a variety of factors. In order to eliminate the effects of confounding variables that might cause the appearance of a relationship between CUB and an independent variable, logistic
Wu Jiuling

Results of the Study

regression analysis, a multivariate analysis, is used in this study. Logistic regression analysis allows for the effects of each important predictor influencing respondents' CUB among never married young women to be determined, and assessed independently.

In this study, all the variables representing psychosocial factors based on the framework are included in a logistic regression model to predict whether the young women would use contraceptives. The full model is presented as follows:

\[
\text{Log } Y = a + b_1 \text{KP} + b_2 \text{KC} + b_3 \text{KS} + b_4 \text{KM} + b_5 \text{PSP} + b_6 \text{APP} + b_7 \text{AC} + b_8 \text{BAC} \\
+ b_9 \text{RB} + b_{10} \text{DCB} + b_{11} \text{DCP} + b_{12} \text{DCPS} + b_{13} \text{BFM} + b_{14} \text{MHS} \\
+ b_{15} \text{PACS} + b_{16} \text{PBACS} + b_{17} \text{PSSA} + b_{18} \text{PSMA}
\]

KP: knowledge about pregnancy;
KC: knowledge about contraception;
KS: knowledge about surgical abortion;
KM: knowledge medical abortion;
PSP: perceived susceptibility to pregnancy;
APP: attitude toward premarital pregnancy;
AC: attitude toward contraceptives;
BAC: boyfriend's approval of contraceptive use;
RB: relationship with boyfriend.
DCB: discussion of contraception with boyfriend;
DCP: discussion of contraception with peer;
DCPS: discussion of contraception with parents;
BFM: belief in folk methods;
MHS: motivation for having sex;
PACS: perceived availability to contraceptive service;
PBACS: Perceived barrier of accessibility to contraceptive service;
PSSA: perceived the severity of surgical abortion;
PSSM: perceived the severity of medical abortion;

Five variables were selected into the equation of logistical regression model by a backward stepwise selection method (using the Wald statistic). The model shows a correct classification of 85.29 percent of contraceptive use behaviour and is statistically significant at the 0.000 level. The model fits this case well. The logistic P-
P plot of the standardized residuals and the normal Q-Q well are shown in Appendix V and VI. Table 4.24 presents the variables selected by this procedure. Five significant variables with P value of less than 0.05 are shown in this logistic regression model. In other words, they are the five significant indicators, namely KC, PSP, BAC, PACS, DCB, whereas the other 13 variables in this study, namely KP, KS, KM, APP, AC, RB, DCP, DCPS, BFM, MHS, PBACS PSSA, PSMA, have been removed from the equation because they are not significant variables.

The results of the logistic regression model reveal that the model is highly significant. The variables, “knowledge about contraceptives” and “boyfriend’s approval of contraception” have the strongest relationship with CUB, with a Wald value of 20.7 and 19.7. After controlling the effects of all other variables in the model, compared to the respondents who have the lowest knowledge about contraceptives, those with moderate knowledge about contraceptives are 4 times more likely to use contraceptives and those with high knowledge are 6 times more likely to use contraceptives. It was also found that, after controlling the effects of all other variables in the model, respondents whose boyfriend’s approved of contraceptives are 11 times more likely to use contraceptives than those whose boyfriend’s disapproved of contraception. It can be said that the variable “knowledge about contraceptives” is the strongest indictor of CUB among never married young women and that the variable “boyfriend’s approval of contraception” is the second strongest indictor of CUB.

As the logistic regression model shows, the variables “perceived susceptibility to pregnancy” and “perceived availability of contraceptive service” also have a strong
relationship with CUB with Wald values of 13.9 and 9.4 repressively. The results show that among the respondents who have a high perception of susceptibility to pregnancy, the probability of contraceptive use increases 42.6 times and among those who have a moderate perception, the probability of contraceptive use increases 3.7 times, compared to those who have a low perception of susceptibility to pregnancy. Also, compared to the respondents who perceived availability of contraceptive service to be difficult, those who perceived availability of contraceptive service to be easy are three times more likely to use contraceptives.

Another variable “discussion with boyfriend” from the logistic regression model is found to have a weaker relationship with CUB with a Wald value of 4.04. The probability of contraceptive use increases three times for the respondents who have discussed contraceptives with their boyfriends compared to those who did not discuss with boyfriends.

Therefore, these results indicate that knowledge about contraceptives and boyfriend’s approval of contraceptive use are the strongest indictors of respondents’ CUB and perceived susceptibility to pregnancy and perceived availability of contraceptive service were also strong indictors of respondents’ CUB, whereas discussion with boyfriends is a weaker indicator of the respondents’ CUB.
Table 4.24 Logistic Regression Showing Significant Determinants of Respondents' CUB

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Wald</th>
<th>p</th>
<th>R</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge about contraception (KC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (r)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>1.8160</td>
<td>20.3197</td>
<td>0.0000</td>
<td>0.2269</td>
<td>6.1475</td>
</tr>
<tr>
<td>High</td>
<td>1.3788</td>
<td>3.5330</td>
<td>0.0602</td>
<td>0.0656</td>
<td>3.9700</td>
</tr>
<tr>
<td>Boyfriend's approval of contraception (BAC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disapproval (r)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval</td>
<td>2.4342</td>
<td>19.6860</td>
<td>0.0000</td>
<td>0.2230</td>
<td>11.4071</td>
</tr>
<tr>
<td>Perceived susceptibility to pregnancy (PSP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (r)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>1.2953</td>
<td>7.6137</td>
<td>0.0058</td>
<td>0.1256</td>
<td>3.6519</td>
</tr>
<tr>
<td>High</td>
<td>3.7511</td>
<td>10.9893</td>
<td>0.0009</td>
<td>0.1566</td>
<td>42.5691</td>
</tr>
<tr>
<td>Perceived availability of contraceptive service (PACS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (r)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>-0.1307</td>
<td>0.0321</td>
<td>0.8578</td>
<td>0.0000</td>
<td>0.8775</td>
</tr>
<tr>
<td>High</td>
<td>1.1864</td>
<td>6.7085</td>
<td>0.0096</td>
<td>0.1151</td>
<td>3.2752</td>
</tr>
<tr>
<td>Discussion with boyfriend (DB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (r)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1.0806</td>
<td>4.3560</td>
<td>0.0369</td>
<td>0.0814</td>
<td>2.9464</td>
</tr>
</tbody>
</table>

Note: Model $X^2 = 182.584$, $p = 0.0000$; percentage of sample classified correctly = 85.29%. 

(r) Is the reference category. a = -7.1524
The equation for the logistic model is as follows:

\[
\begin{align*}
\text{Prob. (contraceptive use)} & = -7.1524 + 1.8160 \text{KC (moderate)} + 1.3788 \text{KC (high)} + 2.4342 \text{BAC} \\
& + 1.2953 \text{PSP (moderate)} + 3.7511 \text{PSP (high)} + 1.1864 \text{PACS (high)} \\
& + 1.0806 \text{DB}
\end{align*}
\]

In short, from the results of this quantitative research, great attempts are made at determining some important factors associated with respondents' CUB among never married young women in Beijing City. It can be said that knowledge about contraception, boyfriend's approval of contraceptive use, perceived susceptibility to pregnancy, perceived availability of contraceptive service and discussion of contraceptives with boyfriend are the most influential factors on respondents' CUB. In other words, respondents' CUB is influenced directly by these psychosocial factors. These finding have proved that the Precede-Proceed Model is useful in explaining possible factors influencing the respondents' CUB.
4.6 Case Study

In order to obtain a complete picture about respondents' CUB among never married young women to supplement quantitative research findings, in this study, eight in-depth interviews were conducted. The results are presented as the following:

Case One

She was studying at a vocational school, 19 years old with first pregnancy and gestation of 11 weeks. Her boyfriend was in the same age as she was and he worked as an attendant at a dance club. She occasionally met him at their friend’s party.

The first sexual experience took place at her boyfriend’s room after she knew him only four months. Her boyfriend requested or insisted on her to having sex and she also was curious about it too, so she agreed to go ahead. However, they didn’t use any contraceptive method to protect herself. She did not regard premarital sexual activity as a serious issue. She said:

Our first sex was not stimulated by watching some pornography, I didn’t think that I have some motivation to do this, it just happened when he wanted to do it. I was careless about this. It was “WU SUO WEI” (meaning that having sex is ok, never mind).

When she was asked, whether or not she thought about losing virginity and being abandoned by her boyfriend someday, she was still carelessly about it.

I do not care about my virginity because my boyfriend said that my virginal membrane had been broken already. I guessed that it would have happened when I fell down from bicycle many years ago. (How did you know it was true?) my boyfriend said that I didn’t bleed when I had my first intercourse … I did not worry about that this (premarital pregnancy) would influence my life and marriage. If he abandoned me, I don’t really care about it. I believe that if someone really loves me, he should not care about my past, even though he should be upset, he
should not treat me badly. My girl friends and I thought that as long as we think something is correct, just do it, and it is unnecessary to care for the comments from outside.

Because she studied at a vocational school, the studies were not hard to her; thus she often had enough time to meet her boyfriend at her room or in his room in the afternoon. The frequency of having sex was about four –five times a week. However, they rarely used contraceptives because both of them felt shameful to buy them at drug stores.

I knew some contraceptive devices, such as condom, pill, but we occasionally use condom. I never take responsibility for it. I thought that this was his business. How can I go to the drug store to buy them? I felt shame and so did he, so he only got it from his friends and his family. If he got condoms from somewhere, we would use them, if he did not have them, sometimes, he did not ejaculate sperm inside... We used condom only a few times, maybe he was not willing to find it, because he seemed that he would not really like it and felt “ Bie Niu” to use it (it means uncomfortable).

Normally, she didn’t discuss the issue related to contraception with boyfriend and girl friends. She just knew who used condom or took the pill, but she did not care about how to use them correctly. They did not have deeply communication each other because she felt shy to discuss this issue.

When she was asked whether or not she was worried about becoming pregnant though she had unprotected sexual relationship, she said:

Fear of pregnancy was on my mind once in a while, but I was not really worried about it and didn’t think which method that I have to use. I once asked my boyfriend that what I have to do, in case, if I become pregnant. Then, he said that is ok, you can take pill or I use condom, but he didn’t really buy the pill for me or buy condoms for himself... I thought that it would not happen to me because I was not pregnant though we had sex frequently.

She did not go to hospital for checking up in time, even her period did not come for two and half months. She just guessed that she would be pregnant and felt
uncomfortable, but no one discovered this, and she did not have a chance to diagnose it, because it was during her examination period. Therefore, she didn’t visit the doctor until her semester end, by then, she was pregnant with 11 weeks. Now, she had to spend a few days at hospital because she could not have an induced abortion at the outpatient department. She did not reveal any thing to her parents about her situation because she was worried that if they came to know this they would be very angry.

I told my mother that I would stay at one of my girl friends’ house just for fun, as it was on semester break, so she was not suspicious about me. After hearing my situation, first response of my boyfriend was to find money as soon as possible to pay for my treatment fee and get ride of it quickly. It seemed that he would like to take responsibility for this. His parents already agreed to give money to pay the fee and one of his relatives accompanied me to the hospital.

She knew that some of her girl friends had experienced premarital sex and had abortion, but they rarely discussed each other how to prevent pregnancy because they felt shameful. She only heard about the name of surgical and medical abortion, but didn’t know what the complications of induced abortion were. She didn’t have any idea about this. She said: “Until now, I did not think that having abortion will lead to some problem in the future, only thing bothering me was that my parents would get to know this and I was afraid of the surgical abortion.”

When she was asked whether or not she is going to practice contraceptive devices and to keep sexual relationship with her boyfriend, she said: “I did not think too much about this until now. I am sure that we will continue our relationship. I thought I should be careful while we have sex in the future, but I don’t know what kind of contraceptive methods that I have to use.”

She once tried to find out some information related to contraception, but she failed and also didn’t ask her friends, because she didn’t have a strong desire to
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understand them. Now, she thought that the knowledge about contraceptive devices should be taught at the high school, but she was against the idea to provide condoms at high school, because it would encourage students to engage in sexual activities at school.

Case Two

Case two was a 21-year-old woman with a high school education, working as a secretary who had a relationship with her boyfriend for two years. Her boyfriend was a 24-year-old journalist. It was her first pregnancy and her gestation was 50 days, also she suffered Trichomoniasis. She would have a surgical abortion after treatment for Trichomoniasis.

She met her boyfriend when she was 15 years old and she started to date him when she was 20. At first, she refused her boyfriend’s request to engage in sexual relationship, but late she agreed when her boyfriend repeatedly asked for, she explained the reasons:

After rejecting his first request, I thought about it. I felt we loved each other very much and our relationship was stable so, we would get married in the future. Why shouldn’t we make love?... In order to prevent pregnancy, he went to the drug store to buy condoms and he used them.

At the early stage, her sexual activity was very frequent, sometimes 4-5 times a day. Gradually, their sexual activity was as a part of regular life, later, the frequency reduced to about one time per week. She knew about several contraceptives, however, they didn’t use them often and also she felt that counting the days for rhythm was too complicated for her. She said: “After the condoms were used up, I occasionally found that the sperm could be squeezed out of the vagina and I didn’t get pregnant. Then every time after having sex, I went to the toilet and waited for the sperm to flow out
They once worried about getting pregnant and discussed contraception. Both of them felt uncomfortable to use condoms, even though they knew condoms could be the safest method. One time, she bought birth control pills at drug store, but the directions on the bottle of pill mentioned that it would lead to vomiting, so her boyfriend didn’t allow her to take them. Also, she was going to have an IUD, but her boyfriend said that it would cause pelvic inflammation and bleeding, so he disapproved her to do this. Recently, they didn’t use any method to prevent pregnancy. She said:

With the lapse of time, I didn’t become pregnant without contraceptive use for a long time, thus, we thought that one of us maybe suffered from some infertility disorder, so it is unnecessary for us to use any method.

She thought that premarital pregnancy could affect the reputation of her family. Her parents would be very sad and angry if they knew about her pregnancy because they were very conservative. She could not understand why her parents considered this as a too serious issue. She said:

Actually, it is unnecessary for them to consider this as a too serious issue. It is really unnecessary. (She shook her head and repeated saying “unnecessary” many times). I am an adult and can decide something by myself and this is my own matter.

She didn’t care for her reputation could be influenced by her premarital pregnancy because many young people she knew had already had premarital sexual relationship. She said:

If my colleagues looked down on me, I could transfer to another new unit where no one knew my previous experience of pregnancy. Now young people don’t care about “virginity” too much. However, I am not too liberal to keep the sexual relationships with several men at the same time.

Ordinarily, my parents control me closely. Before I graduated from high
school, I didn’t communicate with boys too frequently. I did not want to go out with boys. Now, the relationship between my boyfriend and I is approved by both sides of our parents.

Her mother once warned her to be careful and not to exceed the boundary of friendship, but her mother didn’t converse with her deeply and didn’t directly tell her how to use contraceptives because her mother was conservative and could not speak out directly.

After she found out that she was pregnant, the first thing that came to her mind was fear of surgical pain and worry about abortion that would affect badly on her child in the future. But her boyfriend worried about her health because she was not in good health. However, both of them didn’t understand what would be the negative consequences of induced abortion except hearing some limited information from their friends. She said:

Occasionally, I heard some discussion of induced abortion from my friends. Someone said: “surgical abortion would lead to miscarriage in the future.” Others said: “surgical abortion was not bad for one’s health and one only needs to take a rest for two or three days. It is unnecessary to follow the doctor’s orders and took a long time to rest.” Also, they said: “medical abortion is very simple method, just take the pills, then the “child” will be discharged easily. One of my friends has had medical abortion three times, so I intend to choose medical abortion.

According to her, this experience of abortion would affect her sexual life from now on. She would be somehow afraid of getting pregnant, therefore, she won’t continually keep sexual relationship with her boyfriend before she got married. Also, she gave her some opinion about the necessity of health education.

I knew that the condom was available in many bigger department stores. If someone wants to get them, it is not difficult. The advertisement of preventing AIDS by using condoms was shown on TV a few months ago, but many middle-aged people strongly disliked this advertisement. They didn’t think that it is necessary for disseminating information for
preventing AIDS and they thought it seems directly to expose related to sexual issues too obviously because everyone can get the information from other sources, but young people did not give strong opinion on it. I don’t care about this kind of advertisement, but I hope that information about consequence of premarital sexual behavior and the harmful outcome of induced abortion should be propagated among young people, especially, in high school. Students should be educated to realize the consequence of sexual behavior, not just enjoying sex and be helped to understand the risk early.

In addition, she felt the social pressure on the premarital pregnancy and thought that premarital pregnancy was considered as a social stigma by some people in current society, such as the doctors and nurses. She thought that the doctors’ attitudes are indifferent with despising sight to the unmarried young women. She said:

I am afraid of their sights and appearance in the hospital. How can we consult some information about contraceptives and induced abortion from them? Some young women even are fearful of visiting the doctors. The doctors should help unmarried pregnancy to reduce their fear and provide the service of counselling about contraceptive methods and the risk of induced abortion, but scare them running away hospital... Doctors don’t tell more words except diagnosing whether I am a pregnant and telling me when I should have an abortion.

Case Three

Case three was a 23-year-old university student who was the youngest of three children in her family. Her parents generally had strict control on her and didn’t allow her to date boys. But now she came to Beijing alone to study here. Her parents had no control over her.

Her boyfriend was two years older than she was and a university graduate. She had been dating him for more than one year. A month ago, her boyfriend came to Beijing to accompany her to study. So, they lived together now and had a sexual relationship. Their frequency of sex was three times a week, but they never used
contraceptives because she did not have a proper understood about pregnancy, she said:

I think that pregnancy is maybe a complicated process in which some conditions have to be prepared in advance. At least, it should have some psychological preparation for the couple who wants to have a baby. Then, based on this preparation, pregnancy will relatively easily occur after having intercourse. For couple like us, making love is not because we are going to have a baby, but because of our affection. Also, I once read a scientific article that discussed pregnancy. It said 'egg and sperm will not survive for a long time and the number of living eggs and sperm would be very low,' so, getting pregnant depends on the frequency of sex. Having sex one or two times won't lead to pregnancy. Therefore, I thought that my chance of getting pregnant was minimal. However, unexpectedly, it is so simple to get pregnant if you are carelessness sometimes.

Normally, she would rather read literary works than journals of common life or health. She wasn't interested in the knowledge about pregnancy or abortion and her desire for seeking contraception was not strong. She said:

We just heard about some contraception, but we didn't really care about it. We didn't think that it was necessary for us to use it because I won't easily get pregnant. Occasionally, I thought about the possibility of getting pregnant without contraceptive use, but I never thought about the consequence of being pregnant and what should I do in case I get pregnant.

Her attitude was very liberal about premarital sexual activity and pregnancy. She didn't consider the consequence of premarital sex and pregnancy as a serious issue that may influence her reputation and health.

If a couple loves each other very much and doesn't have sexual activity, it is impossible and abnormal. If they don't use contraceptives properly, pregnancy would be inevitable that pregnancy will happen. I don't think that premarital pregnancy is a humiliation....The certificate of marriage means nothing for me as long as love and commitment of marriage exist no matter whether sexual relationship occurs before or after.

When she was asked how to face pregnancy, she looked very calm and said:
“After recognizing pregnancy, I didn’t feel any psychological stress, guilt or regret. This is the consequence of our love. Because it is not a good time to have a child, so I decided to have an abortion.”

Case Four

She was 18 years old, unemployed, graduated from a vocational school. This was her first pregnancy with gestation 45 days. Her boyfriend aged 28, worked as a policeman. They are cohabiting now.

According to her, when she studied at the school where students are trained students as performers, many of her classmates aged 13 or 14 had lost their virginity. They had sex just for fun, but she was strongly against this behavior because she believed that her chastity have to shared with the person whom she trusts and loves. One of her classmates once asked her to have sex with him, but she refused it. She thought that the relationship between them was unstable. If she had sex with him, it would just like playing a game with him, but not affection.

She met her boyfriend by chance. After she met him three months, he encouraged her to have sex, but she rejected it, because she didn’t think that they had understood each other well and she didn’t know what was his parents’ opinion about her. Three months later, he demanded her again, then she agreed to do it and asked him to buy condom. She had positive attitude toward condom, but she also has negative attitude toward to pill and jelly.

In general, we used condom as well as the rhythm method. If I am in my safe period, we will not use condom. (How can you count your rhythm?), we always use “Qian Qi Hou Ba” (according to her, it means that safe period is from seven days before beginning of menstruation to eight days after menstruation), to count my safe period. I don’t feel that
using condom will be troublesome or uncomfortable and I believe its security. I have heard about pill and jelly, but I don't think that jelly is safe and also, I worry about pill because some of my friends said that it will lead to obesity. I don't want to become fat.

With regard to contraceptive service, she didn't think that contraceptives were unavailable at drug stores, but she had some psychological barriers to access to it. She said: "I am still embarrassed to access to this kind of service because our country is not sexually liberated country. If I buy it at drug stores, someone will laugh at my behavior because I am too young."

When she was asked about the reason for current pregnancy, she said:

It is failure to use contraceptive because condom broke. I thought that only a little sperms leaving inside was not serious, so I didn't think it was necessary to have to take some emergence contraceptive pills (ECP) for preventing pregnancy, even though I knew ECP can prevent pregnancy within 72 hours after having unprotected sex... I learned that if egg meets sperm, pregnancy would happen, but I don't know how many sperms should be needed for pregnancy.

**Case Five**

She was a 20 years old high school graduate, who worked as a secretary at a company. This was her first pregnancy with a gestation of 42 days. Her boyfriend was two years older than she was. She knew her boyfriend for one and a half-year and had a sexual relationship with him for four months until now.

Her first sexual experience was at her boyfriends' house when his parents were away. Her boyfriend asked her whether they could have sex and she agreed to it. She said,

At that time, I did not really think about the consequence of having sex. I did not think about getting pregnant, so we didn't use any contraceptive. I only thought that he was the person that I love and I could give him my virginity. After having sex, I once worried about losing my virginity, but my boyfriend treated me well and said 'he
would love me more'. Gradually, I forgot this worry and continued my sexual relationship with him because I trusted him.

She forgot the time when they first began to use contraceptives, but she remembered the fact that her boyfriend suggested to use contraceptives first because he worried about pregnancy, so he brought and wore condom on his own initiative. She didn’t believe any folk methods in preventing pregnancy, but she didn’t want to take the pill as a contraceptive because she got the idea from the magazine “Sheng Huo” that the pill would reduce sexual desire. She said:

My boyfriend felt uncomfortable with the condom and didn’t like to use it, so he used condoms only during my unsafe period. Usually, he remembered my period date because I always forget my period time, and counted my safe time by using “Qian Qi Hou Ba”. I thought the reason for current pregnancy was forgetting my period date and wrongly calculating my safe period. Usually, as long as I requested him to use condom, he always respected my suggestion and used it.

She thought that premarital sexual activity could be accepted if people love each other and would be married. She disagreed that premarital sex would influence a person’s marriage in the future if a woman has sex with the same man. She did not think that premarital pregnancy could affect her family’s reputation but it should be confidential among her colleagues who would consider this as bad thing. She said:

From my personal view, premarital pregnancy should not happen, because it is not a good thing. However, it has happened and there is no way to avoid the issue, so others should not blame this, especially the doctors should not despise unmarried pregnant. I won’t look down upon the person who has premarital pregnancy. Two of my friends have premarital sexual activity, but they are lucky to have avoided pregnancy.

She thought that she had an adequate knowledge about how pregnancy occurs, but she didn’t understand the severity of induced abortion clearly. She only knew that having a surgical abortion would lead to secondary infertility in the future. She never heard about medical abortion.
Even though she has a good relationship with her parents who had already known that their daughter was in love and sometimes, stayed at her boyfriend’s home at night, they didn’t tell her how to prevent pregnancy. Her father once gave her a warning to her ‘be careful, don’t get pregnant.’ She said:

After learning about pregnancy, I was very scared about surgical pain and worried that this surgical procedure would leave some sequels and cause an unhealthy child in the future. My boyfriend was worried whether or not it would affect my health. Until now, I don’t want to tell my parents about this. I am not sure whether I have to tell them. Maybe I will tell my mother, my father has a bad temper.

When she was asked about her opinion on contraceptive use in the future and who should take responsibility, she said,

I think that my boyfriend should care the contraceptive matter because he uses condom. I don’t think it is necessary for me to buy them. If he asked me to buy them, I would not do it...This experience (having abortion) is terrible. I am not going to have sex with him again until we get married. (When asked if she was sure she would not have sex with him after a long time, she replied) if I have, I will use contraceptives.

She thought that it is necessary to develop the education on contraception, and the risk of induced abortion because she lacked this knowledge. She only got some knowledge about some physical anatomy and menstruation health from high school, but she was against the idea that sex education was developed at high school. She said:

Sex education may stimulate the students who didn’t think about having sex to do this, if this knowledge were taught in high school, so the best way is to publish the knowledge and sell some special books to meet the persons’ needs. If someone needs, he or she could easily get it at a bookstore or elsewhere.
Case Six

She was 22 years old, and graduated from Chinese Art College. Now, she worked as an art designer for six months. Her boyfriend was 27 years old with the same occupation as she did. He had an apartment to live. When she was just 20 years old, she met him and kept a good relationship until now. They had engaged in premarital sexual activity for nearly one year. This was her first time to be pregnant, and gestation was 39 days.

Her first sexual experience was acting on impulse of her boyfriend, and she was not willing to do it, but her boyfriend thought that she would be his real girlfriend after having sex, so, at that time, having sex was unplanned and they did not use any contraceptive method. Then, she was afraid of becoming pregnant and her boyfriend had the same feeling too. Next day, her boyfriend went to a drugstore to buy Emergency Contraceptive Pill (ECP), because she only got this information from the advertisement and she also felt shame to buy them. After having unprotected sex four times, they discussed to use some contraceptive methods. Then, her boyfriend once bought a box of condoms, but only used one and did not keep wearing it during the process of intercourse, because he did not like it. She said:

He strongly felt uncomfortable to wear it and sexual desire was obviously different from natural. His facial expression was rather confused. Finally, he rejected to wear it continually and threw it away. At that time, I could not say anything and I did not want to make him too uncomfortable, because sexual satisfaction should not be enjoyed by only one person.

Due to the failure of the use of condom, they practised withdrawal and the rhythm method to prevent pregnancy at most time because she thought that the most risk of having sex was to become pregnant. Even though she knew that pregnancy
would be possible by using withdrawal, the chance for getting pregnant would be very low. However, sometimes, her boyfriend could not take it well, and she also forgot her menstruation cycle, thus she would take ECP to make up the failure and used it many times. As she mentioned,

Sometimes, I warned him not to ejaculate inside, and he promised that he would not do it, but at the critical moment, man’s words always change, he did not care about his promises and ejaculated inside... if it happened in my unsafe time, I would take ECP, and I have taken ECP three times. If it happened in my safe period—“Qian Qi Hou Ba” I did not care about it. I can not understand why I got pregnant because I was in my safe time. My girlfriend had used this method for more than two years and never got pregnant.

Regarding attitude toward contraceptive devices, she did not make complain about condom. She thought that the bad feelings of using condom only can be felt by her boyfriend as her girlfriends, who had experienced abortion several times, said that their boyfriend did not like to use it too. However, she has strongly negative attitude toward pill.

My mother told me that pill had some side-effects on health, especially for young girl. I also worry about taking pill because it might have some negative affects on my foetus in the future, before getting married and delivering a baby, because taking any kind of medicine for a long time would not be good for health.

In terms of premarital sexual activity and pregnancy, she thought she was a conservative person. She did not agree that premarital sexual activity could happen with anyone or with many partners. She thought that sex should be taken seriously, not just for fun. Premarital pregnancy should not happen because the child born to single parent would be discriminated by the society. She hoped that her child should live in a good environment. She said:

After having first sex relationship, I once considered about losing my virginity. I thought it should be shared with my spouse and also, I
worried that he would abandon me someday. In the meanwhile, I felt very curious about this because I was very naive and didn't really know about sex. Gradually, I felt our relation still was stable and he was very kind to me, so I did not worry about the possibility of being abandoned, ‘my heart was Ta Shi’ (it means easy), then I continued to have sex with him.

But, she does not like the way that her classmates have done. They regarded the premarital sex as a normal thing and they were motivated by the desire to experience casual making love. They thought that as long as two persons feel happy, sex relationship should take place, would not need think about whether they would get married in the future.

She thought premarital sex could be accepted, if two persons love each other, and have a stable relationship. Now, she felt that premarital sex could promote their relationship.

If I did not have sexual relationship with him, he only can understand me in terms of my outside appearance and cannot understand the real situation in me, because something could be hidden. After having sexual relationship, both of us exposed to each other in naked and trod each other frankly. I thought I am adult and can take responsibility to my behavior, so having sexual behavior is very normal, but I can’t accepted it, if this happen under 20 years old.

With regard to the knowledge about pregnancy and induced abortion, she didn’t think that she had an adequate knowledge about pregnancy. She only had some superficial knowledge from a very simple textbook that she used at high school. For example, she only understood the sentence of “sperm meets egg, pregnancy would occur” and didn’t know how the concept really occurs; However, she had an idea that having sex would lead to pregnancy.

She heard that induced abortion might affect person’s health from her mother because her mother’s health was not good since she had an abortion, but she did not
know how abortion would affect health. When she found out that she was pregnant, she could not believe it and was very nervous and her boyfriend didn’t know how to deal with the matter either. She didn’t tell this to her parents, because they would be angry. Then, she called her girlfriend to seek help because she had already undergone an abortion.

My friend told me that the successful rate of medical abortion was 70 - 80 percent. So, I chose surgical abortion that relatively felt “Ta Shi” (means feeling at ease) because I have to continue my work. I do not like to take too much trouble and hope it can be finished quickly.

When she was asked about her future intention to use contraceptive methods, she was positive about using them in the future. She said,

After undergoing this experience, I think I will use contraceptive methods perfectly to minimize the chance of getting pregnant and I believe my boyfriend would agree to use condom, otherwise, I do not think that he really loves me. If he does not agree to use condom, I will not allow him to touch me any more.

She thought that the prevalence of knowledge related to prevent pregnancy is not enough in modern society. But she had some contradictory views on whether, or not to introduce contraception, such as condom. She said:

I heard that the students at high school in U.S.A are able to get condom from schools, but I thought that it can prevent pregnancy and also, it would encourage students to engage in more sex. In Beijing, vending machines for condom have been found at the gate of some universities. Some people were strongly against it, they thought it would affect the appearance of Beijing City, but if they were not there, how can people get it when they need it. When first time seeing the advertisement of Condom related to prevention of AIDs, I was surprised. I thought that condom was used to prevent pregnancy, not for disease because I thought it was unnecessary to use it for us and I trust my boyfriend.
Case Seven

She is a 22 years old high school graduate, who worked as a secretary at a company for two and a half years. She was the only daughter of her family, but she lived with her grandparents and relatives in Beijing. Her parents lived in another province. This was her second pregnancy and her gestation was 49 days. She had to stay at hospital to undergo this abortion, because the space between two pregnancies was less than six months.

Her boyfriend aged 27, was an engineer. Her first sexual experience began after she had fallen in love with him for half year at the age of 20, when acting on sexual impulse. She thought that it was natural for this to happen because of their affection. At that time, she didn’t think about getting pregnant, but her boyfriend used withdrawal method. After that time, she began to worry about getting pregnant, but her boyfriend comforted her and said “Mei Shi De” which means does not matter.

She had had sexual experience for two years and knew some method such as, condom, rhythm, pill, and spermicide. But, she didn’t know how to use the pill and how to correctly count the safe days for rhythm (because she said, “rhythm is the days except 7-8 day before menstruation starts), she didn’t even know the name of the withdrawal that her boyfriend used. Her frequency of intercourse was about 4-5 times a week. Her contraceptive use pattern was that she used it sometimes. She said, My boyfriend occasionally used condom (only one or two boxes of condom had been used) during my unsafe period. Sometimes, I reminded him that I was in my unsafe period, then he would use a condom or ejaculated outside, but I didn’t always comply with my rhythm. Sometimes, having sex was unplanned and we didn’t use some method. After that, I would think, worry and fear getting pregnant, then just waited for my period to come and he would say “Mei Shi De”. For example, this time I guessed that I would be pregnant and he still said “Mei Shi De”, but it happened. (When asked if she knew about ECP that
Wu Jiuling

She occasionally discussed about using contraceptives with her boyfriend. Both of them felt that it was troublesome and influenced the sexual atmosphere during the process of intercourse by using condoms. Also, she rarely discussed this issue with her girlfriends because she felt shame to discuss it. She felt uncomfortable to buy condoms at the drug store because she was directly seen by someone. She thought that her boyfriend should take more responsibility for contraceptives and she believed his choice for contraceptives. The important thing is that she perceived a low susceptibility to pregnancy. She said,

Generally, my boyfriend respected my opinions. If I asked him to use a condom, he would be likely to use it, but I rarely put forward my request to him because I thought that the possibility of pregnancy was minimal by using the rhythm method and ejaculating outside. Also, I didn’t have pregnant for a long time.

At first, she felt that premarital sexual activity was not good at the beginning, but after having her first sexual experience she could not control herself to stop it. She never thought about losing her virginity nor worried about the influence on her marriage in the future because she trusted her boyfriend and believed that they would get married. However, she was strongly worried that someone who would blame her and look down on her (when she mentioned about her worry, tears fell down from her eyes when saying this) would discover her pregnancy.

I knew that sexual behavior and premarital pregnancy were not good. But, if my parents were around me, I would not do this. (Tears fell down from her eyes again). He treated me very well and cared for me very much.

The reason for her pregnancy this time is the same as the last time: her boyfriend didn’t use the withdrawal method well, so he ejaculated some sperms.
inside. But she didn’t know how to deal with this situation except waiting for her period to come. During the waiting time, she was very depressed and nervous. She didn’t know about induced abortion at all. She felt helpless and also worried that doctor would look down on her and treat her badly, so she asked her girlfriend to accompany her to hospital. Actually, previous surgical abortion didn’t cause her any physical suffering only caused a little bleeding but the surgical process was uncomfortable. She still however, suffered some psychological stress that lasted 2-3 weeks. She regretted her behavior of not using condom. However, after having abortion, they insisted on using condoms for 3-4 months, but did not use it every time because they still like to use withdrawal and she believe her boyfriend’s decision. She said:

Sometimes, he still ejaculated outside and he still believed it was effective. He said that ‘last time, I didn’t use it well, this is just occasional failure, I will do it well next time’, but he failed again… we didn’t think too much about my becoming pregnant during having sex. Only after that, we remembered whether or not it would lead to pregnancy.

This time, she came to the hospital alone. She had already learned some things about induced abortion. She did not felt as helpless as before, but she was still nervous and feared some problem such as, she was afraid of surgical pain and she worried about her health and that her fertility in the future would be influenced by induced abortion. She said: “It’s impossible to face all of this easily. Especially, now that my boyfriend is not here recently (burst into crying again).”

When she was asked whether she got some advice from doctors after having surgical abortion last time, she said: “The doctor did not tell me anything except prescribing some antibiotic medicines and other medicines to reduced bleeding.”
She thought the prevalence of knowledge about contraception in China was not enough. People like to talk about erotic jokes in public places, but they are reluctant to talk about related knowledge. She felt that she had only a little knowledge about it and her boyfriend’s knowledge about it was no more than her.

I didn’t feel that it would be difficult to buy contraceptives at drug stores and supermarkets. However, I always felt ignorant and lack the source of getting these knowledge about them. I don’t know what kind of method I should buy and which one is the best one. I felt that I would go to drugstore blindly and only could get some information from the directions after buying something. The salesclerk does not know about them more than us. One time, the salesclerk told my boyfriend: “the one is most expensive, the one is the best.

She hoped that she could get some information from some special brochure at the hospitals or drug stores, or supermarkets, in which the basic knowledge about contraception, abortion etc. could be found.

Case Eight

A 23-year-old sales supervisor with a university education was going to have her second abortion due to a different boyfriend. Her gestation was 45 days. She grew up in a family in which her parents were separated. She only met her mother once a week.

She made love with her first boyfriend at aged 19, two years after she met him. At the first time of intercourse, she didn’t use any contraceptive. But several months later, they became aware that it was possible to get pregnant without contraceptives, so, she asked her boyfriend to buy condoms because he knew which size would be suitable to him, but they only used them sometimes because her boyfriend dislike
them. She said:

He felt uncomfortable to use it, but I didn’t feel any discomfort. Of course, I hoped he would use them every time because it is safe and it can prevent AIDS. However, men always ask women to follow their words. That is why I got pregnant when I was 21 years old.

Six months after she broke up with her first boyfriend, she met her second boyfriend by chance. He was a 28-year-old irritable and stubborn person with a strong desire to possess. She didn’t want to have sex with him because she suffered heavily from her first experience of abortion. She said:

I knew it was possible to get pregnant if I had sex with him. One day, after I quarrel with him, he coerced me to have sex without any contraceptives at that time. I said, “no, you can’t do that”, but it didn’t work. I felt that he just wanted to possess my body, but not for love. Then I took the ECP within 48 hours, but I don’t know why I still got pregnant.

With respect to premarital sexual activity and pregnancy, she thought she could accept it because nowadays, the rhythm of life was so rapid and marriage required responsibility. A couple could love each other for a long time without marriage. She said:

If a couple loves each other, they can live together. No one requires that they have to marry. This is just a difference of lifestyle, so it’s unnecessary to criticise an other’s lifestyle. However, it is important that people must use contraceptives during their sexual activity.

When she was asked about the feeling of her previous abortion, and whether she got some suggestion from the doctors, she said:

I experienced fear and anxiety and didn’t know how to deal with it because I was too young to accept it. The doctor was very busy. She just diagnosed the factor of my gestation and asked me which abortion I wanted to have. After abortion was finished, I did not have any question to the doctor because I worried that doctor would look down on me and someone would find out this, so I left the hospital quickly. I felt as if I were relieved of a heavy load, anyway, every thing is ok.
were relieved of a heavy load, anyway, every thing is ok.

She thought that this experience would affect her contraceptive behavior in the future. Also, she didn’t think that she had enough knowledge about contraceptives and abortion because there was still conservation idea about sex and people didn’t talk about this issue like a political issue in the current society. She thought that it was necessary for university students to get some sex education, but not for high school student because it is too early to them.

In addition, she didn’t think that family planning service was as good as she expected. She thought that contraceptives should be free of charge or they could be got from vending machines everywhere like “Coca Cola”. She said: “If there was a vending machine, I would like to try it. I don’t care what people think about it while I buy it. I just care about the machine that will “eat” my money without providing contraceptives.”

4.6.1 Summary of Case Study

The average age of eight cases in in-depth interview is 21 while five have an education level of high school or vocational school accounted for five –eighths and the remaining three have an education of university or college level. Their occupations are secretary (three cases), student (two cases), and employee in company (one case), art designer (one case) and unemployed (one case). The majority of them are the only child of their family and they live with their parents or relatives, only two of them stay with their boyfriends and only one case come from a family in which the parents have been separated. All of them have regular boyfriends and for most of
abortion.

As Table 4.25 shows, it was found that most of them were aged 20 or less when they experienced their first sexual activity. Five of the eight cases started to have sex with their boyfriends within 6 months after they met their boyfriends. All of them voluntarily had their first sex and their attitude toward premarital sex and pregnancy was positive. The majority (three-fourths) of them did not use any contraceptive, and only case two and case four had prepared condoms for their first sexual activity. Three of eight cases (case two, case seven and case eight) experienced their sexual relationship for more than two years, whereas case three, case four and case five experienced these less than half a year. The results show that five of eight cases did not use contraceptives prior to their current pregnancy and the rest of them experienced contraceptive failure. From the history of contraceptive use, only one case (case three) never used any contraceptive, two of the cases used contraceptives occasionally, most of cases used less effective methods or counted the rhythm method incorrectly. In addition, only case seven and case eight were second pregnancies. The gestation of seven cases was not too long and all cases except one was within 50 days. Regarding intention of contraceptive use, half of them reported that they will use contraceptives, another three cases decided to stop sexual activity and only case one did not give an opinion.
Table 4.25 Sexual Behavior and CUB and Experience of Abortion for Eight Cases

<table>
<thead>
<tr>
<th>Item</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C7</th>
<th>C8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Sex</strong></td>
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<td></td>
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<td></td>
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<tr>
<td>Age</td>
<td>18</td>
<td>20</td>
<td>23</td>
<td>18</td>
<td>20</td>
<td>21</td>
<td>20</td>
<td>19</td>
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<tr>
<td>Duration between dating boyfriend and having first sex</td>
<td>4M</td>
<td>4M</td>
<td>12M</td>
<td>6M</td>
<td>12M</td>
<td>12M</td>
<td>6M</td>
<td>6M</td>
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<tr>
<td>Voluntary</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Contraceptive use at first intercourse</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td><strong>Duration of having sex history</strong></td>
<td>18M</td>
<td>24M</td>
<td>1M</td>
<td>5M</td>
<td>4M</td>
<td>12M</td>
<td>24M</td>
<td>48M</td>
</tr>
<tr>
<td><strong>Attitude toward to premarital sex and pregnancy</strong></td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td><strong>Contraceptives use prior to current pregnancy</strong></td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td><strong>Previous Experience</strong></td>
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<td></td>
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<tr>
<td><strong>Pregnancy</strong></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Frequency of contraceptives use</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>Sec.</td>
<td>Sec.</td>
</tr>
<tr>
<td><strong>Gestation prior to Current pregnancy</strong></td>
<td>80D</td>
<td>50D</td>
<td>45D</td>
<td>44D</td>
<td>45D</td>
<td>39D</td>
<td>49D</td>
<td>42D</td>
</tr>
<tr>
<td><strong>Intention of contraceptive use</strong></td>
<td>NA</td>
<td>S</td>
<td>Y</td>
<td>Y</td>
<td>S</td>
<td>Y</td>
<td>Y</td>
<td>S</td>
</tr>
</tbody>
</table>

**Note:**
- Y = yes; M = month; P = positive; N = no;
- O = occasional; E = every time; Mos. = most time; F = first time
- Sec. = second time; D = day; NA = no answer; S = stop sex;

The reasons of current pregnancy for the eight cases are presented in Table 4.26.
the same which is no contraceptives use. Condom's breakage is the reason of case four and case five counted the rhythm method incorrectly, whereas, case six and case seven are the result of their boyfriends not using withdrawal well which allowed some sperm inside. The results reveal that only case four used a most effective method for preventing pregnancy.

Table 4.26 The Reason of Current Pregnancy of Eight Cases

<table>
<thead>
<tr>
<th>Item</th>
<th>C 1</th>
<th>C 2</th>
<th>C 3</th>
<th>C 4</th>
<th>C 5</th>
<th>C 6</th>
<th>C 7</th>
<th>C 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom broke</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Didn’t use Withdraw well</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Incorrectly count Rhythm</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
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<td></td>
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<tr>
<td>No contraceptives use</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Squeezing sperm out of vagina</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the case study, it was found that each case has different characteristics:

Case one is a young girl aged 19, naive and lacking knowledge about pregnancy, contraception and outcome of induced abortion. However, she expressed very liberal thought about premarital sexual activity and pregnancy. She had frequent sexual activity with her boy friend, but she had a very low perception of susceptibility to pregnancy and lacked the responsibility to use a contraceptive and perceived more barriers to access contraceptive service. Also, she rarely communicated with her boyfriend, peers and her parents about contraceptive issues.

Case two displays a liberal attitude toward premarital sexual relationships and pregnancy, but she lacked the proper knowledge about pregnancy. She gave up the
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continuous use of condoms because she believed in her own method of preventing pregnancy and had low perception of susceptibility to pregnancy and severity of complications of induced abortion. Her boyfriend has strongly negative attitudes toward condoms, the pill and IUD, and disapproved of the use of these most effective contraceptive methods. The respondent seemed to lack bargaining power with him, even though she did not perceive the availability of contraceptive service to be difficult. In addition, she is strongly against the doctors' attitude of looking down on unmarried pregnant women. Furthermore, her case highlights the phenomenon in current Chinese society that many middle-aged people are still against the distribution of condoms in public places.

Case three has a university education level, but she does not display a high level of knowledge about pregnancy, contraception and induced abortion, as we would expect. Not only does she have limited knowledge about pregnancy, contraception and induced abortion, but she also misunderstood the knowledge that she had already learned. Therefore, she has lower perceived susceptibility to pregnancy and she has never used contraceptives and doesn't worry about the consequence of pregnancy. In addition, she has very liberal and practical ideas to explain her premarital sexual behavior and pregnancy.

Case four is the youngest in this study and started sexual activity early. She has a strong awareness of preventing pregnancy and she has fair knowledge about contraceptives, but she didn't understand how pregnancy actually occurs, so, she didn't take any measure to protect against contraceptive failure. Also, she perceived a psychological barrier to access contraceptive service, but her boyfriend could have taken the responsibility to buy contraceptives. In addition, she reported that
premarital sex activity is a common phenomenon among certain young people.

With respect to Case five, it seems that her boyfriend had more knowledge about contraceptives than she had and took more responsibility for contraceptive use. She depended on her boyfriend to count the safe period of the month for her by using an incorrect method. Also, she lacked deep communication with parents about contraceptives and she disagreed that premarital pregnancy should be looked down upon by other people, especially by doctors.

Case six reveals that her consciousness of preventing pregnancy is strong and she used a contraceptive method every time. But, she chose less effective methods, “withdrawal” or “the rhythm method”, most of the time and it appears that she abused ECP. She did not have adequate knowledge about how to correctly use contraceptives. Also, she thinks that men have more power than women during sexual activity, therefore she would rather sacrifice her health than make her boyfriend feel uncomfortable during their intercourse. In addition, she felt that premarital sexual behavior not only could be accepted, but also that it would bring some benefit by promoting her relationship with her boyfriend.

Case seven had one previous experience of surgical abortion. However, she gradually forgot her suffering from surgical abortion. After insisting on using condoms for a short time, she believed and followed her boyfriend’s decision to continually use withdrawal, the failure of which had led to her first pregnancy. Both of them had low consciousness of preventing repeat pregnancy, and had negative attitudes toward condoms, and didn’t know about other contraceptives, such as ECP. She rarely took responsibility to use a contraceptive and lacked contraceptive decision-making. She failed to make decisions about contraceptive use, and relied on
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her boyfriend instead. She has a liberal attitude toward premarital sexual activity, but she also perceives strong social stigma and psychological stress concerning her premarital pregnancy. She stated that there is no post abortion counselling at the hospital.

Case eight started her first sexual experience relatively early and her family background may have had some influence on her early sexual behavior. She experienced her first abortion because they sometimes didn’t use condoms. As for the second pregnancy, her experience reveals that gender inequality exists in current society because she experienced sexual coercion. She thinks that premarital sex could be accepted, but that attention should be paid to contraceptives for preventing pregnancy and condoms should be available everywhere like “Coca Cola”.

Overall, the case study reveals that every case has a positive attitude toward premarital sexual relationship and premarital pregnancy. But most of cases lack adequate knowledge about pregnancy, contraceptives and induced abortion. Perceived low susceptibility to pregnancy is an important reason for non-use of contraceptives or for using less effective contraceptives. Some of the cases lacked responsibility for contraceptive use and were strongly dependent on their boyfriends’ decision. Also, only a few of the cases discussed the contraceptive issue with their boyfriends or peers or parents. In addition, the two cases that had experienced previous abortion reported that they did not get some suggestion from doctors after having an abortion. In addition, all of the cases are eager to learn some knowledge about human sexuality.
CHAPTER V

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1. Discussion and Conclusion

In China, premarital pregnancy and abortion have attained high public visibility. Various research and intervention programs on young people's sexual behavior and reproductive health have been conducted and have achieved remarkable outcomes. However, over the past ten years, the rate of induced abortion among unmarried young women has not declined. It is necessary for us to carefully reconsider the strategies and programs that have been carried out to determine if the strategies and program should be improved or if new contents should be added. Although the results of this survey cannot be generalized to the contraceptive behavior among never-married young women in Beijing as a whole, the combination of quantitative and qualitative approaches used in this study has provided an assessment of the reasons for premarital pregnancy among this population. Also, the major findings of this study would likely contribute to some strategies for reducing the rate of induced abortion and promoting young people's reproductive health.

5.1.1 The Situation of Contraceptive Behavior

The Rate of Contraceptive Use

According to the results of this study, the utilization of contraceptives among the respondents during the past 12 months was very low. For example, only one-eighth (13%) of the respondents insisted on contraceptive use every time and one third used
contraceptives most of the time. On the other hand, almost an equal proportion (one fourth) of the respondents never used or occasionally used contraceptives. The results are similar to some other findings in Sub-Saharan Africa, where the current contraceptive use rates among adolescents ranged from 10 percent in Namibia, Ghana, and Senegal to 23 percent in Cameroon (Annk, B., 1998). Comparing the results of the current study with the results from Paul Sachdew's study, it is found that the usage rate (34.3%) among unmarried young women in the U.S.A is higher than that in China. In terms of contraceptive use prior to current pregnancy, the results of this study show that the rate of contraceptive use is 31 percent, a higher utilization than the finding (7.4%) from Luo lin's study in Sichuan Province, China in 1991. The increasing use of contraception may be an outcome of the mass media education of the Family Planning program and the greater availability of contraceptives in current years. This increase, however, is small and is not sufficient to protect young women from the risk of premarital pregnancy.

The Type of Contraceptive Method

While infrequent use of a contraceptive method can expose a woman to the risk of pregnancy, the type of method used may further intensify the risk. The findings of this study reveal that a total of 224 women had used a contraceptive method during the past 12 months. The methods used as first choice are condom (49%), withdrawal (27.7%) and the rhythm method (15.6%) respectively. The proportion of women who used the less effective methods, withdrawal and the rhythm method combined, is nearly the same as those who used the most effective method, condom. Meanwhile, after analysing the reasons for contraceptive use...
failure prior to current pregnancy among 96 respondents, the findings reveal that half of them used the rhythm method and one-fourth used withdrawal. The qualitative information from case seven also demonstrated the serious consequence of using less effective methods because she had experienced induced abortion twice within six months as a result of the failure of the withdrawal method.

As found in many previous studies, the use of less effective methods, such as the rhythm method and withdrawal result in a high risk of contraceptive failure. The reason for the use of these methods may be that they are considered to be natural, traditional, simple and convenient methods. However, failure in using the rhythm method is associated with erroneous calculation of the safe period of the month; the case study data finds that three cases who have used the rhythm method erroneously counted their safe period of the month by using "Qianqi Hou Ba".

Interestingly, this study finds that a majority (76.7%) of the respondents rely on the use of condom and withdrawal, for which the male partner is responsible. These findings are in line with Paul Sachdev’s study in the U.S.A(1993) and Li AL.’s study in China (1997). A possible explanation for this situation may be as follows: (1) condoms and withdrawal are easy and simple methods, (2) condoms are relatively more available in Beijing, (3) lack of knowledge about other methods.

In addition, one surprising phenomenon found in this study is that the use of the pill was extremely low (less than 5%), even though about 92 percent of respondents had heard of the pill. A possible explanation is that the highly publicized side effects associated with the use of the pill are responsible for its low use.
The Reason for Non-Use of Contraceptives

With regards to the reasons for non-use of contraceptives, in the study by Berganza (1989), the most common explanations for non-use were lack of knowledge, difficulties in procuring contraceptives, ambivalence, and the fear of discussing sexual matters with adults. Nevertheless, the availability of and objective access to contraceptives generally does not seem to be the primary problem in Beijing. In this study, about one-quarter (26.8%) of the respondents, those who had never used a contraceptive, were presented with 14 statements that described various reasons and were asked to check one or more reasons which applied to their cases. One of the most important reasons, cited by about three-fourths of the respondents, is that they did not think that sex would lead to pregnancy at that time. Although this reason was found in other studies by Paul S. (1993) and Vu Ngoc Bao (1997), but it was not the most important reason in their studies. Possible elaborations on this reason can be presented as the following: (1) Their desire for sexual enjoyment superseded their concern for an unplanned pregnancy, and they presented themselves as pleasure oriented and believed in carefree, erotic experiences. (2) They did not perceive the risk of pregnancy. (3) They expressed the conviction, "it won't happen to me." (4) They think that occasionally having sex does not matter. (5) They trusted their luck and were convinced that the mere denial of the possible occurrence of pregnancy would ward off the consequences of unprotected sex.

Worrying about the side effects of the pill is also an important reason for not using contraception, a result which is in agreement with the studies in other countries (Paul S., 1993, Anastasia J., 1998). However, the pill is one of the safest
contraceptive methods for adolescents. Amy E. Poilance, in the article "Teen Contraception in the 1990s", pointed out that following an extensive data review by the Food and Drug Administration, American College of Obstetrics and Gynaecology, WHO, Committee on the Safety of Medicines in the United Kingdom and International Planned Parenthood Federation in May 1989, the FDA released information concluding that physicians should continue to prescribe oral contraception (OCs) for adolescents. Actually, there are many benefits of OCs use for young women. For example, oral contraception protects against ovarian cancer, endometrial cancer, salpingitis, ectopic pregnancy, benign breast disease, functional ovarian cysts, dysmenorrhea and iron deficiency anemia. Also, in Cadprenter's study (1986), it was shown that adolescents using low dose pill showed weight changes similar to nonusers over a one-year period.

Other important reasons for non-use of contraceptives include other statements such as "having sex was unplanned", "boyfriend disapproves of contraceptive use", and "using contraceptives is troublesome." These reasons have been found in previous studies, whereas, another reason cited in this study, "it is shameful to get contraceptives," is different from the studies in America or in the studies related to married women. In this study, however, both the quantitative and qualitative survey reveal that this reason is a psychological barrier to using contraceptives among unmarried young women because premarital sexual activity is not accepted by the current society, which views contraceptive use as socially acceptable only for married people. Thus, unmarried women do not want others to know that they have had or they are going to engage in sexual activity.

In summary, the situation of contraceptive use among the respondents is poor.
Most of them prefer to use less effective contraceptive methods, and they use contraceptives only on an irregular basis, whereas, the most effective method, the pill, is ignored. These phenomena could bring about the problem of unwanted pregnancy for unmarried young women and therefore, the results suggest that special attention should be directed toward improving the utilisation of contraceptives among never-married young women.

5.1.2 Factors Affecting Contraceptive Use Behavior

The results of the multiple logistic regression analysis reveal that the following five variables are significant indicators of contraceptive use: knowledge about contraceptives, boyfriend's approval of contraceptive use, perceived susceptibility to pregnancy, perceived availability of contraceptive service, and discussion with boyfriend. Of these variables, knowledge about contraceptives, perceived susceptibility to pregnancy and boyfriend’s approval are the most important determinants. According to the results, a young woman who has low knowledge about contraceptives, perceives low susceptibility to pregnancy, does not have her boyfriend’s approval of contraceptive use, perceives the availability of contraceptive service to be difficulty, or does not discuss contraceptives with her boyfriend is less likely to use a contraceptive method. Also, the qualitative results strongly support these findings.

(1) Knowledge about Contraceptives

China has had an effective, nation wide Family Planning Campaign since the 1970s and there is now a widespread service delivery net work throughout the
country. Therefore, the name of contraceptives are widely known among Chinese people. This study also finds that the overwhelming majority of respondents have ever heard about condoms and oral contraceptives (OCs). However, the proportion of the young women who know how to correctly use condoms and OCs is low (31.4% and 10% respectively). Regarding the emergency contraceptive pill (ECP), about two-fifths of the respondents have heard about it and those who know how to use the emergency pill account for less than one fourth of the respondents.

Some portions of both the quantitative and qualitative studies explain why the situation of the respondents' knowledge about contraceptives is not favourable. (1) Unmarried young people can not get this kind of information from formal textbooks at the schools or universities. In other words, they are not educated regularly before marriage because the course offered at the premarital sexual education school in several medical institutes appointed by the government of Beijing, is only open to persons who are preparing for marriage. (2) According to Chinese traditional sexual culture, sexual expression should be suppressed. Even though Chinese people's attitudes and ideas about sex have gradually changed along with opening up of the country, people still can not publicly discuss sexual issues. The social norm does not accept that unmarried women engage in sexual activity and the virginity of women is still highly valued in Chinese society. Thus, parents feel ashamed or shy to discuss contraceptive issues with their children and young women themselves also feel shy to discuss this with their girl friends. Most of the respondents have discussed this issue only with their boyfriends and have received limited information from them. Often, the information from boyfriends is not correct. For example, some respondents said that their boyfriends counted their safe period for the rhythm method by using " Qian
Qi Hou Ba” (an incorrect calculation) which is a common phenomenon among young people who use this technique to calculate the rhythm. The results of this study indicated that 32 respondents became pregnant because they incorrectly calculated the safe period for the rhythm method.

Also, respondents mentioned that they had heard the name of some contraceptives, but they did not know which one was the best method for them. As case seven said: “the salesclerk at the drug store told me that the one which is most expensive, the one is the best.” Lack of knowledge regarding the suitability of contraceptive methods is one of the reasons for not using contraceptives among some of the young women.

Knowledge of ECP is crucial, since women must first know that they can prevent pregnancy after intercourse in order to seek out treatment. The ECP is most extensively used in Europe, while it is still a new method in other countries, including the United States. In China, it has been gradually researched, disseminated and utilized in more than 20 cities since 1995. Beijing was the first city to offer this service without prescription in the Family Planning clinics and drug stores (Wu SM 1994). However, the dissemination of knowledge about ECP is still weak, including a lack of detailed consultation from the provider and careless indications on the pill box.

The findings of this study reveal that the proportion of respondents who know about ECP is low. Case six and Case seven’s experience give us a warning that knowledge about ECP is not currently prevalent in Chinese society. Even though case six knew about ECP from the advertisement, which simply introduces some functions of the pill and gives instructions regarding how to use it, since she had never
consulted a health professional about the use of ECP, she uses it too frequently, possibly to the point of abusing it. These phenomena are similar to the findings of Xiao BL.’s study in 1999. In her study, some unmarried young women did not go to the clinics to get ECP because of their shyness, they bought ECP at drug stores instead. They failed to use the pill correctly and had to have an abortion. In addition, other young women regard ECP as a regular pill and take it every time or most of the time after having sex. However, taking ECP frequently is very harmful for a young women’s health because of the dose of ECP is much higher than the regular pill and it could cause disorders in the menstrual cycle, haemorrhage and prolonged bleeding if taken too often or for a prolonged time.

From all of the above findings and discussions, it is concluded that: (1) Knowledge about contraceptives and utilization of contraceptives among never-married young women is still poor; (2) Misunderstanding about contraceptives is a common issue; (3) The sources of information about contraceptives are limited; (4) contraceptive services for young women and men have remained out side the formal realm of family planning programs in China.

(2) Low Perceived Susceptibility to Pregnancy

In the previous studies, perception of pregnancy risk was one of the factors associated with non-use of contraceptives. A study by Reschovsky and Gemen’s (1991) examined the contraceptive choices made by 673 sexually active teenage women and noted that the perception of pregnancy risk was a predictor of contraceptive use. This study finds that only one-fourth of the respondents perceive themselves to be highly susceptible to pregnancy. Furthermore, the logistic regression
analysis confirms that perceived susceptibility to pregnancy is one of the important indicators of respondents’ contraceptive use behavior. The analysis indicates that respondents who perceive a high susceptibility to pregnancy are forty two times more likely to use contraceptives than those with a low perceived susceptibility to pregnancy. Meanwhile, the relationship between the level of education and perception of susceptibility to pregnancy shows that, young women who have a high level of education also perceive themselves to be highly susceptible to pregnancy. In sum, the results support the hypothesis of this study.

According to the Health Belief Model, people who perceive higher susceptibility are more likely to take preventive behavior. If a woman does not perceive susceptibility to unwanted pregnancy, she may not use a contraceptive. As Case three, who is a student at the university, said: “We just heard about some contraception, but we didn’t really care about it. We didn’t think that it was necessary to use it because I won’t easily get pregnant.” And Case two said: “I didn’t use contraceptives for a long time and didn’t become pregnant, thus, we though that one of us may suffer from some fertility disorder, so it is unnecessary for us to use any method”. Also, Case one stated: “Fear of pregnancy was on my mind once in a while, but I was not really worried about it and didn’t think about which method I should use.” In addition, a sizeable proportion of women in our sample cite “I did not think about getting pregnant when I engaged in sexual activity” as their reason for not using contraceptives.

At this point, it can be said that some young women who have a low perception of susceptibility to unwanted pregnancy might neglect the use of contraceptives, even though they have a high level of education or knowledge about contraception and
pregnancy. Therefore, strengthening young women’s perception about pregnancy risk should be included in the curriculum of sex education.

(3) Boyfriend’s Influence on the Contraceptive Use Behavior (CUB)

Boyfriend’s influence on the contraceptive use was measured by three variables. This study reveals that the variable boyfriend’s approval of contraceptive use is the strongest indicator of CUB and discussion of contraceptives with boyfriend is also an indicator of CUB. These results are suitable for the theoretical model and supports the hypotheses of this study. Furthermore, one of four more important reasons for not using contraceptives is that the respondents’ boyfriends do not approve of contraceptive use. Some other studies have also shown that encouragement from the male partner is a strong contributor to effective contraceptive use among young women (Serold and Goodwin 1980, Thompson 1978). One plausible explanation is that sexual politics (women as a social group are dominated by men as another social group) still exist, which means men are considered as the center and have the priority of decision making in contemporary Chinese society and family. Even though women’s social status has been improved and nowadays, especially, young women and men are more equal than ever before, double standards, men’s passive participation in Family Planning programs and reluctance to use condoms still exist. As case six indicates: “he felt very uncomfortable to wear a condom and threw it away, at that time, I could not say anything and I did not want to make him too uncomfortable....” This influence of sexual politics can not be eliminated in a short time because it is rooted in the legacy of the feudalistic Confucian dogma that has dominated China for thousands of years. Fortunately, the proportion of respondents
whose boyfriends disapprove of using contraceptives is not high in this study. In another words, most of the respondents’ boyfriends agree to use contraceptives.

The other variable, relationship with boyfriend, has not been entered into the logistic equation model. There might be an interaction among these three variables but boyfriend’s approval of contraceptives is the strongest variable. However, it is obvious that the proportion of contraceptive use among respondents who have a stable relationship with their boyfriends is higher than that of respondents who have an unstable relationship. This result is similar to many studies in other countries (Slonim-Nevo, 1988, David J. 1993, Daniele B. 1998). It can be explained as follows: first, with a lasting romantic relationship, the communication between sexual partners progressively improves and becomes more open on sexual and contraceptive matters (Catania et al. 1992). Second, deep involvement also fosters mutual planning and the boyfriend’s consideration to assume responsibility in avoiding premarital pregnancy either by using a contraceptive himself, or encouraging his partner to use one. Third, in a stable relationship a woman’s bargaining position is improved; her boyfriend is less likely to ignore her request to assume contraceptive responsibility because he is emotionally involved. In a casual relationship the man may not feel obligated to avoid pregnancy, and therefore may ignore the woman’s request to practice contraception. Also, both young men and women feel uncomfortable discussing contraceptives when they are in a casual relationship (David J 1993).

In addition, the in-depth interview of Case eight reveals that sexual coercion exists in Chinese society and it might be related to unwanted pregnancy. This case reminds us that we should not ignore this issue when we explore the reasons for unwanted pregnancy.
It can be concluded that boyfriend's disapproval of contraceptive use as well as discussion about contraceptives with the boyfriend and the relationship with the boyfriend are important influences on the contraceptive use behavior of young women even though the proportion of respondents whose boyfriends disapproved of contraceptive use is not high in this study. Furthermore, the phenomenon of sexual coercion might leading to neglect of using contraception should not be ignored in sex education curricula.

(4) Knowledge about Pregnancy

Although the research hypotheses that respondents with a lower level of knowledge about pregnancy are less likely to use contraceptives is not accepted in this study because the logistic regression analysis does not show statistical significance, the quantitative results show that most of the young women have a fair knowledge about pregnancy, but some of them (about 30%) still lack of a basic knowledge about the conditions leading to pregnancy. For example, they think that pregnancy could occur, even if a woman never has a menstruation cycle. Although most of the young women (84.3%) knew that if the sperm does not meet the egg after having intercourse, getting pregnant would be impossible, they do not really understand the details of conception.

Also, the survey finding reveals that a misunderstanding of pregnancy is another phenomenon among some of the young women. The example from case three shows that she conceptualized pregnancy as a complicated process in which some conditions have to be prepared in advance. At the very least, there should be some psychological preparation for the couple who wants to have a baby.
In addition, the findings from the case study reveal that respondents receive little knowledge about pregnancy from the school or university. This is in line with other studies in China (Zheng XY., 1997, Li AL. 1998). The situation of some young women who do not have adequate knowledge about pregnancy could be explained as follows:

In China, students in junior high school are educated only by the textbook “Physiology and Hygiene”, which includes superficial knowledge about sexuality, such as reproductive organs, some normal phenomena of the development of the reproductive organs and menstrual health care, as well as a basic explanation of reproduction. However, it is a common phenomenon that some teachers do not explain these contents and instruct the students to read this textbook by themselves because the teachers feel shy to explain this subject matter. Also, students themselves feel shy to read this book or to ask the teacher questions regarding sexuality or discuss sexuality with classmates. Nowadays, the sex education among adolescents in China is still in an initial stage.

Since 1984, Beijing, Shanghai and other cities have conducted a series of experimental studies which focus on how to practice adolescent education in school and explore alternative methods to implement sex education in China. In practice, however, the school oriented adolescent sex education programs are still restricted in this dynamic and changing society, (Zhang KL., 1997) and there are still some problems in its developmental process, such as lack of teachers and reference books for the teachers. Until now, there is no set of guidelines and no series of teaching materials and instruments for sex education which are applicable to students at
varying stages of age development (Chen JQ. 1996). Therefore, the major sources for accumulating related knowledge consist of various books outside of the school.

Therefore, knowledge about pregnancy among young people is limited and superficial. It is an urgent agenda to explore and develop an appropriate, moderate and suitable sex education curriculum in China.

(5) Responsibility for Contraceptive Use

The findings show that poor responsibility for contraceptive use is also a factor affecting women’s CUB. The quantitative study indicates that in the group of respondents who never used contraceptives, most of the respondents (75%) did not discuss contraceptives with boyfriends which is nearly three times of the number of the respondents who discuss contraceptives with boyfriends (19%). Also, the case studies show that most young women rarely discuss contraceptives with boyfriends, or request their boyfriends to use condoms. For instance, some of the respondents completely depend on their boyfriends’ attitude to determine whether they will use a contraceptive. If their boyfriends do not buy condoms or pills, some respondents do not use a contraceptive. Even though they do not remember their safe period for the rhythm method, some respondents rely on their boyfriends to count the safe period for them, or trust in their boyfriends’ choice of contraceptives. One possible explanation is that some respondents think that men should take more responsibility for contraceptive use than women because condoms are used by men who know what size condoms is suitable to them or what kind of condom they prefer. Also, they feel that a man who buys condoms is more easily accepted by the society than a woman because double-standard still exists in present society, and women always feel more
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shy to buy contraceptives than men. Furthermore, they think that their boyfriends are older than they are and have more knowledge about contraceptives than women, so they trust what their boyfriends say and follow their recommendations without hesitation.

David J., who conducted focus group discussions with 76 sexually experienced young men and women in 1993 to explore the reasons unmarried men do or do not involve themselves in contraceptive practice, reported that the woman's initiative often determined whether or not condoms or any contraceptive was used because some men had condoms available but would use them only if they had to. As the in-depth interview study finds, some of the cases report that if they ask their boyfriends to use a condom, their boyfriends will use it. However, they lack the initiative to demand their boyfriend use condoms.

Therefore, empowerment of women and enhancing women's own consciousness regarding the negotiation of contraceptive use with their boyfriends in order to protect themselves from a risk situation or risky sexual behavior should not be ignored in sex education.

(6) Perceived availability of Contraceptive Service

The research hypothesis based on the association between women's CUB and perceived availability of contraceptive service is accepted in this study. Logistical regression analysis shows that those women who perceived difficulty in obtaining contraceptive service are less likely to use contraceptives. The plausible reason may be association with availability of contraceptive service in Beijing. Although family planning programs were started in the 1970s, various safe, effective and convenient
contraceptives are only easily accessible and available without charge to married couples. Therefore, most hospitals in Beijing do not provide condoms, whereas, drug stores and supper markets do not provide the necessary variety of contraceptives in order to meet the clients' needs. Another reason may relate to young woman's knowledge about contraceptives. For example, case seven reported that she wants to buy some contraceptives, but she does not know which contraceptive method is the best one.

(7) Previous Experience of Induced Abortion

In the sample of this study, it is found some of the young women who have experienced induced abortion, however, the situation of contraceptive use among these women is not good. Although some of them regret that they did not use contraception following their first abortion and they are concerned about avoiding another pregnancy, only half of them use the most effective contraception methods and some still relied on less effective methods or irregular use of contraceptives during the past 12 months. The reason for the current pregnancy is associated with the fact that most respondents (59.5%) do not use of contraceptives.

The possible explanations are presented below: (1) The evidence from this study shows that the women in the study perceive lower severity of complications of induced abortion, especially for repeat abortions. Because the quality of induced abortion service in Beijing is quite good, and the rate of short-term complications, such as prolong bleeding, is low in this study. (For example, two cases in the case study portion who had the experience of abortion report that they did not have symptoms after the previous abortion). (2) Although they undergo an experience of
abortion, they do not obtain knowledge about long-term complications, such as infertility, miscarriage, and placenta retaining during delivery in the future. Especially, they know little about medical abortion and think it is a simple method, because they do not receive information about the risk of complications of induced abortion, especially for repeat abortion, from doctors or books, after having an induced abortion. (3) These women may forget their suffering from the previous abortion after a period time, as Case seven exemplifies. Therefore, it is suggested that the development of post abortion counselling, and dissemination of information about the risk of complications of induced abortion are necessary and urgent.

5.1.3 Uncertain Factors Associated with Contraceptive Use Behavior

In this study, it is revealed that some of the variables represented psycho-social factors do not make a significant contribution to respondents' CUB, such as knowledge about induced abortion, attitude toward contraceptive use and premarital pregnancy, belief in folk methods, motivation for having sex, perceived barriers of accessibility to contraceptive service, and discussion of contraceptives with peers and parents.

(1) Knowledge about and Perceived Severity of Complications of Induced Abortion

The research hypothesis of association between knowledge about and perceived severity of complications of induced abortion (surgical and medical abortion) and CUB are not accepted. The result shows that respondents who have a poor knowledge about induced abortion and have a low perception of the severity of
induced abortion use contraceptives less, but the difference is not statistically significant. The possible explanation is that these two variables are not sensitive indicators for predicting CUB, because a significant correlation between knowledge about contraceptives and knowledge about induced abortion or perceived severity of induced abortion may exit. Therefore, after using logistical analysis and controlling the variable-knowledge about contraceptives, there is not a significant relationship between knowledge about and perceived severity of complications of induced abortion and CUB. In addition, knowledge about induced abortion is measured by asking respondents whether they have ever heard about induced abortion. This question may be too simple to measure a person's knowledge because it is not a practical way of measuring one's knowledge. This is a defect of the questionnaire in this study.

(2) Attitude toward Premarital Pregnancy

In the research hypothesis, respondents who have relatively liberal attitudes toward premarital pregnancy are less likely to use contraceptives, but no evidence could be found to support this hypothesis. One plausible interpretation for this would be that respondents have a contradictory attitude toward premarital pregnancy. According to the results of the qualitative study, all of the eight cases have a liberal attitude toward premarital sexual relationships and some cases think that a premarital sexual relationship can promote their relationship with their boyfriends and that premarital pregnancy is inevitable according to their understanding. However, when they consider the social pressure, they think that either a premarital sexual relationship is not good, or that a premarital sexual relationship is acceptable, but
premarital pregnancy should be avoided. Therefore, it can be said that attitude toward premarital pregnancy is not a sensitive indicator in predicting women’s CUB.

(3) Attitude toward Contraceptives

In the research hypothesis, respondents with negative attitudes toward contraceptives are expected to use contraceptives less. The results show that respondents who have a negative attitude toward contraceptives do use contraceptives less, but the difference is not statistically significant according to logistical regression analysis. A likely interpretation for this would be that attitude toward contraceptives is not a sensitive indicator for predicting women’s CUB. However, the relationship between attitude toward a contraceptive method and contraceptive use has been obtained from previous studies (Gajanaayke, 1989, Vu Ngoc Bao, 1997). The reason for these differing results may be that the measurement of variables and statistical analysis methods vary from one study to another.

(4) Belief in Folk Methods

One research hypothesis was that respondents who believe in folk methods for avoiding pregnancy use effective contraceptives less. The results show that most respondents do not believe the folk methods listed in the table, because young women have never heard about these folk methods. This is due to the lack of resources for obtaining information about contraceptives, in regards to both modern contraceptives and folk methods, and limited communication with others. Thus, the hypothesis concerning the association between belief in folk methods and CUB is not accepted. However, the findings of this study show that the belief in folk method is a factor
partially affecting women’s CUB. For example, in the quantitative study, nearly forty percent of respondents believe that standing up-right or squatting to make the sperm fall down after having sex is an effective method to avoid pregnancy. As the Case two states: “After the condoms were used up, I occasionally found that the sperm could be squeezed out of the vagina and I didn’t get pregnant. Then after having sex, I always went to the bathroom and waited for the sperm to flow out automatically.” The belief in folk methods is associated with lack of proper knowledge about pregnancy, so it suggests that young women should be educated about the basic facts of human sexuality.

(5) Motivation for Having Sex

It is shown that over three-fourths of respondents cite that they engage in premarital sex because of their affection, while less than one tenth reported that their motivation was associated with non-affection, such as earning money, feeling lonely, and worrying that their boyfriend might abandon them. The hypothesis in this study is that the respondents who have a sexual relationship with their boyfriend because of their affection use contraceptives more often. However, the study does not find a statistically significant relationship between contraceptive use and motivation for having sex, so the hypothesis is not accepted. The possible interpretation is that motivation for having sex is a very sensitive issue. Some respondents will feel shy or worry about the interviewer’s attitude toward her premarital sexual behavior, so they do not reveal the real motivation to engage in sex. Due to the difficulty in obtaining accurate information about their motivation, the hypothesis can not be proven. Hence, motivation for having sex may not be an indictor for predicting women’s CUB.
(6) Perceived Barrier of Accessibility to Contraceptive Services

The research hypothesis based on the association between women’s CUB and perceived barriers of accessibility to contraceptive service is not accepted. As expected, women who perceived more barriers to accessing contraceptive services use contraceptives less. However, this is not significant in the final logistic regression model. The possible reasons are presented below: first, most respondents know where they can obtain contraceptives and they don’t feel that contraceptive services are unavailable in Beijing. If they want, they can easily obtain contraception. Second, although two-third of respondents have the perceived psychological barrier that buying contraceptives is shameful and they therefore would not wish to buy contraceptives, their boyfriends feel less of a psychological dilemma to buy contraceptives than they, and some respondents’ boyfriends prepare the condoms on their own initiative. Therefore, it is perceived barrier of accessibility to contraceptive services may not directly influence the respondents to use contraceptives.

(7) Discussion of Contraceptives with Peers or Parents

This study reveals that over half of the respondents discuss about contraceptives with peers while only less than ten percent of the respondents discuss with parents. This result is nearly the same as Daniele B.’s study (1998). The hypothesis that there is a positive association between women’s CUB and discussion about contraceptive use with peers or with parents is not accepted. Although respondents who can discuss contraceptives with peers or with parents use contraceptives more often, the difference is not statistically significant in the logistic regression analysis. The plausible explanation is that discussion about contraceptives with peer or with parent
5.1.4 Conclusion

In sum, there are five variables which significantly influence the women’s contraceptive use behavior. They are (1) Predisposing factors: perceived susceptibility to pregnancy, knowledge about contraceptives, (2) Enabling factor: perceived availability of contraceptive service, and (3) Reinforcing factors: boyfriend’s approval of contraceptive use and discussion about contraceptives with boyfriend. The qualitative results strongly support the quantitative results. Knowledge about contraceptives and perceived susceptibility to pregnancy are key variables which strongly influences women’s CUB. Also, boyfriends play an important role in women’s CUB. In addition, the qualitative study reveals that women’s responsibility about contraceptive use and doctors’ consulting on contraception and the risk of induced abortion are important factors influencing women’s CUB. However, some variables do not show a significant effect on women’s CUB.

In short, as discussed above, the results support the conceptual framework of this study by applying the combination of quantitative and qualitative research methods. Some of the predisposing, enabling and reinforcing factors in the modified Precede-Proceed Model are significant predictors of young women’ contraceptive use behavior as hypothesized. In addition, the variables, which have no effect on women’s contraceptive use behavior can be rationally explained by the findings from both the qualitative and quantitative studies.
5.2. Recommendations

Based on the research findings of both quantitative and qualitative study, as well as direct experience while conducting this survey, the following recommendations are proposed in order to improve young women’s contraceptive use behavior and reduce the rate of induced abortions among never-married young women in Beijing.

5.2.1 Development of Sexual Education for Young People

According to the research findings of this study and facing social reality, a comprehensive, effective and culturally sensitive sex education program for young people in Beijing should be developed and implemented in order to reduce premarital sexual activities and unsafe sex, as well as promote modern contraceptive use.

First, teachers at schools, especially at senior high schools, should recognise the importance of developing sex education program and teaching sex education to adolescents, and change their belief that exposing students to information about sex and contraception will encourage them to engage in sexual activity. Furthermore, teachers should follow new strategies to teach sex education to students in an effective way.

Second, including sexual morality education, students should be educated in promoting abstinence and the delay of early sex debut as well as how to protect themselves from unsafe sexual relationships. Not only should the contents of sex education include physical development at puberty, and how the reproductive system functions, but also basic knowledge of sexuality, such as how conception occurs, how contraception works, how to protect against STDs and unwanted pregnancy as well as
the risks of teenage pregnancy and induced abortion. The idea of providing condom at high schools should not be encouraged, but the information about how to access contraceptive services, how to get contraceptives and how to use them, especially for ECP, should be introduced to students. In case they have sexual behavior or encounter unsafe sex, they should know how to deal with it.

Third, the counselling of adolescents’ health should be opened to students at high school in order to communicate with individual students and answer specific problems in detail.

5.2.2 Enhancing Women’s Perceived Susceptibility to Pregnancy

It is evident from this study that contraceptives are available for most young women, but perceived low susceptibility to pregnancy is the more important factor affecting women’s CUB. Therefore, merely ensuring availability and accessibility to family planning services may not be enough to effectively prevent unwanted pregnancy. Interventions designed to promote the importance and value of contraceptive use in achieving one’s goal of not becoming pregnant would seem essential.

Therefore, it is important to emphasize the young women’s awareness that as long as they are having sexual activity, the risk of being pregnant will exit and contraceptives should be prepared before hand.
5.2.3 Strengthening Education of Contraception and Improving the Quality of Service of Family Planning Programs

It is obvious in this study that most young women do not know how to correctly use the most effective contraceptives. Also men dislike or feel uncomfortable to use condom and one of the reasons for non-condom use is associated with the quality of condoms. Therefore, the following suggestions are made:

1. An emphasis should be placed on the strengthening the education and dissemination of knowledge about contraception and how to correctly use the oral contraceptive pill and ECP.
2. A comfortable condom should be researched and developed in order to reduce the obstacle feeling.
3. Increased training in the proper use of condoms could reduce slippage and breakage, thereby reducing dissatisfaction and increasing use.
4. Condoms should be available like common goods at various department stores, drug stores and health service centers. Vending machines for condoms should be available in many places, such as public toilets, department stores, and not only in limited several areas.

5.2.4 Promoting Men’s Co-operation and Strengthening Young Women’s Responsibility for Contraceptive Use

Since men play an important role in contraceptive decision-making and using effective contraceptives, special efforts are needed to educate and motivate men to cooperate with their girlfriends in the use of effective contraceptives to prevent
unwanted pregnancies and to use condoms to prevent the spread of STDs. Men should be educated not only on contraceptives, but also gender equality, women's problems, reproductive health and healthy sexual relationships. Meanwhile, it is also important that young women should be encouraged to increase their self-esteem, self-confidence and individual freedom. There is a need to improve communication between young men and women on sexuality and reproductive health matters. Young women should be taught how to negotiate with boyfriends, and how to make a decision on contraceptive use, and how to protect their reproductive health. Furthermore, the promotion of their joint and equal responsibility should be emphasized.

5.2.5 Providing the Service of Counselling

The findings from both quantitative and qualitative study reveal that most of the young women do not have adequate knowledge about the severity of complications of induced abortion and some young women who have had previous induced abortions still irregularly use or do not use a most effective contraceptive. Therefore, prior to abortion, counselling should be available for young women and post abortion counselling should automatically be offered to all women using abortion services in order to reduce repeat abortion. Also, simple and easily understandable hand books and information sheets should be distributed at hospitals. The contents should include detailed advice, including the risk of repeated abortion, and educating men to take more responsibility for preventing pregnancy.
5.3 Recommendations for Further Research

First, in order to better understand unwanted pregnancy and induced abortion-related matters among never-married young women, we should encourage more and better qualitative research in the future.

Second, the further research should investigate male partners who accompany young women to come to hospital for abortion. The results reveal that male partners play a very important role in young women’s CUB. Therefore, male partners’ knowledge about pregnancy, contraceptives and the risk of induced abortion, attitudes toward contraceptives use and induced abortion, as well as their intention on contraceptive use after their girlfriends have an abortion should be investigated in both quantitative and qualitative studies.

Third, as indicated from this study, some young women have a misunderstanding about medical abortion because they do not have proper knowledge about medical abortion. Meanwhile, a number of previous studies have emphasised the short-time complications of medical abortion. Furthermore, a follow-up study on the long-term complications of medical abortion should be conducted.

5.4 Limitation of the Research

First, due to limited time and budget, this study only focuses on some selected psychosocial factors and demographic characteristics and the abortion experience of respondents to explore their contraceptive behavior. However, determinants of contraceptive behaviours among unmarried young people are very complicated and
different in the diverse social and cultural context. They can be influenced by many other factors such as cultural, religious, political, and economical factors.

Second, this study was conducted in a government hospital and the study population could not be randomly sampled from the whole population of never married young women because premarital pregnancy is still a social stigma. Thus, the conclusions derived from this study cannot be used to explain the contraceptive use behaviour of all never-married young women in Beijing.

Third, under the psychological pressure of social stigma or the bias due to the doctor's attitude, some respondents, who were younger or came to the hospital for the first time were very nervous, fearful, they didn’t know how to visit the doctor and they didn’t trust the doctors. Three factors may have affected the results of this study.

Fourth, a limitation pertains to the time and context in which the questionnaires were administered. Some of the respondents were interviewed before having an abortion, which was a time of stress. In addition, since some questions were sensitive, the young women may have felt ashamed or embarrassed, so some questions may not have been answered truthfully in the limited time. Also, the respondents may hide their age or give a false marital status, which may result in an inadequate sample.
REFERENCES


Ailan Li. (1998). Psychosocial Factors Associated with Sexual and Contraceptive Behavior among Unmarried University Students in Beijing CHINA. A Thesis submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts (Health Social Science) Faculty of Graduate Studies Mahidol University.pp.1


Wu Jiuling


Vu Ngoc Bao (1997) Psycho-social and Cultural Factors Affecting Modern Contraceptive Practice among Women Seeking Pregnancy Termination in HANOI, VIETNAM. A Thesis submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts (Health Social Science) Faculty of Graduate Studies Mahidol University. pp.1


APPENDIX I

QUESTIONNAIRE
APPENDIX I

QUESTIONNAIRE

CONTRACEPTIVE USE BEHAVIOUR AMONG NEVER-MARRIED YOUNG WOMEN WHO HAVE UNWANTED PREGNANCY IN BEIJING

Good morning / afternoon, I am a health researcher in Research and Training Center for maternal and child health in Beijing Medical University. We are conducting a study on contraceptive use behavior among young people. The purpose of this survey is to get some important information related to contraceptive use behaviors. There is no right or wrong answer, please don't hesitate to answer these questions. We will keep secrete for you. Your name and work address will not be recorded on the paper.

If you have some questions related to pregnancy, contraception and induced abortion to ask me, I will explain them to you as possible as I can.

Case number: __________________

Date of interview: ______/______/______

Time of interview: from _____ to _____
Section I. Social-demographic Characteristics of the Respondents

1.1. What is your present age? ___________

1.2. What is the highest level of education that you have completed?
   (1) primary school
   (2) Junior high school
   (3) Senior high school
   (4) College/ university

1.3. Are you presently? ___________
   (1) Factory worker
   (2) Employee in company
   (3) Waitress in the restaurant, hair salon, salesclerk, telephone operator;
   (4) Teacher, medical personnel, researcher, etc.
   (5) Student
   (6) Unemployed
   (7) Other ___________

1.4. What kind of living arrangement do you have?
   (1) living alone
   (2) living with boyfriend;
   (3) living with family/ relatives
   (4) sharing the room with same sex friend
   (5) others

1.5. What is the highest level of education that your mother has completed?
   (1) None
   (2) primary school
   (3) secondary school
   (4) Junior high school
   (5) Senior high school
   (6) College/ university

1.7. What is your parents’ marital status at the present?
   (1) Married / living together
   (2) divorce/ separated
   (3) other ___________
1.8. If living together, how is your parents’ relationship?

(1) happy together
(2) so, so (peaceful)
(3) in constant conflict
(4) Do not know

Section 2. Experience of Previous Induced Abortion

2.1. Have you had the experience of induced abortion before this time?

(1) No (stop here if you answer “no”)
(2) Yes (if answer “yes”, please continuously answer the following questions)

2.2. What kind of induced abortion you have had?

(1) medical abortion
(2) surgical abortion
(3) other ____________________________

2.3. How many numbers did you have induced abortion before this time?

(1) 0
(2) 1
(3) 2
(4) 3
(5) above

2.4. Did you get some problem from previous abortion?

(1) No symptoms
(2) abdominal pain
(3) prolonged bleeding
(4) irregular menstrual cycle
(5) pelvic infection
(6) others ____________________________

2.5. How was your feeling after having abortion?

(1) feared surgical pain
(2) felt relieved that the pregnancy had been terminated
(3) worried that someone would find out
(4) no bad feeling
(5) felt shameful
(6) regretted not used contraception other feelings
Section 3. Knowledge about Pregnancy, Contraception and Severity of Complications of Induced Abortion

3.1. Do you thank that the following statements are correct or incorrect?

Correct  Incorrect  Don’t know

(1) Getting pregnancy would be possible, if a woman lies with a man, under the same cover;
(2) Getting pregnancy would be impossible, if a woman who has a regular menstrual cycle has intercourse with a man, during her safe period of the month;
(3) Getting pregnancy would be impossible, if the sperm does not meet the egg, after having intercourse;
(4) Getting pregnancy would be possible, if a woman who has never menstruated, has intercourse with a man;
(5) Getting pregnancy would not be easy, if a woman has intercourse with a man who withdraws before ejaculation;

3.2. Have you ever heard and know how to use the following methods to prevent pregnancy? (respondents should explain how to use the contraception that they have heard, then interviewer judge whether the explanation is correct)

Never heard  Have heard  know how to use

(1) pill
(2) condom
(3) injection
(4) jelly or cream
(5) emergency pill
(6) rhythm method
(7) withdrawal
Wu Jiulin

3.3 Have you ever heard about severity of surgical abortion?
   (1) No
   (2) Yes

3.4 Have you ever heard about severity of medical abortion?
   (1) No
   (2) Yes

Section 4. Perceived Susceptibility to Pregnancy and Perceived Severity of Complications of Induced Abortion

4.1. Do you agree the following statements?

<table>
<thead>
<tr>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
</table>

(1) You always felt that pregnancy would never happen to you;
(2) It is possible to be pregnant from the first time intercourse;
(3) Because you are still young, so you are not easy to get pregnancy;
(4) Having intercourse only one or two times, pregnancy would possibly occur;
(5) You didn’t get pregnant last time, you had sex without contraceptives, so you thought you were not easy to get pregnant this time;
(6) you never thought about getting pregnant, when you had sex at that time;

4.2. Do you agree or disagree following statements about surgical abortion?

<table>
<thead>
<tr>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
</table>

(1) it can be done multiple times because it has no side effect on health.
(2) It lead to infertility in the future;
(3) it may lead to problems during delivery
if a woman has had multiple abortions
(4) it may cause prolonged bleeding
after operation;
(5) it will not cause fever;
(6) It may cause abdominal pain or upper
  genital tract infection;
(7) it will not influence a woman’s
  menstrual cycle;

4.3. Do you agree or disagree following statements about medical abortion?

<table>
<thead>
<tr>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
</table>
| (1) It is simple and quick method to
discharge the “child”; |          |          |
| (2) It is a pain-free method; |          |          |
| (3) It may cause prolonged bleeding; |          |          |
| (4) It can be done multiple times because it
  has small side effect on health. |          |          |
| (5) It may cause abdominal pain or upper
  genital tract infection; |          |          |
| (6) It will not lead to infertility in the future; |          |          |

Section 5. Attitude toward Premarital Pregnancy and Contraception

5.1. Attitude toward Premarital Pregnancy:

(1) Do you think that premarital pregnancy can be acceptable, if the partners fall in
  love?
  (1) No, I disagree  (2) yes, I agree
(2) Do you think that premarital pregnancy can not be accepted because pregnant
girl will be looked down by the family or society?
  (1) No, I disagree  (2) yes, I agree
(3) Do you think that premarital pregnancy can be acceptable, if partners have a commitment to marry?
   (1) No, I disagree          (2) yes, I agree

(4) Do you think that premarital pregnancy will lead to a bad reputation for the woman?
   (1) No, I disagree          (2) yes, I agree

(5) Do you think that other people should not blame a young women for premarital pregnant?
   (1) No, I disagree          (2) yes, I agree

(6) Do you think that premarital pregnancy can be acceptable, because it can promote the relationship with boy friend?
   (1) No, I disagree          (2) yes, I agree

(7) Do you think that premarital pregnancy will not lead to a bad reputation for the woman’s family?
   (1) No, I disagree          (2) yes, I agree

(8) Do you think that premarital pregnancy will result in bad consequences for the woman’s marriage in the future?
   (1) No, I disagree          (2) yes, I agree

5.2. Attitude toward Contraception:

(1) Do you think that condom can reduce sexual pleasure?
   (1) Yes, I think so.        (2) No, I don’t think so.   (3) I am not sure.

(2) Do you think that it is too troublesome and time consuming, using contraception?
   (1) Yes, I think so.        (2) No, I don’t think so.  (3) I am not sure.

(3) Do you think that the pills have no side effects on the health?
   (1) Yes, I think so.        (2) No, I don’t think so.  (3) I am not sure.

(4) Do you think that you feel shameful for using contraception?
   (1) Yes, I think so.        (2) No, I don’t think so.  (3) I am not sure.

(5) Do you think that condoms make you uncomfortable during intercourse?
   (1) Yes, I think so.        (2) No, I don’t think so.  (3) I am not sure.

(6) Do you think that using contraception may imply that you have had previous sexual intercourse?
Section 6. Belief in Folk Methods to Prevent Pregnancy

6.1 Do you believe that following folk methods could help you avoiding pregnancy?

<table>
<thead>
<tr>
<th>Believe</th>
<th>Not Sure</th>
<th>Don't believe</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Urination immediately after intercourse;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Taking a hot shower after intercourse;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Standing up-right and letting sperm;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Flow out after having sex;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Using Douche, after intercourse;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Washing genital with soap / herb after intercourse;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 7. Motivation for having sex:

7.1. What is the purpose for you having sex? (choosing one or more items)

<table>
<thead>
<tr>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Physical need</td>
</tr>
<tr>
<td>(2) Affection</td>
</tr>
<tr>
<td>(3) Curious</td>
</tr>
<tr>
<td>(4) Feel lonely</td>
</tr>
<tr>
<td>(5) For earning money</td>
</tr>
<tr>
<td>(6) Worrying about abandonment;</td>
</tr>
<tr>
<td>(7) other</td>
</tr>
</tbody>
</table>

Section 8. Perceived Availability and Barrier of Accessibility to Contraception Service:

8.1 Do you think that getting to contraceptive service is easy or difficulty for you?

<table>
<thead>
<tr>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) easy</td>
</tr>
</tbody>
</table>
8.2 Where do you think you are difficulty to get contraception? Please rank the order of three major area.

(1) Hospital or health centre
(2) Drug store
(3) Department stores
(4) Friends
(5) Family members
(6) Others

8.3. Do you agree or disagree with following statements?

<table>
<thead>
<tr>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
</table>

(1) You know where contraceptive services are available;
(2) It is easy to obtain contraception because it is available everywhere;
(3) It is time consuming to travel or in order to obtain this service;
(4) The price of contraception such as, condom or pill is too expensive for you;
(5) It is shameful to buy contraception in the hospital or drug stores or big department store;
(6) You felt embarrassed when you consult at hospital about contraception;

Section 9. Influence on Contraceptive Use from Boyfriend, Peer and Parents

9.1 How long do you know your partner?

(1) < 6 months
(2) 6 – 11 months
(3) 12- 18 months
(4) > 18 months
9.2. What is your feeling about your partner?
   (1) love him
   (2) like him
   (3) dislike him, but he treats me in a good way
   (4) others ______________________

9.3. During the past 12 months, how often have you had sex?
   (1) more than one times /per week;
   (2) one time / per two weeks;
   (3) one time / per three weeks;
   (4) one time / per four weeks or more above;
   (5) only one time for the whole year;
   (6) indicates number of time, if you remember__________.

9.4. Have you ever discussed about contraception with your partner when you have sex?
   (1) Never
   (2) Occasionally discussed
   (3) Often discussed

9.5. Do your partner agreed to use condoms when you request him?
   (1) Disagree
   (2) Agree every time
   (3) Agree sometimes
   (4) Don’t know

9.6. Do you have close friends who use contraception?
   (1) No
   (2) Yes
   (3) Don’t know

9.7. Have you ever discussed about contraception with them?
   (1) No
   (2) Yes

9.8. Do you have good communication with your parents?
   (1) Don’t have
   (2) Have
9.9. Have you ever discussed about contraception with your parents?
   (1) Never
   (2) Often
   (3) Occasionally

9.10 Did they suggest you to use contraception?
   (1) No
   (2) Yes

Section 10. Contraceptive Use

10.1 Did you use any contraception prior to current pregnancy?
   (1) No (if answer is “no”, please answer question 10.5.)
   (2) Yes (if answer is “yes”, please go to question 10.2)

10.2. What kind of contraception did you or your boyfriend use?

<table>
<thead>
<tr>
<th>Use</th>
<th>Not use</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Pill</td>
</tr>
<tr>
<td>(2)</td>
<td>Condom</td>
</tr>
<tr>
<td>(3)</td>
<td>Rhythm</td>
</tr>
<tr>
<td>(4)</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>(5)</td>
<td>Injection</td>
</tr>
<tr>
<td>(6)</td>
<td>Jelly or cream</td>
</tr>
<tr>
<td>(7)</td>
<td>Emergence pill</td>
</tr>
<tr>
<td>(8)</td>
<td>Other ___________</td>
</tr>
</tbody>
</table>

10.3. Who made the decision to use it or them?
   (1) yourself
   (2) your partner
   (3) both of you

10.4. Why did the contraception that you used failed?
   (1) Don’t know the reason
   (2) Condom broken
   (3) Forgot to take in the pill
   (4) Other ___________
10.5. What are important reasons you not using contraception prior to current pregnancy? Please rank the order of three major reasons.

(1) You didn’t know what the contraceptives are;_________
(2) You never thought about getting pregnant at that time;_____ 
(3) Difficult to obtain contraceptives; __________
(4) Boyfriend’s disapproval of contraceptive use; ________
(5) Worrying about side effects of pill;______________
(6) Because condoms and pills are expensive; __________
(7) It is shameful to obtain contraception; _________
(8) Having sex was unplanned, so contraception was unavailable at that time; ___
(9) It is troublesome to use contraceptives; __________
(10) It is easy to have an abortion; ___________
(11) Didn’t matter to me if I got pregnant, I wanted sex pleasure; __________
(12) Using a condom makes sexual activity unnatural; __________
(13) Don’t know which contraceptive is the best one; __________

10.6. During pass 12 months, did you use contraception?

(1) Never use (if answer is “never”, please answer question 10.5.)
(2) Ever use (if answer is “ever”, please go to question 10.7)

10.7. How often do you used them?

(1) every times
(2) most of the time
(3) occasionally

10.8. what kind of contraception that you and your boyfriend have ever used? Please rank the order of first 3 method that you and your boyfriend frequently use

(1) Pill __________
(2) Rhythm __________
(3) Condom __________
(4) Jelly or cream __________
(5) Withdrawal __________
10.9. what are important reasons you never use contraception? Please rank the order of three major reasons.

(1) You didn’t know what the contraceptives are; 
(2) You never thought about getting pregnant at that time; 
(3) Difficult to obtain contraceptives; 
(4) Boyfriend’s disapproval of contraceptive use; 
(5) Worrying about side effects of pill; 
(6) Because condoms and pills are expensive; 
(7) It is shameful to obtain contraception; 
(8) Having sex was unplanned, so contraception was unavailable at that time; 
(9) It is troublesome to use contraceptives; 
(10) It is easy to have an abortion; 
(11) Didn’t matter to me if I got pregnant, I wanted sex pleasure; 
(12) Using a condom makes sexual activity unnatural; 
(13) Don’t know which contraceptive is the best one;

10.10 Do you intention to use contraception if you have intercourse again?

(1) No 
(2) Yes 
(3) Not be sure

10.11 Do you think who should take responsibility for contraceptive use?

(1) you 
(2) your boyfriend 
(3) both of you
APPENDIX II

Guideline of In-depth Interview
Good morning/afternoon, I am a health researcher in Research and Training center for maternal and child health in Beijing Medical University. We are conducting a study on contraceptive use behavior among young people. The purpose of this in-depth interview is to get some detail information for the questions related to contraceptive use behaviors. There is no right or wrong answer, please don’t hesitate to tell the truth about how do you think and how did you do. We will keep secret for you and your name and work address will not be recorded on the paper.

Because it will be very slow if I note all the content on paper, and writing note will also interrupt our talking very often. So the type record will be used. I hope that you can understand and would like to cooperate with me. If you have some questions related to pregnancy, contraception and induced abortion to ask me, I will explain them to you as possible as I can.

Case number: 
Date of interview: ____/____/______
Time of interview: from ____ to ____
I. Individual and Family Background

(1) Age, education, occupation;
(2) Do you have your own independent room?
(3) What is your mother and father's education level?
(4) How is the relationship between your parents?
(5) Do you think you have good communication with your parents?
(6) Can you discuss about sexual issue or contraception with your parents? Why?

II. Knowledge, Susceptibility and Attitude toward Pregnancy

(1) Do you know how does the pregnancy happen? If answer "yes", please tell more information about pregnancy and where did you get the knowledge?
(2) whether did you worry about you will get pregnancy, when you have sex with your boyfriend? Why?
(3) what opinion do you have about premarital pregnancy? Why?

III. Knowledge and Attitude to Contraception and Perception of Availability and Accessibility of Contraceptive Services

(1) What kind of contraception did you hear, see, buy, and use?
(2) Could you tell me how to use them?
(3) (if answer "ever use") How satisfied did you with it or them? And how often did you use them?
(4) (if answer "never use") why didn’t you use contraception?
(5) Did you feel some problems for obtaining contraception? Where did you feel problems for obtaining contraception? What problems have you had?

IV. Relationship with Boyfriend

(1) How long have you known your boyfriend?
(2) Have you ever discussed about your marriage?
(3) How is your feel abort your partner? How often do you have sex?
(4) When and Where did you have your first sexual activity? were you voluntary when you had sex with your boyfriend at your first? Did you use contraception?
(5) How did you get pregnant?
(6) Did he know your pregnancy? What is his opinion?
(7) Have you ever discussed about contraceptive use with your partner?
(8) Did your boyfriend use anything? Do your boyfriend approve to use contraception?
(9) (if answer “No”) why he disapprove to use it?
(10) (if answer “yes”) What kind of contraception did he want to use or he want you to use?
(11) Do you think who should take responsibility for contraceptive use? Why?

V. Knowledge, Perception of Induced abortion and Previous Experience of Abortion?

(1) have you ever heard some negative influences of surgical or medical abortion?
(2) Have you ever had experience of induced abortion?
(3) Do you worry about surgical or medical abortion? Why?
(4) what is your felling about previous abortion? Did you get some problem after you got abortion?
APPENDIX III

Score Table
APPENDIX III

Score Table

Knowledge about Pregnancy

<table>
<thead>
<tr>
<th>Do you agree or disagree with the following statements?</th>
<th>True</th>
<th>Not sure</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Getting pregnancy would be possible, if a woman</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>sleep with a man, but not having intercourse;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Getting pregnancy would be impossible, if a woman</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>who has a regular menstrual cycle has intercourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with a man, during her safe period of the month;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Getting pregnancy would be impossible, if the sperm</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>does not meet the egg, after having intercourse;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Getting pregnancy would be possible, if a woman who</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>has never menstruated, has intercourse with a man;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Getting pregnancy would not be easy, if a woman has</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>intercourse with a man who withdraws before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ejaculation;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Knowledge about Contraception

<table>
<thead>
<tr>
<th>Types</th>
<th>know how to use correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Coffin</td>
<td>1</td>
</tr>
<tr>
<td>Pill</td>
<td>1</td>
</tr>
<tr>
<td>ECP</td>
<td>1</td>
</tr>
<tr>
<td>Injection</td>
<td>1</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>1</td>
</tr>
<tr>
<td>Rhythm method</td>
<td>1</td>
</tr>
<tr>
<td>Jelly or cream</td>
<td>1</td>
</tr>
</tbody>
</table>
### Perceived Susceptibility to Pregnancy

Do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) I didn’t get pregnant last time, when you had sex without contraceptives, so you thought you were not easy to get pregnant this time;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(2) It is possible to be pregnant from the first time intercourse;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(3) I am too young, so it is not easy for me to get pregnant;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(4) Having intercourse only one or two times, pregnancy would possibly occur;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(5) I always felt that pregnancy would not happen to me;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(6) I never thought about getting pregnant, when I had sex at that time;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Perceived Severity of Complications of Surgical Abortion

Do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) it can be done multiple times because it has no side effect on health</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(2) It lead to infertility in the future;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(3) it may lead to problems during delivery if a woman has had multiple abortions;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(4) it may cause prolonged bleeding after operation;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(5) it will not cause fever;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(6) It may cause abdominal pain or upper genital tract infection;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(7) it will not influence a woman’s menstrual cycle;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Perceived Severity of Complications of Medical Abortion

Do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) It is simple and quick method to discharge the &quot;child&quot;;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(2) It will not lead to infertility in the future;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(3) It may cause prolonged bleeding;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(4) It may cause abdominal pain or upper genital tract infection;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(5) It is a pain-free method;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(6) It can be done multiple times because it has small side effect on health.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Attitude toward Premarital Pregnancy

Do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Premarital pregnancy can be acceptable, if the partners fall in love;</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(2) Pregnant girl will be looked down upon by the family or society;</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(3) Premarital pregnancy can be acceptable, if partners have a commitment to marry;</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(4) Premarital pregnancy will lead to a bad reputation for the woman;</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(5) Other people should not blame a young woman for premarital pregnant;</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(6) Premarital pregnancy can be acceptable, because it can promote the relationship with boy friend;</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(7) Premarital pregnancy will not lead to a bad reputation for the woman’s family;</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(8) Premarital pregnancy will result in bad consequences for the woman’s marriage in the future;</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
### Attitude toward Contraception

Do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) The pills have no side effects on the health;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(2) Condom can reduce sexual pleasure;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(3) even if contraception is used long-term; It will not cause infertility in the future,</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(4) It is too troublesome and time consuming, using contraception;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(5) Condoms make you uncomfortable during intercourse</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(6) You feel shameful for using contraception;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(7) Using contraception may imply that you have had previous sexual intercourse;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(8) boyfriend will doubt your commitment to him if using contraception</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Belief in Folk Methods to Prevent Pregnancy

Do you believe in the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Believe</th>
<th>Not sure</th>
<th>Don’t believe</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Standing up-right and squatting to make the sperm fall sperm;</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(2) Urination immediately after intercourse;</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(3) Using Douche, after intercourse;</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(4) Washing genital with soap/herb after intercourse;</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(5) Taking a hot shower after intercourse;</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
**Perceived Availability and the Barrier of Accessibility to Contraceptive Service**

Do you agree or disagree with the following statements?  

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) I know where contraceptive services are available;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(2) It is easy to obtain contraception because it is available everywhere;</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(3) It is time consuming to travel or in order to obtain this service;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(4) The price of contraception is too expensive for you;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(5) It is shameful to buy contraception in the hospital or drug stores or big department store;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(6) I felt embarrassed when I consult at hospital about contraception;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
APPENDIX IV

Correlation Coefficients among Independent Variables Indicting Respondents' Contraceptive Use Behavior
APPENDIX IV

Correlation Coefficients among Independent Variables Indicting Respondents’ Contraceptive Use Behavior.

<table>
<thead>
<tr>
<th>Variables</th>
<th>PACS</th>
<th>PSP</th>
<th>BAC</th>
<th>DCB</th>
<th>KC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PACS</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSP</td>
<td>0.238**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAC</td>
<td>0.174**</td>
<td>0.374**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCB</td>
<td>0.181**</td>
<td>0.305**</td>
<td>0.323**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>KC</td>
<td>0.142*</td>
<td>0.451**</td>
<td>0.245**</td>
<td>0.321**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

PACS: perceived availability to contraceptives service
PSP: perceived susceptibility to pregnancy
BAC: boyfriend’s approval of contraceptives use
DCB: discussion of contraception with boyfriend
KC: knowledge about contraception
APPENDIX V

Logistic P-P Plot of Standardized Residual
APPENDIX V

Logistic P-P Plot of Standardized Residual

Transforms: natural log
APPENDIX VI

Normal Q-Q Plot of Standardized Residual
APPENDIX VI

Normal Q-Q Plot of Standardized Residual

Expected Normal Value

Observed Value

Transforms: natural log
APPENDIX VII

Distribution of Level of Education by Respondents’ Perceived Susceptibility to Pregnancy
APPENDIX VII

Distribution of Level of Education by Respondents’ Perceived Susceptibility to Pregnancy (%)

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Perceived Susceptibility to Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Low</td>
<td>25.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>15.8</td>
</tr>
<tr>
<td>High</td>
<td>8.0</td>
</tr>
</tbody>
</table>
BIOGRAPHY

NAME                     Wu Jiuling

DATE OF BIRTH            5 April, 1961

PLACE OF BIRTH           Hubei Province, P.R.China

NATIONALITY              Chinese

EDUCATIONAL BACKGROUND   Jiangxi Medical College, 1979-1984:
                         M.D.
                         Mahidol University, Thailand,
                         1998-2000:
                         M.A. (Health Social Science)

POSITION & OFFICE        1992- present: Assistant Researcher,
                         Research and Training Center
                         in Women and Children Health,
                         Beijing Medical University

                         1984- 1992: Chief Doctor,
                         Women and Children hospital
                         in Jiangxi Province, China

FELLOWSHIP               UNFPA and Mahidol University

RESEARCH GRANT           The Ford Foundation