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**FACTORS AFFECTING PREGNANCY TERMINATION PRACTICE IN  
CONTEMPORARY VIETNAM: A CASE STUDY IN HOCHIMINH CITY**

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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS  
(HEALTH SOCIAL SCIENCE)**

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จาก  
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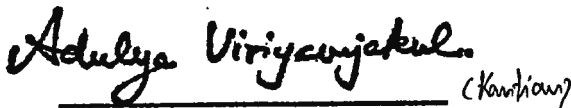
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### **ABSTRACT**

Pregnancy termination in view of Hochiminh women is a reproductive manipulation related to the health, social and economic situation.

Hochiminh city in the Southern Vietnam is one of the three biggest cities has the highest rate of pregnancy termination. In 1993, there was 145,033 women terminated their pregnancy and pregnancy termination ratio was 180 per 100 births. The large number of women practiced pregnancy termination point out the problem of contraceptive use and women's health as the reasons.

The aim of the study is to reveal the socio-economic, demographic differentials among married women practicing pregnancy termination in Hochiminh city, and to analyze the socio-cultural factors such as desire for no more children, contraceptive practice, and familial support that motivating women practicing pregnancy termination. The sample of 400 married women in reproductive age were interviewed by using structured questionnaire from 15 September to 30 October, 1995, in Department of Family Planning of TuDu Ob/Gyn hospital, Hochiminh city, Vietnam .

The findings showed that two types of pregnancy termination have been practiced by Hochiminh women, there are induced abortion and menstrual regulation. The average age of women was 29.7 years. Most of older women using menstrual regulation while most of younger women practicing induced abortion. Three-fourths of them had a secondary education level and above. The educational level of women using menstrual regulation was higher than women using induced abortion. More than three-fourths of women were economically working at the time survey. About 61 percent of those were in low and moderate income classes. In average each woman has 1.6 living

children. For type of occupation, number of living children, religion and monthly income. It was found that there is no much different between women using induced abortion and menstrual regulation.

In terms of past pregnancy termination experience, more than one-third of women had at least one prior pregnancy termination. In average, each woman had 1.5 pregnancy terminations.

There was association between desire for no more children and pregnancy termination. Women with desire for no more children were likely to use pregnancy termination than women with desire for more children.

Women who used contraceptive irregular were likely to use menstrual regulation where as women who used contraceptive regular (but used ineffective method or used effective method incorrectly) were likely to use induced abortion.

For women with secondary education level and under, those who used no contraceptive and ever experienced with prior menstrual regulation were likely to use it again than the others.

Women who have the husband's support related to pregnancy termination were more likely to use it than those who did not have it.

The substantial proportion of women with desire for no more children used pregnancy termination as well as the high proportion of women who are contraceptive non users and contraceptive failure users indicate the limitations of family planning programme. Recommendations are made for improving the function of family planning programme that is improving the mass media on pregnancy termination, promoting the effective modern methods and pregnancy counselling to every body.

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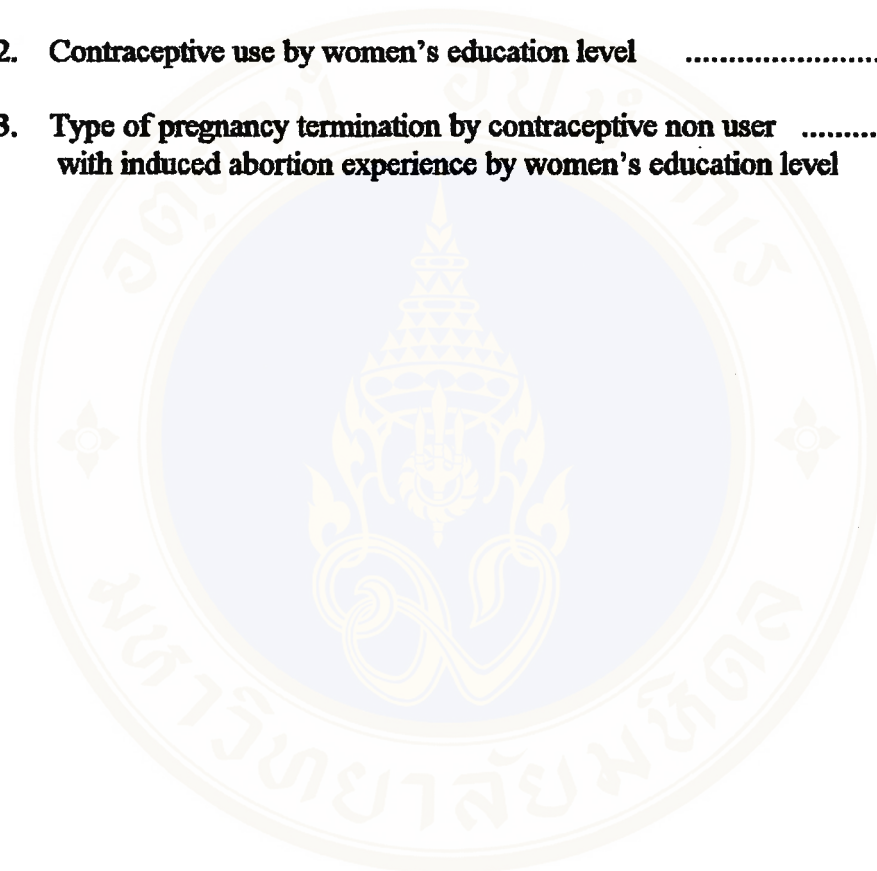
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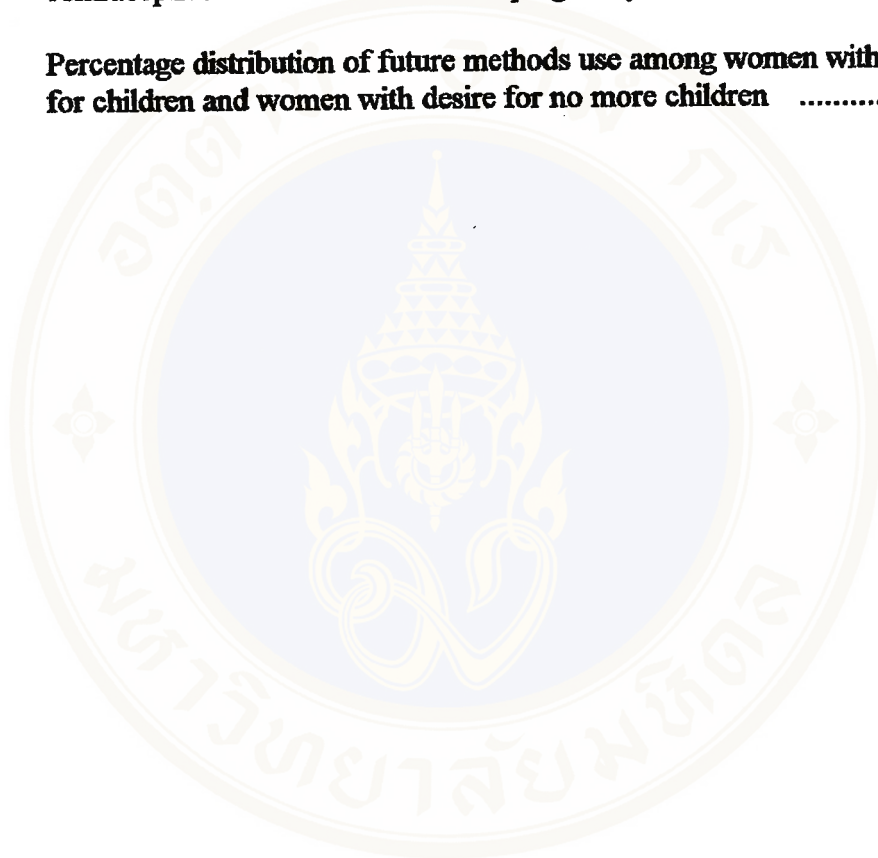
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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 The rationale and identification of the study problem**

Vietnam, like many developing countries, has been faced with various serious problems of high rate of population growth. In 1936 the population of Vietnam was 18 million. It has increased to 53 million by the year of 1979 and was found that there were 72.5 million in 1993 (Inter-Censal Demographic Survey, 1994) and was the second rank in population size among South East Asian countries and thirteenth rank in the world. This rapid growth has been a major contributor to numerous problems, namely inadequacy of housing, widespread poverty, inequitable educational opportunities, and so on. After having considered its adverse effects on economic and social development, in 1963 the government has established a voluntary family planning program, which has been continued to regard as an important part of its development efforts. The fourth party congress of the Vietnam communist party held just after the reunification (1975) stated that 'It is necessary to further push forward family planning'. The National Committee for Population and Family (NCPFP) was established by the government in 1984 to be charge of the population and family planning work. The Ministry of Health (MOH) was made responsible for providing family planning services. So far, however, the population and family planning program has had only limited success. The average population growth rate still remains at a level of above 2 per cent per annum from 1984 to 1993 (Inter-Censal Demographic Survey, 1994).

In Vietnam family planning program is popular and associated with the use of IUD, despite the government encourages a variety of methods. Its main reason was attributed to a limited number of contraceptive methods which are available (Do, Stoeckel, Nguyen, 1991). The government also provides induced abortion and menstrual regulation services at provincial and district hospitals. These services are intended for women who have experienced 'contraceptive failure' (Do, Stoeckel, Nguyen, 1991). The official total abortion rate in Vietnam in 1992 was about 2.5 per woman, which is considered the highest rate in Asia. Between 1976 and 1992, pregnancy terminations increased from 70,281 to 1.3 million, a rise greater than eighteenfold. For Goodkind (1994), the increasing rate of pregnancy termination in Vietnam was explained by some main reasons such as Vietnam viewed IUD and pregnancy termination as methods allowing maximum state control and monitoring of family planning method and hence women can access it easily, the one or two children policy that motivated women to practice pregnancy termination so that they avoid to violate the policy and, the issues of modernization and development which contributed to a growing familiarity with Western cultural and dating patterns and is probably contributing to a rise in sexual contacts, both premarital and otherwise (and hence the unwanted pregnancy and demand for abortion services).

According to the national pregnancy termination census (1992), Hochiminh city in the Southern Vietnam was one of the three cities has the highest rate of pregnancy

termination. From 1990 to 1994, in Hochiminh city, the number of women who had pregnancy termination has shown:

1990	140,157
1991	140,476
1992	139,756
1993	145,033

Based on the report of Center for Protection of Mother and Newborn (CPMN), in 1993 there were 145,033 terminated pregnancies while there were 78,000 births. In other words, the pregnancy termination ratio was 180 per 100 births in Hochiminh city. This ratio was higher than of Russia and of Hungary by three times, of Italy by four times. These are countries were classified as the ones had 'sky-high abortion rate' (Popov, 1990).

The high number of pregnancy termination in Hochiminh city may also resulted from the influence of IUD and pregnancy termination policy, one or two children policy and imported western culture that just mentioned above. First, the decrease of crude birth rate (from 21.1 per thousand in 1980 to 20.5 per thousand in 1991), and the third children born rate (from 30.0 per cent in 1991 to 22.8 per cent in 1991), in line with the high pregnancy termination rate have shown a part of the relationship between one or two children policy and the popular use of pregnancy termination in Hochiminh city. Second, Hochiminh city is the main economic center of all country and the area which contact with western countries earliest. Therefore, it can not avoid the influences of above imported cultural patterns that may result in a rise in sexual contacts and consequently, a rise of unwanted pregnancy.

For the characteristic of women practicing pregnancy termination, based on the reports of CPMN , it showed that about 51.0 per cent of women were terminated by induced abortion and the remain 49.0 per cent were terminated by menstrual regulation. Less than 4.0 per cent of all pregnancy terminations were performed among women under the age of 20. The 25-29 aged group occupied approximately 28.0 per cent of all aged groups. In addition, 96.2 per cent of such women were currently married women and furthermore, that those with no children constituted only 5.0 per cent. These statistics indicated that pregnancy termination use was prominent in married women, especially in women with one or more children. In addition, it should be noted that the contraceptive prevalent rate (CPR) among these women was not high, about 38.0 per cent.

The large number of married women practicing pregnancy termination in Hochiminh city has pointed out the problems on contraceptive use. Because pregnancy termination is an indicator of contraceptive non use and contraceptive failure. Besides it is generally to know that pregnancy termination is an inefficient method of birth control and is usually associated with the short term complications such as hemorrhage, incomplete abortion, uterine perforation, and intrauterine adhesion as well as the long term of complications to the users such as infertility. For instance, the report of TuDu Ob/Gyn hospital where the sample was drawn, estimated that about 31.0 per cent of all secondary infertility patients ever used pregnancy termination in the past, especially one-fifth of them ever had induced abortion's complications. Moreover, it is known that pregnancy termination also has deep impact on social women's life.

Therefore, to study systematically what factors motivating women to practice pregnancy termination is the necessary undertaking. The results of study will be beneficial for programs related with family planning, health education and women's reproductive health.

## **1.2 Objectives**

The study has the specific objectives as following:

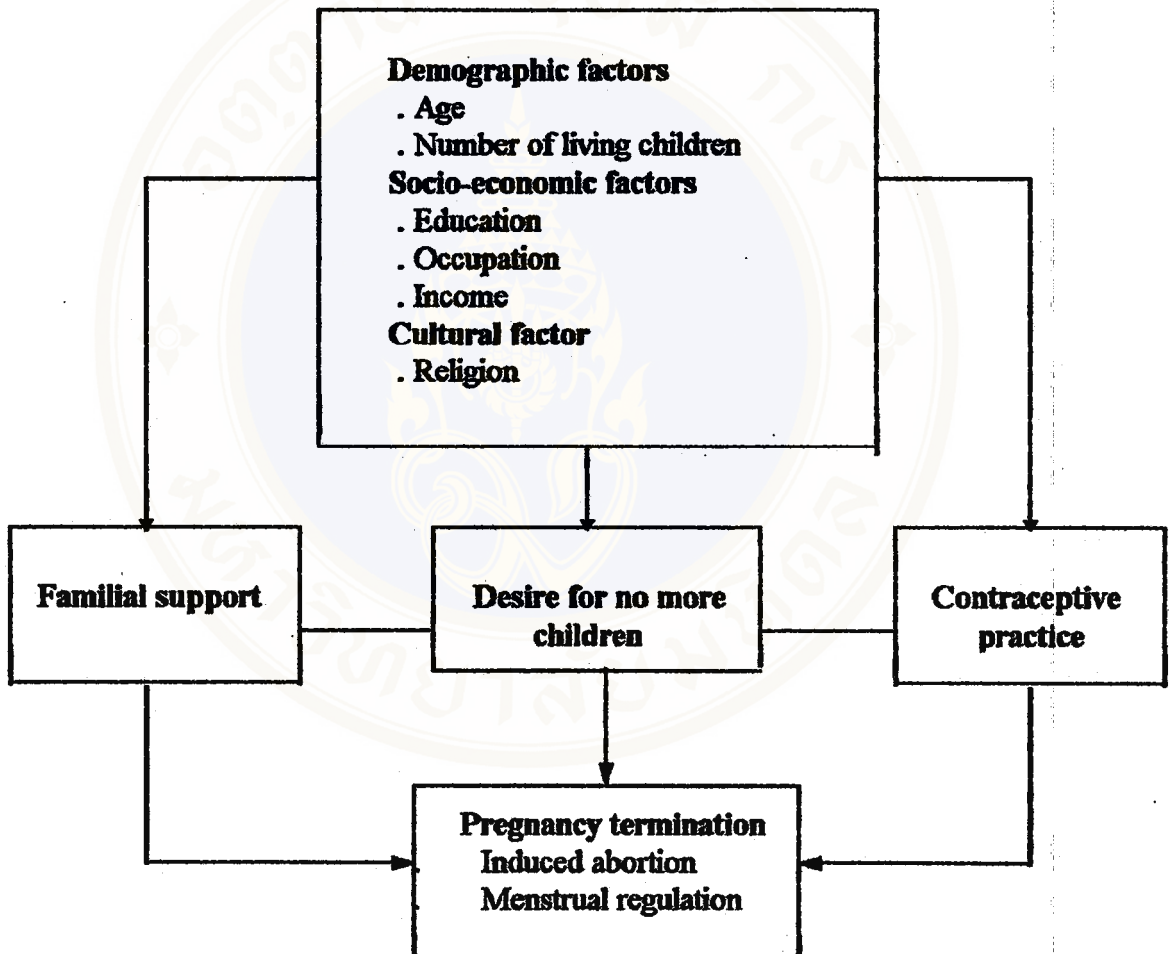
- 1. To identify the demographic and socio-economic differentials among married women practicing induced abortion and menstrual regulation.**
- 2. To analyze the socio-cultural factors which motivating women to practice pregnancy termination. These factors include : desire for no more children, contraceptive practice, and familial support.**

## **1.3 Conceptual framework**

For social science, behavioral factors have been considered as the most important factors that influenced to the refusal or acceptance of pregnancy termination use. For the study design, desire for no more children, contraceptive practice and familial support are independent variables. The dependent variable is pregnancy termination use. The socio-economic, demographic and cultural characteristics of respondents which includes age, number of living children, education, occupation, income and religion are considered background variables .

The figurative presentation of the conceptual framework (Figure 1) and explanation of the used variables are given as follows:

**Figure 1: Conceptual framework of pregnancy termination**



### **Desire for no more children**

It is universally agreed that before a person or a couple adopts family planning, there must be motivation. In psychological terms, that means family planning must be perceived as a venue to attain important goals. On the other hand, if people believe that family planning would destroy important goals, they would have strong motives not to have practice family planning (United Nations, 1974). Therefore, for woman who does not want any more children or, if she wants no more for the next, say, four years, and if she exposes to the risk of pregnancy, she would use birth control method which including contraceptive and pregnancy termination. Many studies have found that desire for no more children has a significant predictor of pregnancy termination use. For instance, studies conducted in Hungary, Japan, Latin American and India showed that women who resorted to abortion - legal or illegal- were frequently highly motivated to limit their family size (David,1983).

Therefore, it can assume that desire for no more children will be the factor which motivates the woman to practice the pregnancy termination to eliminate unwanted pregnancy.

### **Contraceptive practice**

According to Gaslone (1976), women who practice contraception consistently and effectively have fewer unwanted pregnancies and thus display a lower abortion practice over a period of time than those who practice contraception ineffectively or not

at all. In addition, it is necessary to note that even with perfect use, no modern contraceptive method is 100 per cent effective (Tietze and Bongaarts, 1975). The impact of contraceptive failure accumulates over time, the longer a method is used, the higher the chance it will fail (Tietze, 1974). Therefore, David (1992) suggested that induced abortion or menstrual regulation as a back up method in situation of contraceptive non use or failure. More over, it is necessary to know that the pregnancy termination and contraception serve the same ultimate purpose, that is, to prevent unwanted pregnancy or mistime birth. Therefore, if an unintended pregnancy occur, whether as a result of contraceptive failure or when contraception were not used, the pregnancy termination can be used to prevent a birth.

Based on the above arguments, it can assume that unwanted pregnancy is caused by contraceptive non use or failure, has subsequently resulted in a high probability of pregnancy termination. Therefore, contraceptive failure or non use could be considered as important factors which will motivate the women who have desire for no more children to adopt the pregnancy termination.

### **Famillial support**

'Role relationships' provided organizing principle for human behavior and the social life of each individual might be viewed as a series of structured interactions between individual with others towards whom the individual had a particular type of relationship: husband, son, relative, friend. In the context of fertility control behavior

there are many studies have shown that the husband plays a strong influence on adoption and continuation of contraceptive use of his wife (United Nations, 1974). Thus familial support could be considered as a motivation of fertility control behavior of individual. In this study it is assumed that support of husband is a factor which may influence in the process of the making decision of pregnancy termination use.

### **Socio-economic, demographic, and cultural characteristics**

The previous studies observed that socio-economic, demographic and cultural characteristics of an individual such as number of living children, age, educational level, type of occupation, income and religious affiliation have reflected the differing incidence of pregnancy termination. However, these factors are not considered as direct cause of pregnancy termination. For instance, Thom (1990) showed that in Northern Vietnam the older women and the women with higher parity were more likely to desire no more children and consequently, they were also more likely to use pregnancy termination than the others. In Zaire, Shapiro (1990) indicated that the better-educated women and women who are employed were more likely to practice contraception since the number of children they desire was low. However, in the absence of perfect contraception, these women were more likely to use induced abortion. Therefore, in this study it is assumed that individual's background, in any instance, could affect one's motivation, perception and behavior related to pregnancy termination use such as desire for no more children, contraceptive practice and familial support.

#### **1.4 Hypothesis**

**Based on the above conceptual framework, in order to examine the association of desire for no more children, contraceptive practice and familial support on pregnancy termination. Four hypotheses are defined as follow :**

##### **First Hypothesis**

**Married women in reproductive age who have desire for no more children are likely to use pregnancy termination.**

##### **Second Hypothesis**

**Married women in reproductive age who receive the husband's support on pregnancy termination are likely to use it.**

##### **Third Hypothesis**

**Married women who experienced with contraceptive failure are likely to get the pregnancy termination.**

##### **Fourth Hypothesis**

**Married women in reproductive age who did not use any contraceptive are likely to use pregnancy termination.**

## **1.5 Operational definition**

**1. Pregnancy termination includes two separate procedure :**

**\_ Menstrual regulation (literally “ to suck out the fetus”) is performed by a suction procedure within five weeks of pregnancy.**

**\_ Abortion (literally “ to destroy the foetus”) refers to all other pregnancy termination procedures performed after five weeks.**

**The two major categories of abortion are “induced” and “spontaneous”.**

**\* Induced abortion are those initiate voluntarily with the intention to terminate a pregnancy.**

**\* Spontaneous abortion are those that begin without human intervention, a miscarriage in lay terms.**

**In this study, the term “Abortion” refers to induced abortion and the term “Pregnancy termination” refers to menstrual regulation and induced abortion.**

**2. Unwanted pregnancy is defined as a pregnancy that was consciously unintended at time of conception and unwanted during the gestation period.**

**3. Desire for no more children refers to women who did not want any more children because of such reasons as completed family size, economic burden, health problem, etc.**

**4. Contraceptive practice of women and their husband will be investigated under the following aspects :**

. **Awareness of family planning-** refer to the concern about family planning and it was divided into two groups: the respondents who are 'aware' and those person who are 'unaware'.

. **Current use of contraceptive-** refer to reported use of contraceptive at the time of survey.

. **Ever use of contraceptive-** refer to the incidence of contraceptive use in the respondent's lifetime without any reference what so ever to the timing, frequency or regularity of use.

. **Never use of contraceptive-** refer to couple who use no contraceptive at any time in the past as well as in the present.

. **Contraceptive failure-** refer to couple who had used contraceptive from the last menstruation but still get pregnancy.

. **Attitude towards contraceptive use-** mainly mention on the women's thinking on their active in using contraceptive.

**5. Familial support** refers to the husband's support towards the practice of pregnancy termination. It was divided into three levels including (1) usually, (2) sometimes and (3) never receive the support from husband.

. **'Usually'** refers to the husband's support towards the practice of pregnancy termination at any time in the past as well as in the present.

. **'Sometimes'** refers to the husband's support towards the practice of pregnancy termination in the past but not in the present and vice versa.

. *Never* refers to having no husband's support towards the practice of pregnancy termination in the past as well as in the present.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 General overview : Pregnancy termination

Pregnancy termination, especially induced abortion is the oldest reproductive manipulation known to man. Anthropologists tell us it was practiced among primitive peoples for a variety of social, religious and personal reasons. For instance, in some tribes, lactating women who became pregnant were aborted rather than have their children raised in slavery. Pregnancies involving couples within specified degrees of kinship were taboo and were terminated out of shame or fear of evil consequences. Pregnant women in migrating tribes had to choose between induced abortion and abandonment. However, abortion was not universally accepted in some tribes. Among some tribes, the hazards of induced abortion were felt to outweigh the risks associated with pregnancy and birth. Among others, it was held that induced abortion disrupted the balance of nature, resulting in poor crops and drought. Among some groups it was feared that an aborted woman caused men to be sterile.

Today, induced abortion continues to be practice, whether accepted or forbidden, in all parts of the world and by women in all walks of life. It is estimated that the annual number of cases vary between 30 and 50 million, roughly half of them carried out illegally. It is noted that if the number of menstrual regulation is taken into account, the figure should be higher. Theoretically, in today's technological world, hardly any

woman has to become pregnant unless she wishes to be. Unfortunately, a large proportion of couples live in countries where they do not have ready access the contraception because supplies and services are inadequate or non-existent. Even in countries where contraception is widely used unwanted pregnancy still occur, either as a result of failure of method or of improper or inconsistent use. Moreover, in all parts of the world some women and men do not use contraception at all because it is forbidden by the religion, by tradition or by law, because they feel they can not afford it, are afraid of it or dislike it, or because they cannot tolerate the side effects of method.

By itself, pregnancy termination is an inefficient method of birth control. As the society becomes more experienced in controlling its fertility, the resort to pregnancy termination will decline. However, it is never eliminated and the combination of it and contraception remains the prime method of fertility regulation throughout the contemporary world (Diggory, 1977).

## **2.2 Selected factors influencing pregnancy termination**

There are many factors affecting women's decision on whether to practice pregnancy termination. The selected factors that are included in this study are background factors such as socio-economic, demographic and cultural factors and independent factors such as desire for no more children, contraceptive practice and familial support.

### 2.2.1 Socio-economic, demographic and cultural factors

#### Age

It is generally known that different ages with different fecundity, sexual activity and contraceptive behavior resulted in different risks in exposure of pregnant and contraception. Consequently, different ages has exposed different risks of unwanted pregnancy and pregnancy termination.

It is observed that a substantial majority of women having abortions in 22 countries such as Canada, French, Denmark, England, Italy, Singapore, India, South Africa, etc. were aged 20-34. Moreover, it was found that the highest abortion rates are found among women aged 20-24 in these countries excluding Czechoslovakia, the German Democratic Republic, Hungary, Singapore and Tunisia. For these five countries, the abortion rates are highest for women aged 25-29 or 30-34 (Tietze, 1986).

Under the results of Intercensal Demography Survey of 1994 in Vietnam, the percentage of pregnancy termination rate increased from the age group 15-19 to the age group 30-34 then decreased to the age group 35-49. The study on pregnancy termination in the Northern Vietnam of Do, Stoeckel and Nguyen (1991) showed that most of married women seeking pregnancy termination were aged 30-34 (30.7 per cent). And it was followed by 22.4 per cent of 25-29 years age group, 21.3 per cent of 35-39 years age group. The lowest rate was under 20 years age group (0.9 per cent).

Therefore, it could be said that potential pregnancy termination mainly occurs in women aged 20-34. Underlying patterns of fecundity, sexual activity, family formation and family- building explain the concentration of abortions among women in this age.

#### **Number of living children**

The number of children that a woman has before she experiences abortion varies from culture to culture, according to ideal family size, partner's opinion, awareness on cost and benefit of children and the limits of personal endurance in childbearing. For instance, in Mexico, a woman may have five or six children before resorting to abortion, while none or two in Sweden, three or four in Denmark, and one or two in East Europe and Japan (Callahan, 1970).

Modernization tends to influence women to have fewer children overall, thus they intend to use abortion earlier and even before they have had any children at all. In Czechoslovakia, for example, the proportion of those with no children resorting to abortion is rising although government policy discourage it. In Hungary, where the desired family size was about two children and abortion is current method of birth control, every six childless women terminated her first pregnancy; among those with one more than half terminated and among those with two children more than three-quarters terminated their next pregnancy (Callahan, 1970).

David (1980) and Miller (1981) stated that one of the determinants of choice behavior in resolving an unwanted pregnancy - whether to terminate or not -influenced by

the wish not to exceed the “completed” number of children. For instance, a study on pregnancy termination in Northern Vietnam of Thom (1991) showed that for the women in the age group 25-44, their average number of pregnancies are higher than number of wanted children and number of living children (3.2 compared with 2.1 and 1.8). This means that some of these women practiced pregnancy termination to eliminate the pregnancies that exceeded their “completed” number of children. Therefore, number of living children is an important factor that influences on the pregnancy termination. The more children woman has, the more pregnancy termination will be used.

### **Education**

The education of women reflects the abortion rate in a variety of ways, according to the culture of a country and the state of its development. Generally, but not universally, the higher the education level of women, the greater is tendency to seek abortion to eliminate unwanted pregnancy either in the absence of contraceptives or to correct contraceptive failure (Callahan, 1970).

Data for Asia (Lisksin, 1980) showed that the number of induced abortions tended to increase with the wife's education. In Taiwan those with junior high or more education resorted to abortion more than those with no formal education, 17.9 per cent as compared with 8.8 per cent. In Korea, more than twice as many wives with college education resorted to abortion than did wives without any schooling, 37.0 per cent compared with 17.0 per cent (Callahan, 1970).

In Vietnam, a study by Thom (1991) showed that the education level of married women who seeking pregnancy termination were relatively high. About three-fourths of them have secondary education or above and non of them were illiteracy. In addition, their husband's education level were similar. Another study on abortion of Do, Stoeckel, Nguyen (1991) in Vietnam also showed that 70.0 per cent of women seeking pregnancy termination in Hanoi had at least a high school education. These studies suggested that the average educational level of women practicing pregnancy termination was higher than the average educational level of women in all country.

In short, it can be summarized that the woman with higher education is more likely to practice pregnancy termination than woman with lower education.

### **Occupation**

The impact of occupation on pregnancy termination differs country by country.

A study in Mexico showed that most of married women who seeking abortion were housewives. The remaining were professional women (nurses, teachers, clerks, e.g.) and other skilled or semi skilled workers. This study also indicated that most of women who are housewives had the higher number of living children and have reached their desired family size than their counterparts. Therefore, they are more likely to practice pregnancy termination.

In contrary, Shapiro (1990) in the study about the impact of women's employment and education on contraceptive use and abortion in Kinshasa (Zaire) found

that employed women reported a considerably higher incidence of abortion than did either self-employed or non employed women.

Similarly, a study of Thom in Northern Vietnam (1991) indicated that three-fourths of women who practiced pregnancy termination were economically working at the time of survey. About 20.0 per cent of them doing professional jobs such as doctors, teachers and technicians and so on, women who engaged in household works account for 25.0 per cent. Report from Center for Protection Mother and Newborn (CPMN) in Hochiminh city Vietnam (1993), also showed that majority of women seeking pregnancy termination have worked in private sector followed by those who were government official, housewives, and unemployment.

Hence, it can be said that for women who are employed , there may be a conflict expected by the time demands of employment and the time demands of childcare. They would appear to confront the highest opportunity cost of child bearing and therefore have the lowest demand for larger numbers of children and the highest motivation to use contraception, in which including pregnancy termination.

### **Religion**

The great religions of the world have traditionally seen abortion as posing serious moral problems, though they have differed in their solutions. One can detect some difference in degree of the resort to abortion according to religious practice as Orthodox Jews in Israel, better educated Catholics in the United States, evangelical Protestants in

Mexico and Chile. This means that the more devout and those more informed about their religion's teaching are less apt to seek induced abortion than the different or the uninstructed. But if circumstances press hard, many women will in desperation set aside their religious principles and turn to abortion as a practical necessity, however regrettable (Callahan, 1970).

Study of Philippines showed that a majority of women had experienced little or no shame or guilt after the abortion. Although the vast majority of the women were Roman Catholics who attended church regularly, religion apparently had little influence on their decisions to terminate an unwanted pregnancy (IFRP, 1981).

### **2.2.2 Desire for no more children**

Generally couple will have desired for no more children in the following causes:

- a. When they are already had as many children as they wanted.
- b. The economic burden that another child would cause
- c. The poor health of woman which doesn't allow her to get another pregnancy , and so on.

A study in Mexico also indicated that desire for no more children was the main reason for pregnancy termination use of married women (36.3 per cent). The rest reasons were 33.3 of insufficient income, 16.6 per cent of poor health, and 3.3 per cent of extra marital problems or separated (IFRP, 1981).

An another study in Vietnam also found that the reasons for seeking menstrual regulation and induced abortion are shown in Table 2.1.

**Table 2.1 Percentage distribution of reasons for seeking pregnancy termination in the past and present**

Reasons	Past	Present
Don't want more children	50.9	56.0
Birth spacing	41.1	40.0
Contraceptive failure	6.3	1.5
Others	1.8	2.5
Total	100.0 (n=112)	100.0 (n=200)

Source: Nguyen T. Thom, 1991.

In Vietnam, desire for no more children is strongly associated with the number of living children, a substantial majority of women want no more children rising from 84.15 per cent for women with three living children to about 90 per cent of those with four living children and more (Inter-censal Demographic Survey, 1994).

Therefore, desire for no more children can or the need to limit family size can be considered motivation to force women adopt pregnancy termination.

### 2.2.3 Contraceptive practice

There are two important factors that related to pregnancy termination including contraceptive non use and contraceptive failure.

### **Contraceptive non use and pregnancy termination**

**It is well recognized that the risk of becoming pregnancy is greatest if no used contraception (Westoff et al, 1981). A study of abortion patients in the State of Illinois (USA) found that 27.0 per cent of abortion patients were using methods of contraception and 58.0 per cent were not using any method when they became pregnant. More over, in Bolivia, 60.0 per cent of women had abortion complications in several hospitals reported that they had not used contraceptive prior to pregnancy (Bailey et al, 1988).**

**In Hochiminh city, Vietnam, the report of Center for protection Mother and Newborn in 1993 indicated that 90.77 per cent of women who seeking pregnancy termination had not used any contraceptive method.**

**In addition, when comparing never user and ever user that related with pregnancy termination, Tietze and Henshaw (1986) stated that because induced abortion and contraception share the ultimate goal of preventing unwanted pregnancy, a high correlation exists between abortion experience and contraceptive experience in populations where both contraceptive and abortion are available and where some couples attempt to regulate the number and spacing of their children. In such populations, women who have used contraceptive are more likely than never user to have an abortion, and vice versa. The reason for this may be that women who have practiced contraception are likely to have fewer religious objections to fertility control than the others. In Korea, for example, according to a 1971 survey of 5,600 ever-married women, about 46.0 per cent of contraceptive users had had one or more abortions, compared with 12.0 per cent of**

nonusers. Conversely, 73.0 per cent of women who had had at least one abortion were practicing contraception, compared with 29.0 per cent of women who had never had an abortion were practicing contraception. Therefore, it seems that the abortion use tend to associate with the contraceptive use.

### **Contraceptive failure and pregnancy termination**

Women who practice contraception consistently and effectively have fewer unwanted pregnancies and, therefore, display a lower abortion rate over a period of time than those who practice contraception in effectively or not at all (Gaslonde,1976).

The Pan-American Health Organization had estimated that for every 100 women using 'effective'contraception, it could have 2.2 induced abortion can be expected annually for those using 'less effective' contraception, could have 8.6 per cent of induced abortion, and for those using no method at all, 10.0 per cent of induced abortion (Paho, 1985). Moreover, Okolski (1983) has demonstrated that there is strong positive correlation between the frequency of use of traditional contraceptive methods, which have high failure rate and the use of induced abortion.

Do, Stoeckel, Nguyen (1991) in a study of Vietnam found that 60.0 per cent women seeking pregnancy termination were of the failure of contraceptive method, 38.3 per cent were of non use of contraception and 1.7 per cent were of breastfeeding. This study also noted that the high proportion of women having repeat pregnancy termination, 50 per cent or 1.6 pregnancy termination per woman, suggested that menstrual

regulation were being used as a substitute for family planning methods, it also suggested for repeated method failure.

#### **2.2.4. Familial support**

A study in the Philippines showed that in majority of cases, problem of abortion was not a secret, have someone knew about it, usually her husband as well as relatives and friends. In most cases of unwanted pregnancy, the woman first discussed with her husband, then with a relative or friend (IFRP, 1981).

In Vietnam, majority of married women received familial support for using the pregnancy termination. There was only 0.83 per cent of married women did not have husband's support in the case of menstrual regulation and 0.77 per cent in the case of induced abortion (VNDHS,1989). In contrast, in the Dominican Republic, a sizable proportion of husband either did not know or did not want to know their wives' abortion history, preferring to let them take responsibility for such decisions (Friedman et al., 1975).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

In order to gain information and data that serve the objectives of study, field survey and quantitative technique were employed. The study conducted from 15 September to 30 October 1995 to collect the pertinent quantitative data.

#### **3.1 Study area and the population**

TuDu Ob/Gyn hospital located in Cong Quynh street in Hochiminh city, which is the largest and possibly the best equipped women's hospital in Southern Vietnam, purposely selected as a study area. The hospital receives the large number of patients each year, for instance in 1993 there were 51,286 of in-patients, and 32,232 of out-patients. And the department of Family Planning of TuDu Ob/Gyn hospital carries out 50-60 pregnancy terminations each day or 1500-1800 per month. This department has 50 beds for women asking for pregnancy termination. Five doctors and twelve nurses are responsible for pregnancy termination service. For service charge, every patient pay only 20,000 Dong VN (\$USD 2) for induced abortion or menstrual regulation procedure (mainly for syringe) the remain medical fee the government will support.

Population in this study is currently married women in reproductive age (18-49) who live in Hochiminh city and come for the service of induced abortion and menstrual regulation at Department of Family planning of TuDu Ob/Gyn hospital during the period

of three months, from September to November 1995. In average, there was about 4500-5400 pregnancy terminations at that time.

### 3.2 Sample size

On the basis of the entire population was about 4500-5400 (less than 10,000) from September to November 1995 and there are two subsamples including induced abortion and menstrual regulation group, and there is an equal number of cases ( $n_1 = n_2 = n'$ ) the subsample size of this study was calculated by using following formula:

$$n' = \frac{2z^2 pq}{(d')^2}$$

In which:

$n$  = the desire subsample size.

$z$  = the standard normal deviate, set at 2.0, which the corresponds to the 95 per cent confidence level.

$p$  = the proportion in the target population estimated to have a particular characteristic.  $P$  is set at 2.0.

$q = 1.0 - p$ .

$d'$  = degree of accuracy desired, set at 0.10.

Source: Handbook for Family Planning Operations Research Design (Fisher et al, 1991).

From this formula, the subsample size was calculated as 200 cases. Therefore, the sample size of this study was 400 respondents in which induced abortion and menstrual regulation group composed of the same 200 respondents in each group.

Sample size of the study was 400 respondents that are chosen by three following criteria:

1. Currently married women in reproductive age
2. Those who came for the service of pregnancy termination at Department of Family Planning of TuDu Ob/Gyn hospital from 15 September to 15 November 1995.
3. Those who are residents in Hochiminh city.

### **3.3 Questionnaire and Data collection**

The information required for this study were collected using a structured questionnaire that included close-ended questions. The questionnaire included 60 questions and was divided into five parts (Appendix B).

**Part 1:** General information on the socio-economic, demographic and cultural characteristics of the respondents.

**Part 2:** The relevant information regarding the fertility history, desire for children and perception on family-size preference and gender preference.

**Part 3:** About the past and present contraceptive behavior of women and their husbands as well as the perception on the women's autonomy in using contraception.

**Part 4: Including the reason, feeling, belief and knowledge regarding to the pregnancy termination .**

**Part 5: Information on the women's role in family and the husband's support to the pregnancy termination use.**

**This questionnaire also was consulted by those who experienced in pregnancy termination, Family Planning field in Hochiminh city, Vietnam.**

**The data were collected by a survey team which consisted of three experienced midwives that recruited in TuDu Ob/Gyn hospital. They have had three days for training on interviewing techniques and meaning of question in the questionnaire to maintain common understanding. Before collecting data, the prepared interview schedule pretested with 20 respondents. After pretest, the questionnaire was modified and improved.**

**The respondents were recruited based on the medical check-in procedure that will identify them to be induced abortion or menstrual regulation patients. And next, women who are married were chosen for interview and women who are single will be excluded from the survey. Women were selected using a quota sampling technique. For each day, approximately ten to twelve eligible women were interviewed. The interview took place in the morning from 8 a.m to 12 a.m because the midwives had to spend their time for hospital 's works in the afternoon.**

**The completed questionnaires were edited daily in the field to ensure that the questionnaires were done correctly. This including:**

- List all cards to ensure that the ID and number of card is in correct order.**

- Check that only legitimate codes appear in each column and that no 'wild' codes are present.

- Check the logical consistency of codes between items.

### **3.4 Data processing and analysis**

#### **Data entry**

Data entry was done by using spss/pc. All coded questionnaires were keyed directly into diskets. After data entry finished, the frequency distributions of all variables were reviewed to identify any unusual responses.

#### **Data analysis**

The data analysis consisted of two sections. First, socio-economic, demographic characteristics of respondents (sample) such as, age, educational level, occupation, income, religion, residence, reasons for using menstrual regulation or induced abortion will be described by using descriptive statistics. Second, bivariate analysis was employed to identify the relationship between the induced abortion / menstrual regulation use and desire for no more children, contraceptive practice, familial support.

### **3.5 Limitations of the study**

The study was conducted about three months by collecting information, and limited to only one Department of Family Planning, and the population was highly

selective, including only married women. Therefore, due to limited time of survey and limited location of study , sample was not truly representative of all women seeking pregnancy termination in Hochiminh city as well as population of country at time of survey.

The data analyzed also has limitation due to the sample selection. And the selectivity of the sample population was likely to have potential effects on results, and cannot allow generalization, either to the population of Hochiminh city, or to Vietnam population. However, in line with our interest in undertaking this study, we believe that the results may provide useful information for population policy and social workers as well as medical personal. The findings may also be used as a baseline data for further studies.

The information of the husband was received from the wife. Therefore, it has more or less limitation. However, in the context of Vietnam most of women usually follow their husband in any walks of life. Hence, husband's information based on wife still has limited reliability.

## CHAPTER FOUR

### RESULTS

This chapter consisted of two parts: First, it describe the socio-economic, demographic and cultural characteristics of women practicing the induced abortion and menstrual regulation. Second, it will examine the relationship between the pregnancy termination and the factors including desire for no more children, contraceptive practice and familial support.

#### 4.1 The socio-economic, demographic and cultural characteristics of respondents

Knowledge of the demographic and socio-economic characteristics of the respondents such as age, wife's education, wife's occupation, husband's education, husband's occupation, religion, income, number of last pregnancy and number of living children is essential for a better understanding of the population under study. These information are presented in Table 4.1.

##### Age

In terms of age, the results in Table 4.1 suggest that the percentage of pregnancy termination users increased with women's age at group of 19-24 (24.2 per cent) up to age group of 25-29 (27.0 per cent) that was the highest and at which point it declined to age group of 30-34, 35-39 and 40-49 (22.8 per cent, 19.2 per cent and 6.8 per cent,

respectively). The average age of the sample was 29.7 years with majority of the respondents belonged to the age groups from 25-29. For women using induced abortion group, a large proportion of women (25.5 per cent) was in the age group of 19-24. In contrast, for women using menstrual regulation, the large number of women (29.5 per cent) was in the age group of 25-29. Hence, most of older women using menstrual regulation and most of younger women using induced abortion. In comparing the average age of respondents by induced abortion and menstrual regulation group, there is not much difference in average age between women using induced abortion and women using menstrual regulation. The average age for induced abortion group was 29.8 years and for menstrual regulation group was 29.6 years.

### **Education**

In terms of education attainment, as compared to the educational statistics derived from the census 1989, the education level of women in this study was relative higher. The average educational level of the studied women was 9.08 years with three-fourths of the women had secondary and above and only 1.2 per cent was illiterate. While, according to the census, only 9.0 per cent of the women had secondary educational and above, and three-fourths of the women had only primary education and under (Vietnam Population Census, 1989). This difference may be due to educational facilities and opportunity for schooling of women in Hochiminh city are better than other areas. As regards with education level's husband, the husbands had the higher educational

level than their partners. More than half (55.0 per cent) of the husbands had high school education level and above while only 0.8 per cent was illiterate. It must be noted that the government, especially after the revolution of 1975, has a national policy for universal primary education, which gives everybody the right to free primary schooling. This policy appears to influence the current low rate of illiteracy of population. In comparing the level of education by induced abortion and menstrual regulation group, the average educational level of both husband and wife in menstrual regulation was higher than induced abortion group (10.8 years and 9.2 years versus 10.1 years and 8.9 years, respectively).

#### **Wife's occupation**

As recorded in Table 4.1, it was also observed that 38.0 per cent of women were unemployed (including housewives, students and unemployed) and 39.8 per cent of the women were unskilled (types of occupation which are not trained) only 22.3 per cent of the women were skilled (types of occupation which are trained such as teacher, technician, officer etc.). The proportion of women who were skilled in induced abortion group was higher than in menstrual regulation group (23.5 per cent compared with 21.0 per cent, respectively). In contrast, the proportion of women who were unskilled in menstrual regulation group was higher than in induced abortion group (42.5 per cent compared with 37.0 per cent, respectively).

### **Husband's occupation**

For the husbands, 3.5 per cent and 47.5 per cent of them were unemployed and unskilled. The proportion of the husband who were skilled was 49.0 per cent. The proportion of husbands who were skilled in induced abortion group was higher than in menstrual regulation group (50.5 per cent compared with 47.5 per cent, respectively). In contrary, the proportion of husband who were unemployed and unskilled in menstrual regulation group was slightly higher than in induced abortion group (52.5 per cent compared with 49.5 per cent, respectively).

### **Family income**

In terms of monthly income of couple who adopting the pregnancy termination, only 16.0 per cent of the respondents had the high income (above 2,000,000 Dong - equivalent to \$ USD 200) whereas 39.0 per cent of respondents had low income (under 1,000,000 Dong- equivalent to \$USD 100) and 16.0 per cent of respondents had moderate income (about 1,000,000 to 2,000,000 Dong- equivalent to \$USD100 to \$US200). Therefore, most of the women using pregnancy termination were in low and moderate income classes. Table 4.1 also supports that the proportion of women with low income practicing menstrual regulation was higher than the proportion of women with low income practicing induced abortion (42.5 per cent compared with 35.5 per cent, respectively).

### **Religion**

Under the aspect of religion, most of women practicing pregnancy termination have followed Buddhist since the majority of Vietnamese are Buddhist. Table 4.1 shows that there was about 59.2 per cent of respondents have followed Buddhist, the rest have followed Catholics (19.8 per cent) and some other indigenous religions including Confucian and Caodaism. Reversely, there was only 18.0 per cent of the women reported that they had no religion. It is observed that the proportion of women have followed Buddhist in induced abortion and menstrual regulation group was not quite different (59.0 per cent compared with 59.5 per cent, respectively). The proportion of women have followed Catholics in menstrual regulation group was slightly higher than in induced abortion group (20.0 per cent compared with 19.5 per cent, respectively). Similarly, the proportion of women have followed Caodaism and Confucian in induced abortion was also higher than in menstrual regulation group (2.0 and 1.5 per cent compared with 1.5 and 0.5 per cent, respectively). To short, the religious practice among women using induced abortion and menstrual regulation is not too different, most of women in both induced abortion and menstrual regulation group followed Buddhist.

### **Number of living children**

The respondents had small family size. In average each woman had 1.6 living children. About one-third of the women had only one child, but if the women who had no more than two children were taken into account, the proportion was 81.9 per cent.

The average of 1.6 living children per woman was higher than the national average of 1.5 living children per woman who live in urban areas (Vietnam Population Census, 1989). Under the fact that majority of these women have not reached menopause and still have not completed their family size as well, therefore, it is predictable that the average number of living children among these women may increase in the future.

### **Prior pregnancy termination**

In terms of their past experience with pregnancy termination, it is to note that more than half (55.0 per cent) of the respondents had at least one prior pregnancy termination. More than half the women (56.5 per cent) in menstrual regulation group and half of the women (50.0 per cent) in induced abortion group had at least one prior pregnancy termination. More over, nearly one-fifth of the women in induced abortion group (18.0 per cent) and nearly one-fourth of the women (23.5 per cent) in menstrual regulation group had at least two prior pregnancy terminations. Menstrual regulation accounted for three-fifths and three-fourths of prior pregnancy terminations in induced abortion group and menstrual regulation group, respectively. In addition, it was observed that the women with prior pregnancy termination had a total of 332 prior pregnancy terminations, or an average of 1.5 pregnancy terminations per woman. The high proportion of women having repeat terminations suggests that menstrual regulation, and to a lesser degree abortion, was used as a substitute for family planning methods or as a back-up method for repeated contraceptive failure.

**Table 4.1** Percentage distribution of selected socio-economic, demographic and cultural characteristics of respondent by type of pregnancy termination

Characteristics	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
<b>Age groups</b>			
19-24	25.5	23.0	24.2
25-29	24.5	29.5	27.0
30-34	21.5	24.0	22.8
35-39	22.0	16.5	19.2
40-49	6.5	7.0	6.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>200</b>	<b>200</b>	<b>400</b>
<b>Mean</b>	<b>29.8</b>	<b>29.6</b>	<b>29.7</b>
<b>Standard error</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>
<b>Wife's education</b>			
Illiteracy	1.5	1.0	1.2
Primary	16.5	17.5	17.0
Secondary	45.0	39.0	42.0
High school	31.5	36.5	34.0
College and above	5.5	6.0	5.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>200</b>	<b>200</b>	<b>400</b>
<b>Mean (years of education attainment)</b>	<b>8.9</b>	<b>9.2</b>	<b>9.1</b>
<b>Standard error</b>	<b>0.2</b>	<b>0.3</b>	<b>0.2</b>
<b>Wife's occupation</b>			
Unemployed	39.5	36.5	38.0
Unskilled	37.0	42.5	39.8
Skilled	23.5	21.0	22.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>200</b>	<b>200</b>	<b>400</b>

Table 4.1 (continued)

Characteristics	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
<b>Husband's education</b>			
Illiteracy	1.0	0.5	0.8
Primary	11.0	11.0	11.0
Secondary	34.0	32.5	33.2
High school	46.0	43.5	44.8
College and above	8.0	12.5	10.2
Total	100.0	100.0	100.0
Number	200	200	400
Mean	10.2	10.8	10.5
Standard error	0.3	0.3	0.2
<b>Husband's occupation</b>			
Unemployed	2.5	4.5	3.5
Unskilled	47.0	48.0	47.5
Skilled	50.0	47.5	49.0
Total	100.0	100.0	100.0
Number	200	200	400
<b>Religion</b>			
Buddhist	59.0	59.5	59.2
Catholics	19.5	20.0	19.8
Caodaism	2.0	1.5	1.8
Confucian	1.5	0.5	1.0
Muslim	0.0	0.5	0.2
Nil	18.0	18.0	18.0
Total	100.0	100.0	100.0
Number	200	200	400
<b>Monthly income (million dong VN)</b>			
Low (<=1)	35.5	42.5	39.0
Moderate (1-2)	45.0	45.0	45.0
High (2+)	19.5	12.5	16.0
Total	100.0	100.0	100.0
Number	200	200	400
Mean (million dong VN)	1,24	1,2	1,22
Standard error	0.1	0.08	0.07

Table 4.1 (continued)

Characteristics	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
<b>Number of living children</b>			
0	22.0	19.0	20.5
1	29.0	36.0	32.5
2	27.5	27.0	27.3
3+	21.5	18.0	19.8
Total	100.0	100.0	100.0
Number	200	200	400
Mean	1.6	1.5	1.6
Standard error	0.09	0.4	0.06
<b>Prior pregnancy termination (PT)</b>			
<b>. Number of prior PT</b>			
0	50.0	43.5	46.7
1	32.0	33.0	32.5
2+	18.0	23.5	20.7
Total	100.0	100.0	100.0
Number of women	200	200	400
<b>. Types of prior PT</b>			
Prior induced abortion	39.8	19.9	29.8
Prior menstrual regulation	60.2	80.1	70.2
Total	100.0	100.0	100.0
Number of prior P.T	151	181	332

From the finding that about 53.2 per cent of women ever experienced with prior pregnancy termination, it is rationally to assume that if these women were to become effective users of contraceptive, the proportion of women with prior pregnancy termination could be reduced more than half.

## **4.2 Desire for no more children and pregnancy termination**

### **4.2.1 Reasons for requesting pregnancy termination**

Table 4.2 presents the reasons for requesting current and past pregnancy termination among married women age 18-49 in Hochiminh city.

For the current use of pregnancy termination, in induced abortion group, majority of married women used the method because they did not want any more children (52.0 per cent). The second highest percentage one gave economic problem as the reason (23.0 per cent). Due to such current economic problems as insufficient income, risk of losing the job and the refusal of financial support from their parents, the women had to terminate their pregnancy. For those who sought pregnancy termination for birthspacing purpose because their children were too young, the rate was 16.0 per cent. The lowest one was in health problems which cover those who believe that their current health is not good for bearing addition child and those who believe that the risk of fetal malformation would happen in this pregnancy (9.0 per cent). In menstrual regulation group, the situation was similar, the main reason of use of pregnancy termination was no more children wanted (44.0 per cent). The rest reasons were economic problem (27.5 per cent) , birth spacing (24.5 per cent), and health problem (4.0 per cent ).

For the past use of pregnancy termination, the respondents who had previously experienced pregnancy termination were also asked for the main reason for seeking such pregnancy termination. The results in Table 4.2 shows that desire for no more children

was the main reason (45.0 per cent in induced abortion and 38.9 per cent in menstrual regulation group). The rest was economic problem, birth spacing and health problem.

From these figures, it can be said that desire for no more children is a main reason for using pregnancy termination among current married women in the present as well as in the past. This information is consistent with previous literature finding.

**Table 4.2 Percentage distribution of reason of the current and past use of pregnancy termination by types of pregnancy termination**

Reason of use	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
<b>1. Reason of current use</b>			
Desire for no more children	52.0	44.0	48.0
Economic problem	23.0	27.5	25.3
Birth spacing	16.0	24.5	20.2
Health problem	9.0	4.0	6.5
Total	100.0	100.0	100.0
Number of women with current pregnancy termination	200	200	400
<b>2. Reason of past use</b>			
Desire for no more children	45.0	38.9	42.0
Economic problem	38.0	35.3	36.0
Birth spacing	9.0	16.8	13.0
Health problem	8.0	8.0	8.0
Total	100.0	100.0	100.0
Number of women with prior pregnancy termination	100	113	213

#### 4.2.2 Reasons of desire for no more children

The respondents were asked about the reason why they wanted no more children. As recorded in Table 4.3, in induced abortion group, 63.5 per cent of women reported the completed family size as the reason of desire for no more children. About 29.8 per cent of women reported their economic difficulties as the main reason why they wanted no more children. Only 6.7 per cent of women reported they did not want to have any more children because they were too old or their poor health which do not allow them to get another pregnancy. In menstrual regulation group, the situation was similar, the highest percentage of reason of desire for no more children was the completed family size which was 65.9 per cent. The second reason was in economic burden. The lowest percentage of reason of desire for no more children was in the poor health or old age. From these figure it can be concluded that completed family size was the main reason of desire for no more children among women practicing pregnancy termination.

Table 4.3 Percentage distribution of reason of desire for no more children by types of pregnancy termination

Reason of desire for no more children	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Completed family size	63.5	65.9	55.7
Economic burden	29.8	26.1	37.0
Poor health, too old	6.7	8.0	3.6
Total	100.0	100.0	100.0
Number	104	88	192

As indicated in the objective of study, we need to know that whether there is the relationship between desire for no more children and pregnancy termination. To attain this goal, it is necessary to find out two important items. First, which factors affecting women's desire for no more children. Second, whether the pregnancy termination is used for the eliminate of unwanted pregnancy.

Of the numerous factors which directly or indirectly impact to desire for no more children, only a few will be examined here, in line with the scope of the study. These selected socio-demographic and related factors are examined in terms of how they are related to intention to want no more children.

#### **4.2.3 Factors affecting desire for no more children**

##### **Number of living children**

As displayed in Table 4.4, there was the difference of the number of living children among women who have desire for no more children and women who don't have it ( $P < 0.05$ ). In both induced abortion and menstrual regulation group, the percentage of the women with desire for no more children increased from the women with no children and one child (17.6 per cent and 14.5 per cent in induced abortion and menstrual regulation group) to the women who with three children and above (100.0 per cent in induced abortion and 91.7 per cent in menstrual regulation group). In contrast, the percentage of the women with desire for more children decreased from the women with no children and one child (82.4 per cent in induced abortion and 85.5 per cent in

menstrual regulation group) to the women with three children and above (0.0 per cent in induced abortion and 8.3 per cent in menstrual regulation group). For the women who had no children and one child, most of them wanted more children in the future. Whereas, for the women who had two children and above most of them wanted no more children, especially for women who had three children and above all of them desire no more children. Therefore, it can be concluded that the more children women have, the more women desire no more children. Both group the positive relationship existed however the relationship in induced abortion group was slightly stronger than in menstrual regulation group (Cramer's value of 0.71 compared with 0.66, respectively).

Table 4.4 Desire for children by number of living children

Desire for children	Number of living children			Total per cent
	One per cent	Two per cent	Three + per cent	
Desire for more children	82.4	21.8	0.0	48.0
Desire for no more children	17.6	78.2	100.0	52.0
Total	100.0	100.0	100.0	100.0
Number	102	55	43	200
Chi-square value = 103.02      P value = 0.000      Cramer's value = 0.71				

**Menstrual regulation group**

Desire for children	Number of living children			Total per cent
	One per cent	Two per cent	Three + per cent	
Desire for more children	85.5	27.8	8.3	56.0
Desire for no more children	14.5	72.2	91.7	44.0
Total	100.0	100.0	100.0	100.0
Number	110	54	36	200
Chi-square value = 89.38      P value = 0.000      Cramer's value = 0.66				

Further analysis in Table A1 (Appendix A) show that for women with desire for no more children, the women with higher number of living children were likely to express "the completed family size" as a main reason of desire for no more children than the women with lower number of living children ( $P < 0.05$ ). More over, data in Table A2 (Appendix A) also support that in both two groups the women who reported 'the completed family size' had the number of living children which were higher than of the women who expressed 'economic burden' or 'too old or poor health' as main reason of desire for no more children (2.8 compared with 1.9 and 1.6, respectively). It should be emphasized that this figure seems to be higher than the target of national population policy which promoting and expecting married women in reproductive age have desired family size with only two children.

To conclude, the number of living children a woman has, is clearly associated with the desire for no more children and that related to a use of pregnancy termination service. It can be stated that when women have completed family size, which would be

around 2-3 children they obtained pregnancy termination as a mean of controlling their family size.

### **Age**

As shown in Table 4.5, in both induced abortion and menstrual regulation group, it is interesting to note that most of women who had desire for no more children are of older age (35-49) whereas most of those who had desire for more children are of younger age (18-24). The percentage of women who had desire for no more children increased from the women in 18-24 age group (13.7 per cent and 17.4 per cent in induced abortion and menstrual regulation group, respectively) to the women in 35-49 age group (93.1 per cent in induced abortion and 83.0 per cent in menstrual regulation group) ( $P < 0.05$ ). The average age of married women with desire for no more children was 33.5 and 33.2 in induced abortion and menstrual regulation group whereas, the average age of married women with desire for more children was 25.8 and 26.7 in both two groups. The relationship between desire for children and age in induced abortion group was stronger than menstrual regulation group not much (Cramer's value of 0.60 compared with 0.48, respectively).

The link of age and desire no more children may be understood in the fact that older married women, most of them had high parity and reached their family size preferences and therefore they did not want any more children. Whereas, in younger age group, most of them had low parity and have not reached their desired family size and due to some reasons they used the methods to delay the pregnancy.

Further information in Table A3 (Appendix A) support above explanation. In both two groups, the number of living children of older women was higher than the number of living children of the younger ones (mean of 1.6 compared with 0.6).

Concerning to the women who wanted no more children. In both induced abortion and menstrual regulation group, there also was the association between women's age and reason of desire for no more children ( $P < 0.05$ ). The older married women tend to report "the completed family size" as a reason of desire for no more children than the younger ones. (85.4 per cent and 86.7 per cent in 36-49 age group compared with 40.0 per cent and 40.0 per cent and 41.4 per cent in 18-30 age group, respectively) (see Appendix A Table A4).

In sum, it can be concluded that women's age was an important factor affecting to desire for no more children. The older married women were likely to desire no more children than the younger ones.

Table 4.5 Desire for children by age

Induced abortion group

Desire for children	Age				Total per cent	Mean
	18-24 per cent	25-29 per cent	30-34 per cent	35-49 per cent		
Desire for more children	86.3	62.5	41.9	6.9	48.0	25.8
Desire for no more children	13.7	37.5	58.1	93.1	52.0	33.5
Total	100.0	100.0	100.0	100.0	100.0	29.8
Number	51	49	43	57	200	200
Chi-square value = 73.88		P value = 0.000		Cramer's value = 0.60		

**Menstrual regulation group**

Desire for children	Age				Total per cent	Mean
	18-24 per cent	25-29 per cent	30-34 per cent	35-49 per cent		
Desire for more children	82.6	69.5	52.1	17.0	56.0	26.7
Desire for no more children	17.4	30.5	47.9	83.0	44.0	33.2
Total	100.0	100.0	100.0	100.0	100.0	29.6
Number	46	59	48	47	200	200
Chi-square value = 46.85		P value = 0.000		Cramer's value = 0.48		

**Family income**

In induced abortion group, most of women with low and moderate income (54.9 per cent and 51.1 per cent, respectively) wanted no more children. In contrary, most of women with high income want more children. The percentage of women who had desire for more children decreased from the women with high income to the women with moderate income and women with low income (51.3 per cent compared with 48.9 per cent and 45.1 per cent, respectively). However, the statistical test with Chi-square of 0.440 shows that there was no relationship between income and desire for children (see Table 4.6).

In menstrual regulation group, most of the women with low, moderate and high income have desire for children (52.9 per cent, 58.9 per cent and 56.0 per cent, respectively). However, the highest percentage of women who desire no more children

was in women with low income (47.1 per cent). The statistical test with chi-square of 0.627 also shows that there was no relationship between income and desire for children.

Therefore, in both two groups it could be stated that family income was not a factor which affected to desire for children of women.

Table 4.6 Desire for children by income

Induced abortion group

Desire for children	Income			Total per cent
	Low per cent	Moderate per cent	High per cent	
Desire for more children	45.1	48.9	51.3	48.0
Desire for no more children	54.9	51.1	48.7	52.0
Total	100.0	100.0	100.0	100.0
Number	71	90	39	200
Chi-square value = 0.440      P value = 0.802      Cramer's value = 0.04				

Menstrual regulation group

Desire for children	Income			Total per cent
	Low per cent	Moderate per cent	High per cent	
Desire for more children	52.9	58.9	56.0	56.0
Desire for no more children	47.1	41.1	44.0	44.0
Total	100.0	100.0	100.0	100.0
Number	85	90	25	200
Chi-square value = 0.627      P value = 0.730      Cramer's value = 0.05				

### Son's preferences

All babies, whether male or female, are welcome into the family and treated with equal tenderness. Nevertheless sons are definitely preferred, and daughters are desired only if the couple the couple already had son. There is a saying that: "A single boy, that is positive; ten girls that is still negative". Sons will continue the family name and perpetuate the ancestral cult; a family without sons thus run the risk not only of disappearing but of failing in its responsibilities to the spirits of the dead.

As our respondents were asked about their opinion on the statement that "the son satisfy family name". As recorded in Table 4.7, most of them agreed this statement (65.4 per cent in induced abortion and 67.0 per cent in menstrual regulation group). In contrast, only a small amount of women disagreed it (17.3 per cent in induced abortion and 15.9 per cent in menstrual regulation group). Hence, it could be said that in the respondent's thinking the son keep the important role in the family.

**Table 4.7 Percentage distribution of women's opinion about 'Son satisfy family name' by types of pregnancy termination**

Women's opinion	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Agree	65.4	67.0	66.2
Uncertain	17.3	17.0	17.2
Disagree	17.3	15.9	16.6
Total	100.0	100.0	100.0
Number	104	88	192

Therefore, one thing should be examined here is that whether there is the relationship between desire for children and living son. Data in Table 4.8 show that in induced abortion group, majority of women who already had son (76.6 per cent) did not want any more children. In contrast, majority of women who had no son (78.7 per cent) wanted more children. The statistical test with Chi-square of 60.36 show there was the relationship between desire for children and living son. Those who have no son were likely to want more children. Similarly, in menstrual regulation group. Majority of women who had no son (82.0 per cent) wanted more children and most of women who already had son (64.9 per cent) did not want any children ( $P < 0.05$ ).

**Table 4.8** Desire for children by living son

**Induced abortion group**

Desire for children	Living son		Total per cent
	Had living son per cent	Had no living son per cent	
Desire for more children	23.4	78.7	48.0
Desire for no more children	76.6	21.3	52.0
Total	100.0	100.0	100.0
Number	111	89	200
Chi-square value = 60.36	P value = 0.000	Cramer's value = 0.54	

Menstrual regulation group

Desire for children	Living son		Total per cent
	Have living son per cent	Have no living son per cent	
Desire for more children	35.1	82.0	56.0
Desire for no more children	64.9	18.0	44.0
Total	100.0	100.0	100.0
Number	89	111	200
Chi-square value = 44.07	P value = 0.000	Cramer's value = 0.47	

Data in Table 4.9 confirm that living son also influence to reason of desire for additional children of women. In both induced abortion and menstrual regulation group, desire for son was a main reason of desire for additional children among women who did not have son (67.1 per cent and 71.2 per cent, respectively). The percentage of desire for son decreased from the women who had no son to the women who already had son ( $P < 0.05$ ). Therefore, it can be said that those who had no son were likely to express desire for son than those who already had son as reason of desire for additional children.

It is interesting to note that among women with desire for no more children, those who already had living son are likely to express 'the completed family size' as a reason of desire for no more children than those who did not have living son ( $P < 0.05$ ) (see Appendix A Table A5). In other words, it can be stated that the term of completed family size has to link with the term of having son among these women.

To conclude, living son was strongly associated with desire for no more children. The women tend to want no more children as they already had son.

Table 4.9 Reason of desire for additional children by living son

Induced abortion group

Reason of desire for additional children	Living son		Total per cent
	Had living son per cent	Had no living son per cent	
Desire for complete family size	26.9	28.6	28.1
Desire for son	3.8	67.1	50.0
Desire for daughter	69.2	4.3	21.9
Total	100.0	100.0	100.0
Number	26	70	96
Chi-square value = 51.76			P value = 0.000
			Cramer's value = 0.73

Menstrual regulation group

Reason of desire for more children	Living son		Total per cent
	Had living son per cent	Had no living son per cent	
Desire for complete family size	28.2	24.7	25.9
Desire for son	7.7	71.2	49.1
Desire for daughter	64.1	4.1	25.0
Total	100.0	100.0	100.0
Number	39	73	112
Chi-square value = 57.61			P- value = 0.000
			Cramer's value = 0.71

**Husband's opinion**

In the Vietnamese context, most Vietnamese follow confucian and the husband plays an important role in the family . There is a famous Vietnamese saying 'xuât gia tông phu' that means as the girl get married with someone her future life will wholly belong to

her partner. Likewise, the husband will be the one who often gives decision-making regarding family life, especially in fertility decision-making. Under the modernization process, the role of the husband and the wife have been gradually changing and the wife now have more rights in the family than her ancestors. Therefore, it is necessary to find out whether the husband's opinion involved in the desire for no more children of their wives.

When the respondents were asked about the question about who making decision on the number of living children in their family. In induced abortion group, three-quarter (70.0 per cent) of women answered that both the husband and wife are the ones who decide the number of children . One-fifth (20.0 per cent) of them stated that the number of children wholly depend on their husband's opinion. The rest, 10.0 per cent, stated that they can decide the number of their children by themselves. Therefore, it can be said that about 90.0 per cent of women whose their husband's opinion will influence on their fertility decision-making. In menstrual regulation group, the situation is similar, the proportion of women who can not decide the number of children by themselves was 90.5 per cent (Table 4.10). This figure suggests that husband play an important role to fertility decision of their wives.

Once the husband 's opinion influence the fertility, then it can assume that the husband will be involved in decision-making of desire for no more children of his partner as well. Table 4.11 shows the relationship between desire for children of the husband and desire for children of his wife. The results indicate that in both induced abortion and

menstrual regulation group, for the husband who desire more children most of their wives also want more children (88.8 per cent in induced abortion and 84.2 per cent in menstrual regulation group). Similarly, for the husband who desire no more children most of their partners also did not want any more children (65.8 per cent and 74.2 per cent in induced abortion and menstrual regulation group). The proportion of the women desire no more children increased from the proportion of women whose husband desire more children to the proportion of women whose husband desire no more children (11.3 per cent compared with 65.8 per cent, respectively). After the statistical test with a Chi-square of 58.03 in abortion and of 64.39 in menstrual regulation group, it was found that there was the relationship between desire for children of husband and desire for children of wife. The more husband did not want any more children the more wife desire no more children.

**Table 4.10** Percentage distribution of person who making decision on number of living children in family by types of pregnancy termination

Person making decision	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Husband	20.0	14.0	16.6
Wife	10.0	9.5	9.7
Both husband and wife	70.0	76.5	73.7
Total	100.0	100.0	100.0
Number	200	200	400

Table 4.11 Wife 's desire for children by husband's desire for children

Induced abortion group

Wife's desire	Husband's desire		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
Desire for more children	88.8	34.2	56.0
Desire for no more children	11.3	65.8	44.0
Total	100.0	100.0	100.0
Number	80	120	200
Chi-square value = 58.03			P value = 0.000
			Cramer's value = 0.53

Menstrual regulation group

Wife's desire	Husband's desire		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
Desire for more children	84.2	25.8	48.0
Desire for no more children	15.8	74.2	52.0
Total	100.0	100.0	100.0
Number	76	124	200
Chi-square value = 64.39			P- value = 0.000
			Cramer's value = 0.56

However, reversely, in examine whether the wife's opinion will influence to her partner's opinion regarding to the desire for no more children. In order to answer this question, the results in Table A6 (Appendix A) show that in both two groups, for the women who desire no more children their husbands also wanted no more children ( $P < 0.05$ ).

Methodologically, the information from husband and wife were somewhat the same. It can be suggested that social interaction played important role in fertility decision. For most couples, desire for no more children resulted from the exchange between the husband's and wife's opinion .

### **Government policy**

In order to reduce the rapid growth rate of population, Vietnam formally introduced in late 1988 a comprehensive fertility policy encouraging parents to have no more than two children. The influence of one-two children policy on government official could be seen clearer as we compare the average number of living children of couples who are government employee, private employee and unemployed. Data in Table 4.13 show that in induced abortion group the average number of living children of the couples who were government employee was lower than the average number of living children of the couples who were unemployed and who were private employee (mean of 1.3 compared to mean of 5.0 and 1.8, respectively). Similarly, in menstrual regulation group, the average number of living children of the couples who were private employee was higher than the average number of living children of couples who were government employee (mean of 1.7 compared with mean of 1.3, respectively).

In this study, the relationship between government policy and desire for no more children was investigated under the assumption that the couples who were government employee with two children should desire no more children than the others with two

children. The rational for expecting this may be that such couples who were government employee are more concerned about the population policy than the others and they may not want their family size exceed two children so that they do not violate the policy.

**Table 4.12 Mean living children by type of couple's occupation**

Type of couple's occupation	Pregnancy termination group		Total
	Induced abortion	Menstrual regulation	
Unemployed	5.0	—	5.0
Private employee	1.8	1.7	1.8
Government employee	1.3	1.3	1.3
Total	1.6	1.5	1.6
Number	200	200	400

In Hochiminh city, those who were government employee have a chance to learn about population policy and to be encouraged to follow the policy more than the others. In most of government bodies, besides production skills and social contributions, family planning practice also is criteria to choose those who obtain a production award and the accompanying bonuses every six months.

Data in Table 4.13 show that in induced abortion group, the percentage of desire for no more children was highest among the couples who were government employee whereas the percentage of desire for more children was highest among the couples who were private employee. Based on a Chi-square test of 4.12, there was a association between desire for children and the type of occupation. In other words, the

government employee with two children tend to desire no more children than the private official with two children.

In menstrual regulation group. The highest percentage of desire for more children was in the couples who are government employee and the highest percentage of desire for no more children was in the couples who are unemployed. However, a statistical test with a Chi-square of 0.04, showed that there was no association between desire for children and type of occupation.

To sum up, based on the above statistic it could be suggested that the one or two children policy is universal among Vietnamese, especially for those who were government employee.

**Table 4.13** Desire for children by types of couple's occupation (controlling by couples who have two children)

**Induced abortion group**

Desire for children	Types of couple's occupation		Total per cent
	Government employee per cent	Private employee per cent	
Desire for more children	10.7	33.3	21.8
Desire for no more children	89.3	66.7	78.2
Total	100.0	100.0	100.0
Number	28	27	55
Chi-square value = 4.12	P value = 0.042	Cramer's value = 0.25	

Menstrual regulation group

Desire for children	Type of couple's occupation		Total per cent
	Government employee per cent	Private employee per cent	
Desire for more children	26.7	29.2	27.8
Desire for no more children	73.3	70.8	72.2
Total	100.0	100.0	100.0
Number	30	24	54
Chi-square value = 0.041		P value = 0.838	Cramer's value = 0.06

Note : No cases of couple with two children were unemployed in both induced abortion and menstrual regulation group.

To sum, from above findings we can concluded that the number of living children, age, son preferences, husband support and one or two children policy are the important factors which resulted in women's desire no more children.

#### 4.2.4 The association between desire for no more children and the pregnancy termination

Related to the question is that whether a woman with desire for no more children is likely to get pregnancy termination. Results in Table 4.14 shows that in induced abortion group, most of women with desire for more children and women with desire for no more children had one pregnancy termination (59.4 per cent and 40.4 per cent, respectively). However, the highest proportion of women with two or three pregnancy terminations and above belonged to the women who have desire for no more children (34.6 per cent and 25.0 per cent, respectively). In menstrual regulation group,

the highest proportion of women with one pregnancy termination was in the women who have desire for more children (53.6 per cent) whereas, the highest proportion of women with three pregnancy terminations and above belonged to the women who have desire for no more children. The statistical test with Chi-square of 9.04 in induced abortion and 17.00 in menstrual regulation group showed that there was the relationship between desire for children and number of pregnancy termination in both two groups. It can be concluded that those who wanted no more children tend to get more pregnancy termination than the other ones.

It was known that the women with desire for no more children were of older age and also had the higher number of living children. These women also desire no more children than the others. Therefore, it is assumed that the number of living children and the age are the factors that influence to the number of pregnancy termination among women with desire for no more children. Table A7 (Appendix A) support that most of women who have the higher number of living children practiced more pregnancy terminations than the women who have the lower number of living children ( $P < 0.05$ ).

For the women's age, data in Table A8 (Appendix A) also indicates that the older women were likely to resort to pregnancy termination than the younger ones ( $P < 0.05$ ). Hence, it can suggested that the higher number of living children and the older age were the main reasons that explain why women who wanted no more children used pregnancy termination than the others.

**Table 4.14** Number of pregnancy termination by desire for children

**Induced abortion group**

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	59.4	40.4	49.5
2	29.2	34.6	32.0
3+	11.5	25.0	18.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>96</b>	<b>104</b>	<b>200</b>
<b>Mean pregnancy termination</b>	<b>1.6</b>	<b>1.9</b>	<b>1.7</b>
<b>Chi-square value = 9.04</b>			<b>P value = 0.010</b>
			<b>Cramer's value = 0.21</b>

**Menstrual regulation group**

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	53.6	30.7	43.5
2	33.0	33.0	33.0
3+	13.4	36.4	23.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>112</b>	<b>88</b>	<b>200</b>
<b>Mean pregnancy termination</b>	<b>1.6</b>	<b>2.2</b>	<b>1.9</b>
<b>Chi-square value = 17.00</b>			<b>P value = 0.000</b>
			<b>Cramer's value = 0.29</b>

In order to examine more the relationship between desire for no more children and number of pregnancy termination, the educational factor including husband's

educational level and wife's educational level were employed to control this relationship. Because it generally known that educational factor is an important one that influence to the knowledge and behavior of person.

As desire for children is controlled by husband's educational level. The data in Table A9 (Appendix A) show that in both two groups there was still association between desire for children and number of pregnancy termination in husband's high school educational level and above. However, there was no association between two variable in husband's secondary educational level and under.

As desire for children is controlled by wife's educational level. The results in Table A10 (Appendix A) show that in both two groups there was again association between desire for children and number of pregnancy termination in women's secondary educational level and under. However, there was no association between two variables in women's high school educational level and above.

The numerous studies have shown that women who are highly motivated to control family size will use both pregnancy termination and contraception (David et al., 1978; Potts et al., 1977) and women who have had one abortion are likely to resort to another to avoid the future birth (Tietze, 1978a). In this study, it should be noted that pregnancy termination was not the uncommon experience to our respondents, especially for women with desire for no more children. Data in Table 4.15 indicates that in both groups, 38.0 and 41.0 per cent of women experienced with past pregnancy termination have used method in the past and present because they did not want any more children,

while 16.0 and 20.0 per cent of women in above two groups used method in the past because they wanted to delay the birth for some reasons and now they used method for controlling their family size.

**Table 4.15** Percentage distribution of desire for no more children and delay the birth in past and present by type of pregnancy termination.

Reason of use	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
. Desire for no more children in the past and present	41.0	38.0	39.5
. Delay the birth in the past and desire no more children now	20.0	15.8	17.9
. Delay the birth in the past and present	39.0	46.2	42.6
Total	100.0	100.0	100.0
Number of women with past and present pregnancy termination	100	113	213

\* Delay the birth including such reasons as economic reason, birth spacing and health problem.

This means that there is the need to limit family size among these women. Consequently, the fact showed that they resorted to pregnancy termination to solve their need.

In summary, most of the respondents resorted to pregnancy termination because they have desire for no more children. It was found that age, number of living children, income, living son, husband's opinion, occupation were the factors that influence to desire for children of women (want more or want no more children). In comparison with women who want more children, women with desire for no more

children were older, have the higher number of living children and already had son. The couples with two children who were government employee were likely to desire no more children than the others. More importantly, most of them have completed the family size. Driven by the need of limiting family size, as the unwanted pregnancy occur these women used induced abortion or menstrual regulation to terminate it. More over, it should be emphasized that pregnancy termination was ever used in the past with the same reason among these women. Therefore, it can be stated that there was the relationship between desire for no more children and pregnancy termination. In other words, desire for no more children can be considered a factor which motivate women to adopt pregnancy termination.

#### **4.3. Contraceptive practice and pregnancy termination**

In the previous section, we observed that most of women practicing pregnancy termination have desire to limit their family size . Under this motivation, some of them ever used contraception to prevent the pregnancy. Besides, there was substantial proportion of women did not practice any form of contraceptive at all. However, the facts showed that all of them have had to resort to pregnancy termination to eliminate the unwanted pregnancy. Therefore, in order to get more understanding about why women rely on pregnancy termination as well as the relationship between their contraceptive use and pregnancy termination use, this section will be attempted to investigate the contraceptive behavior in terms of how they related to pregnancy termination, knowledge

and attitude about the pregnancy termination among these women. The findings from these are highly significant when considered in the context of national concern to prevent unwanted pregnancies and thus reduce the demand for pregnancy termination.

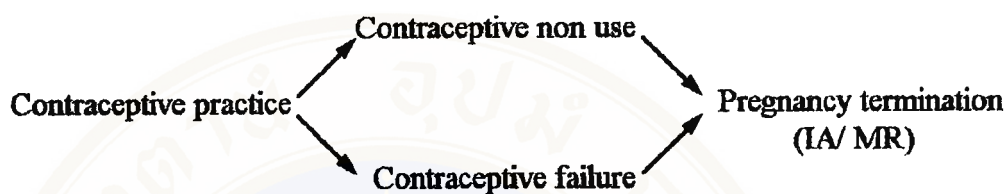
In order to gain above purpose, the respondents were asked to answer the designed questions related their contraceptive behavior, contraceptive method used, reason of contraceptive non use or use irregular, awareness about complications of pregnancy termination, desirability about modern contraceptive and pregnancy termination, etc.

It is to note that the term contraception as used in this study includes any method (modern or traditional method) employed either by the woman or her partner to prevent the pregnancy. Therefore, if a woman used a method which was not recognized medically as a reliable or effective contraceptive such as rhythm and withdrawal, she still was considered a 'user'.

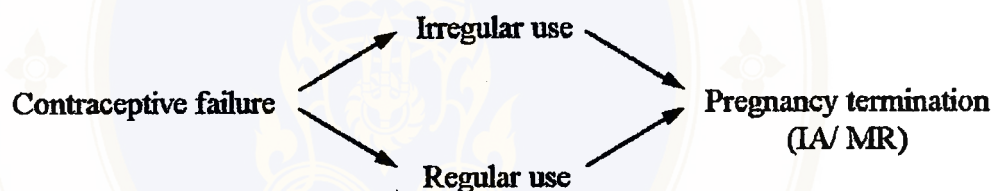
The main indicators that were employed for analyzing the association between contraceptive practice and pregnancy termination is illustrated in Figure 2.

**Figure 2: Main indicators of contraceptive practice, contraceptive failure and contraceptive non use that related with pregnancy termination**

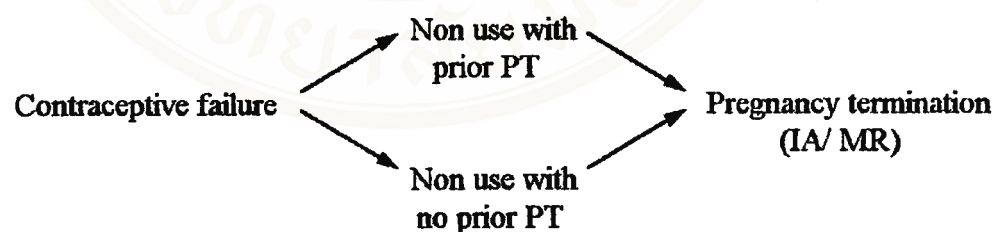
**Contraceptive practice and pregnancy termination**



**Contraceptive failure and pregnancy termination**



**Contraceptive non use and pregnancy termination**



**Note: PT- Pregnancy termination; IA- Induced abortion; MR- Menstrual regulation**

### 4.3.1 Contraceptive use status

According to the current contraceptive use status, the couples were classified into three groups : (1) regular users, (2) irregular users, and (3) non users or the do-nothing group.

*Regular users* were highly motivated to prevent pregnancy. They claimed to have used contraception from the last menstruation and followed it through during every sex act. At time of interview they still were overly concerned about getting pregnant. However, the pregnancy still occurred. It is assumed that they used unreliable or ineffective method (rhythm and withdrawal) or used effective method improperly.

*Irregular users* practiced contraception, but they did not use it consistently and consequently, they get unwanted pregnancy.

*Non users* or do-nothing group made no effort at all to avoid pregnancy.

In this study, *regular user* and *irregular user* were considered as contraceptive failure user because the fact showed that these women get unwanted pregnancy although they used contraceptive before. The contraceptive failure users were identified by asking if they had used contraceptive since the last menstruation.

Data in Table 4.16 shows that a majority (65.0 per cent) of the women did not use any contraceptives or used them inconsistently. More than one-third (35.0 per cent) reported to have used contraceptives with every sex acts.

**Table 4.16 Percentage distribution of current contraceptive use status by types of pregnancy termination.**

Contraceptive Use status	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Regular use	41.5	28.5	35.0
Irregular use	25.0	42.5	33.8
Non use	33.5	29.0	31.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>200</b>	<b>200</b>	<b>400</b>

Compared with this finding, the study on pregnancy termination patients, undertaken by Do (1991) in Hanoi and Thaibinh (Vietnam), made similar observations. The study found that the proportion of non users aged 18-49 was 38.3 per cent, and those who used contraceptive but still get pregnancy accounted for 61.7 per cent.

Concerning the process of use of contraceptive of respondent. The couples were classified into two groups: (1) ever users including those who ever used contraceptive in the past or those who only used it now and (2) never users including those who use no contraceptive in the past as well as in present. The statistics in Table 4.17 indicate that about 23.5 per cent of women in induced abortion group and 20.0 per cent of women in menstrual regulation group who were never users of contraceptive. It could be suggested that these women used pregnancy termination as family planning method.

**Table 4.17** Percentage distribution of ever user and never user by types of pregnancy termination

Contraceptive use	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Ever user	76.5	80.0	78.3
Never user	23.5	20.0	22.7
Total	100.0	100.0	100.0
Number	200	200	400

#### 4.3.2 Methods of contraception

While the non use or use irregular of contraceptive can expose a woman to the risk of pregnancy, the types of method used may further intensify the risks.

For the methods which woman and her husband were using since the last menstruation. Data in Table 4.18 show that for wives, the proportion of women using traditional method, namely rhythm, was higher than the proportion of women reported modern method, namely IUD and oral pill, (41.0 per cent compared with 19.3 per cent, respectively). The proportion of women using modern method in menstrual regulation and induced abortion was not too quite different (19.0 per cent compared with 19.5 per cent, respectively) . The proportion of women using rhythm in menstrual regulation was higher than in induced abortion group (42.5 per cent compared with 39.5 per cent, respectively).

For the husbands, the proportion of husband using traditional method, namely withdrawal, was slightly higher than in modern methods (23.5 per cent compared with 22.3 per cent, respectively). The proportion of husband using condom in menstrual regulation was higher than in induced abortion group (24.0 per cent compared with 20.5 per cent, respectively). The proportion of husband used withdrawal in both two group was the same (23.5 per cent).

In sum, the current use of modern method among couples using pregnancy termination was not high. For wives, the proportion of wives reported traditional contraceptive (unreliable method) and contraceptive non use was more than the proportion reported modern contraceptive (more effective method) by four times in both two groups. Rhythm was used more popular than IUD and oral pill. For the husbands, the situation was similar, the proportion of husband used modern methods were less than the proportion reported the traditional methods and non use by three times. Withdrawal was more frequently practiced than condom.

The high proportion of traditional method used in both male and female, especially rhythm method, in Hochiminh city can be explained by history and duration of family planning program. Before the revolution 1975, Southern Vietnam including Hochiminh city mostly did not have family planning program and rhythm was most popular method used at that time (Hung,1990). After revolution of 1975, and especially, after 1984 as the National Committee for Population and Family (NCPF) was established, the family planning program was just promoted in southern Vietnam. In

addition, the source of modern contraceptive method was very limited at that time (Goodkind,1994). Therefore, the limit of supply combined with the long history of rhythm method used and the young family planning program could be considered the factors which explain the proportion of traditional method used is still high now.

**Table 4.18** Percentage distribution of types of contraceptive method used from the last menstruation by types of pregnancy termination

Types of contraceptive method	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
<b>Female</b>			
<b>1. Modern method</b>			
IUD	11.5	10.5	11.0
Oral pill	8.0	8.5	8.3
<b>2. Traditional method</b>			
Rhythm	39.5	42.5	41.0
<b>3. No method use</b>	41.0	38.5	39.7
<b>Total (all method)</b>	100.0	100.0	100.0
<b>Number</b>	200	200	400
<b>Male</b>			
<b>1. Modern method</b>			
Condom	20.5	24.0	22.3
<b>2. Traditional method</b>			
Withdrawal	23.5	23.5	23.5
<b>3. No method use</b>	56.0	52.5	54.2
<b>Total (all method)</b>	100.0	100.0	100.0
<b>Number</b>	200	200	400

Note: Types of male method was collected by the report of the wife.

### 4.3.3 Reasons for contraceptive non use

The results in Table 4.19 shows that the main reason given for contraceptive non use was that the husband's objection and the lack of knowledge of using the method (26.2 per cent and 25.9 per cent). The proportion of women reported husband's objection as a reason for non use was higher in menstrual regulation than induced abortion group by approximately 13.0 per cent. In contrast, the lack of knowledge of use was higher in induced abortion than menstrual regulation group around 9.7 per cent. Besides, the another important reason was the believe that modern methods were harmful to health (19.4 per cent for induced abortion group and 19.0 per cent for menstrual regulation group). About 19.4 per cent and 13.8 per cent of women in induced abortion and menstrual regulation group cited the unavailability of modern methods as their reason for non use. The last reason for non use of contraceptive was the health problem in using contraceptive.

Concerning the lack of knowledge of contraceptive use as reason of non use, the respondents reported that they did not gain the correct and complete information on methods of contraceptives from health personnel as well as from their commune health centers. Therefore they did not how to choose and use it. More over, it is observed that the drug market in Hochiminh city was diversity, especially in Combined Oral Contraceptives (COC<sub>s</sub>) which have been imported from various countries. However the mass media in family planning program did not provide fully information for users. Hence, the users were difficult to get information as well as to make decision in choosing which method is suitable for them.

Regarding to the women who cited availability of method as reason of non use, the respondents stated that condom and oral pill were their preferred methods. However, their commune health center and district hospital had condoms and oral pill shortage. It should be noted that although the district hospitals are authorized to supply a full range of contraceptives, in practice they emphasized the IUD. More over, for the facilities at a lower level than hospital were not in principle authorized to supply oral pill. The respondents also stated that they could not go to the private drug stores because they did not believe on the quality of products from those places.

In short, the lack of knowledge of contraceptive use and support of husband, and belief that modern contraceptive are harmful to health were the main reasons accounted for contraceptive non use among women practicing pregnancy termination.

Table 4.19 Percentage distribution of reason of contraceptive non use of couple by types of pregnancy termination

Reason of non use	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Husband objection	19.4	32.8	26.2
Unavailability	19.4	13.8	16.6
Don't know how to use	31.3	20.6	25.9
Side effects on health	19.4	19.0	19.2
Health problems	10.5	13.8	12.1
Total	100.0	100.0	100.0
Number	67	58	125

### **Factors related to contraceptive use**

Besides the social and technical barriers, other factors influence the extent to which a woman is likely to use contraceptive method. In this study, in menstrual regulation group the older woman was likely to use contraceptive methods (Table 4.20). The proportion of women using contraceptive increased from the age group 18-24 to the age group 35-49 (45.7 per cent compared with 87.2 per cent, respectively). In contrast, the proportion of women use no contraception decreased from the age group 18-24 to the age group 35-49 (54.3 per cent compared with 12.8 per cent, respectively). Similarly, in induced abortion group the highest percentage of couples who were using contraceptive belonged to the age group 35-49 and the highest percentage of women who were not using contraceptive were in the age group 18-24 (75.9 per cent and 41.2 per cent, respectively). However, the statistical test shows that there was no relationship between the contraceptive use and women's age in induced abortion group.

The women with higher number of living children were also more active contraceptors (Table 4.21). In both induced abortion and menstrual regulation group, the increased use of contraception was generally associated with increased number of living children. The percentage of women using contraceptive method increased from 45.5 per cent and 36.8 per cent of women with no child to 67.4 per cent and 80.6 per cent of women with three children and above children in induced abortion and menstrual regulation group. The association between number of living children in menstrual

regulation group was slightly stronger than in induced abortion group (Cramer's V of 0.36 compared with 0.25, respectively).

In menstrual regulation group, women with desire for no more children were more likely to use contraception than women with desire for more children ( $P < 0.05$ ). However, in induced abortion group, there was no association between desire for children and contraceptive use (Appendix A Table A11).

There was no difference between women with lower educational level and women with higher one on contraceptive use and non use in both two groups (Appendix A Table A12).

Table 4.20 Contraceptive use by age

Induced abortion group

Contraceptive use	Age				Total per cent
	18-24 per cent	25-29 per cent	30-34 per cent	35-49 per cent	
Use	58.8	58.3	72.1	75.9	66.5
No use	41.2	41.7	27.9	24.1	33.5
Total	100.0	100.0	100.0	100.0	100.0
Number	51	48	43	58	200
Chi-square value = 5.671		P value = 0.128		Cramer's V = 0.16	

Menstrual regulation group

Contraceptive use	Age				Total per cent
	18-24 per cent	25-29 per cent	30-34 per cent	35-49 per cent	
Use	45.7	67.8	83.3	87.2	71.0
No use	54.3	32.2	16.7	12.8	29.0
Total	100.0	100.0	100.0	100.0	100.0
Number	46	59	48	47	200
Chi-square value = 24.210		P value = 0.000		Cramer's V = 0.34	

Table 4.21 Contraceptive use by number of living children  
Induced abortion group

Contraceptive use	Number of living children				Total per cent
	None per cent	One per cent	Two per cent	Three + per cent	
Use	45.5	70.7	78.2	67.4	66.5
No use	54.5	29.3	21.8	32.6	33.5
Total	100.0	100.0	100.0	100.0	100.0
Number	44	58	55	43	200
Chi-square value = 12.591		P value = 0.005		Cramer's V = 0.25	

Menstrual regulation group

Contraceptive use	Number of living children				Total per cent
	None per cent	One per cent	Two per cent	Three + per cent	
Use	36.8	76.4	81.5	80.6	71.0
No use	63.2	23.6	18.5	19.4	29.0
Total	100.0	100.0	100.0	100.0	100.0
Number	38	72	54	36	200
Chi-square value = 27.026		P value = 0.000		Cramer's V = 0.36	

#### **4.3.4 Reason for contraceptive failure**

As mentioned in above part, there were two types of contraceptive failure that related to pregnancy termination including irregular use and regular contraceptive use.

##### **Irregular contraceptive use**

The data in Table 4.22 present the reasons for irregular use of the method.

For the women used IUD, the main reason of irregular use was IUD had expelled (89.1 per cent) . The proportion reporting 'IUD was expelled' was 8 points higher in induced abortion than in menstrual regulation group. The remaining of IUD user (10.1 per cent) reported 'bloody' as the their reason given for irregular use of IUD.

For the women whose partners used condom, the most important reason given for irregular use of condom is that 'condom is uncomfortable'. Slightly more than half of the women (53.3 per cent) reported 'condom is uncomfortable'. The proportion reporting 'uncomfortable' was 14 points higher in menstrual regulation than in induced abortion group. Less than half of women (46.6 per cent) cited 'Forget to use' as the reason for irregular use. A higher proportion of women in induced abortion than in menstrual regulation group mentioned 'forget to use' as the reason for irregular use of condom (53.3 per cent compared with 40.0 per cent, respectively).

For the women used IUD, the main reason of irregular use was IUD had expelled (89.1 per cent). The proportion reporting 'IUD was expelled' was 8 points higher in induced abortion than in menstrual regulation group. The remaining of IUD user (10.1 per cent) reported 'bloody' as the their reason given for irregular use of IUD.

**Table 4.22 Percentage distribution of reasons of irregular contraceptive use by types of pregnancy termination**

Reason of irregular use	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
<b>1. Modern method</b>			
<b>IUD</b>			
Expelled	93.3	85.0	89.1
Bloody	6.7	15.0	10.9
Total	100.0	100.0	100.0
Number	15	20	35
<b>Condom</b>			
Forget to use	53.3	40.0	46.6
Uncomfortable	46.7	60.0	53.4
Total	100.0	100.0	100.0
Number	15	30	45
<b>Oral pill</b>			
Forgot to take	78.5	76.4	77.4
Not sure	21.5	23.6	22.6
Total	100.0	100.0	100.0
Number	14	17	31
<b>2. Traditional method</b>			
<b>Rhythm</b>			
Forget to watch calendar	31.4	27.2	29.3
Inactive in sexual life	48.4	54.5	51.4
Irregular menstruation	20.2	18.3	19.3
Total	100.0	100.0	100.0
Number	35	55	90
<b>Withdrawal</b>			
Forgot to withdrawal	40.0	40.0	40.0
Not sure	60.0	60.0	60.0
Total	100.0	100.0	100.0
Number	6	15	21

For the women whose partners used condom, the most important reason given for irregular use of condom was that 'condom is uncomfortable'. Slightly more than half

of the women (53.3 per cent) reported 'condom is uncomfortable'. The proportion reporting 'uncomfortable' was 14 points higher in menstrual regulation than in induced abortion group. Less than half of women (46.6 per cent) cited 'Forget to use' as the reason for irregular use. A higher proportion of women in induced abortion than in menstrual regulation group mentioned 'forget to use' as the reason for irregular use of condom (53.3 per cent compared with 40.0 per cent, respectively).

For women who used oral pill, slightly more than three-fourths of women (77.4 per cent) reported 'forgot to take' as the main reason for irregular use. The similar proportion of women in induced abortion and menstrual regulation group mentioned 'forgot to take' as the reason for irregular use (78.5 per cent and 76.4 per cent, respectively).

For women used rhythm, it was found that 'inactive in sexual life' was the main reason given for irregular use of rhythm in induced abortion and menstrual regulation group (48.4 per cent and 54.5 per cent, respectively). The second reason was 'forget to watch calendar' (31.4 per cent and 27.2 per cent, respectively). The last one was 'irregular menstruation' (20.2 per cent and 18.3 per cent, respectively).

For women whose their partners used withdrawal, the same percentage of women in both two groups stated that 'forget to withdrawal in time' was the main reason of irregular use of withdrawal (60.0 per cent in both two groups).

In sum, the noncompliance behaviors in contraceptive (forgetting to use oral pill, forget to watch calendar in rhythm use), as well as the psychological barriers

(uncomfortable in condom use) and passive behavior in sexual life (in rhythm and withdrawal) were the leading reasons account for the contraceptive irregular use among these women.

#### **Regular contraceptive use**

From the Table 4.16, the proportion of couple use contraceptive regular was 35.0 per cent of all couples. Despite they used method regular their pregnancy still occurred. From the literature review, we know that two important conditions to successful in using contraceptive are use it regular and use it proper, more over the methods used must be effective ones. Therefore, for these couple, it is assumed that these women used effective method incorrectly or used less effective ones.

The reason of improper use was not planned in this study. In fact, it is difficult to know accurately whether the women were using method proper. Because the evaluation would depend on either women's reports of their own behavior (proper use or not) or an independent assessment by an outside investigator during every month of use (Trussell and Kost,1986). More over, even if women report that they are continuous users of a method over time, they may still be at risk of becoming pregnant if they are not using a method correctly (Molyneaux and Kantner, 1990).

However, for the couples who used contraceptive regular but still get pregnancy, there are two things should be to note . First, majority of couple in regular user group used unreliable methods including rhythm and withdrawal. As shown in table 4.23, 70.3

per cent and 74.7 per cent of regular users in induced abortion and menstrual regulation group were practicing rhythm and withdrawal. Under medically standard, it is generally known that these two methods are the unreliable ones and usually associated with the high risk of pregnancy. Okolski (1983) demonstrated the positive correlation between the frequency of use of traditional methods including rhythm and withdrawal and use of induced abortion.

**Table 4.23** Percentage distribution of types of method used regularly by types of pregnancy termination

Method used	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
IUD	6.6	1.3	3.9
Oral pill	1.6	0.0	0.8
Condom	21.5	24.0	22.7
Rhythm	36.4	40.0	38.3
Withdrawal	33.9	34.7	34.3
Total	100.0	100.0	100.0
Number	121	75	196

Second, the proportion of women using IUD but still get pregnancy was 3.9 per cent in which, the IUD users in induced abortion was higher than in menstrual regulation group (6.6 per cent compared with 1.3 per cent, respectively). For these women, the main reason of their contraceptive failure because all of them used a type of IUD, namely Dana. Dana and Copper T were two main types of IUD which are used popular in Vietnam and Hochiminh city. The fact showed that it is ineffective modern method. To

support this finding, one research in Northern Vietnam (Do,1991) founded that 14.9 per cent of all women get pregnancy termination because they used these two methods.

#### 4.3.5 Attitude towards contraceptive use

From section 4.2, it was found that most of respondents desired to have a small family size. Besides their contraceptive behavior we already examined, what need to find out here is that how is their attitude towards contraceptive use especially, their opinion regarding the women's active in contraceptive use.

The statistics in Table 4.24 show that more than half of the women in two groups disagreed about the statement that 'women could be active in using contraceptive' (The same 54.0 per cent in induced abortion and menstrual regulation group).

Table 4.24 Percentage distribution of women's opinion regarding 'Women could be active in contraceptive use' by type of pregnancy termination

Active in contraceptive use	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Agree	46.0	46.0	46.0
Disagree	54.0	54.0	54.0
Total	100.0	100.0	100.0
Number	200	200	400

Moreover, it should be noted that nearly half of women in menstrual regulation group (46.0 per cent) and more than half of women in induced abortion group (52.4 per

cent) who did not want any more children expressed that women could not be active to contraceptive use (Table 4.25). For these women, desire for no more children (or desire to limit family size) was not link with the responsibility on contraceptive use.

**Table 4.25 Percentage distribution of women's opinion regarding to ' to be active in using contraception' by desire for children**

**Induced abortion group**

Active in contraceptive use	Desire for children	
	Desire for more children	Desire for no more children
Agree	44.8	47.6
Disagree	55.2	52.4
Total	100.0	100.0
Number	96	104

**Menstrual regulation group**

Active in contraceptive use	Desire for children	
	Desire for more children	Desire for no more children
Agree	39.8	54.0
Disagree	60.2	46.0
Total	100.0	100.0
Number	112	88

It has been observed by many previous studies that women's attitude towards contraceptive use are positive or negative depend on their education level and their role in family. That is women with higher education or have more authority in family will be more active in their fertility behavior as well as their attitude towards contraceptive use. Therefore, in this study it is assumed that women's education and women's role will be

factor that impact to attitude towards contraceptive use among women with desire for no more children.

In induced abortion and menstrual regulation group, the highest percentage of women believed on the women's active in contraceptive use were in the women with higher educational level (65.7 per cent of women with high school educational level in induced abortion group and 75.0 per cent of women with college educational level in menstrual regulation group). In contrast, the highest percentage of women who did not believe on the women's active were in the women with the lower educational level (57.7 per cent of women with primary educational level in induced abortion group and 60.0 per cent of women with the same educational level in menstrual regulation group). However, the statistical test show that there was no association between the women's active in contraceptive use and women's education in both two groups (see Table 4.26).

It is interesting to note that there was the relationship between women's opinion regarding women's active in contraceptive use and women's decision in family in both induced abortion and menstrual regulation group ( $P < 0.05$ ). As shown in Table 4.27, the highest percentage of women who believe on women's active were in women who make decision in family by themselves (92.3 per cent in induced abortion and 90.0 per cent in menstrual regulation group). Therefore, women who had more authority in family tend to believe they can be active in using contraceptive more than women with less authority in family.

To conclude, less authority in family was the important factor that explain why most of women who desire no more children have negative attitude towards contraceptive use. It is necessary to note that the negative attitude towards contraceptive use will influence to use or non use of contraceptive as well as the effective use of contraceptive (David,1992).

Table 4.26 The opinion about 'women could be active in contraceptive use' by women's educational level  
Induced abortion group

Active	Wife ' s educational level				Total per cent
	Primary per cent	Secondary per cent	High school per cent	College per cent	
. Agree	42.3	45.9	65.7	50.0	51.9
. Disagree	57.7	54.1	34.3	50.0	48.1
Total	100.0	100.0	100.0	100.0	100.0
Number	26	37	35	6	104
Chi-square value = 4.16		P value = 0.243		Cramer's V = 0.21	

Menstrual regulation

Active	Wife ' s educational level				Total per cent
	Primary per cent	Secondary per cent	High school per cent	College per cent	
. Agree	40.0	57.1	48.3	75.0	51.1
. Disagree	60.0	42.9	51.7	25.0	48.9
Total	100.0	100.0	100.0	100.0	100.0
Number	20	35	29	4	88
Chi-square value = 2.5		P value = 0.474		Cramer's V = 0.15	

**Table 4.27: The opinion about 'women could be active in contraceptive use' by person make decision in family**

**Induced abortion group**

Active	Decision in family			Total per cent
	Husband per cent	Wife per cent	Both per cent	
Agree	53.1	92.3	42.4	51.9
Disagree	46.9	7.7	57.6	48.1
Total	100.0	100.0	100.0	100.0
Number	32	13	59	104
Chi-square value = 10.667		P value = 0.004		Cramer's V = 0.32

**Menstrual regulation**

Active	Decision in family			Total per cent
	Husband per cent	Wife per cent	Both per cent	
Agree	65.2	90.0	38.2	51.1
Disagree	34.8	10.0	61.8	48.9
Total	100.0	100.0	100.0	100.0
Number	23	10	55	88
Chi-square value = 11.563		P value = 0.003		Cramer's V= 0.36

**4.3.6 The knowledge and opinion about the pregnancy termination**

Nearly all of women did not have the positive attitude towards pregnancy termination although the facts that all of them practiced it. Table 4.28 confirms that more than 80.0 per cent of the women in induced abortion and menstrual regulation group

considered modern contraceptive more desirable than pregnancy termination . Whereas, there was only 5.0 per cent and 3.0 per cent of the women in above two groups support menstrual regulation.

**Table 4.28** Percentage distribution of women's opinion regarding the desirability of induced abortion / menstrual regulation and modern contraceptive method

Women ' s opinion	Pregnancy termination group		Total
	Induced abortion	Menstrual regulation	
Induced abortion more desirable	0.5	0.0	0.3
Menstrual regulation more desirable	3.0	5.0	4.0
Modern contraceptive more desirable	80.5	83.0	81.7
Above all three methods more desirable	10.0	9.5	9.7
Don't know	6.0	2.5	4.3
Total	100.0	100.0	100.0
Number	200	200	400

However, most of the women did not know about the potential complications of pregnancy termination, despite having had pregnancy termination, they may have experienced these. Table 4.29 shows that the same percentage of women using induced abortion and menstrual regulation (81.0 per cent) did not know about the adverse effects of pregnancy termination. This knowledge deficit was of critical importance which impact to the women's choice to the birth control methods which better for their health.

It should be emphasized that most of respondents think that pregnancy termination is a type of family planning method. The statistics in Table 4.29 indicate that 43.5 per cent of women in induced abortion nearly all women in menstrual regulation group support this statement. This may stem from the fact that in Vietnam pregnancy termination was one of the main methods of current family planning program. The authorities is neither promote it nor intervent it. But, it is used widely in many government as well as private hospitals. In addition, pregnancy termination consultation program for users is limited, these program only have in some main hospitals. In hospital where the sample was drawn, it is observed that there is only one nurse in charge of the consultation work, the pregnancy termination consultation program in hospital only provide the information on name of doctors who perform pregnancy termination, the length of stay, instruction for using contraceptive after pregnancy termination and lack of or too brief information on surgical procedure, the pain involved, the complications and the precautions to take before and after surgery and the differences between contraceptive and pregnancy termination. Therefore, in such absence of information combined with legally and availability of pregnancy termination, it can be understood that why women considered it as family planning method, especially for menstrual regulation.

**Table 4.29** Percentage distribution of knowledge and opinion about pregnancy termination by types of pregnancy termination

Women's opinion	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
<b>'Pregnancy termination's complication'</b>			
Knew	16.0	19.0	17.5
Did not know	81.0	81.0	81.0
Uncertain	3.0	0.0	1.5
Total	100.0	100.0	100.0
Number	200	200	400
<b>'Pregnancy termination is family planning method'</b>			
Agree	43.5	54.0	46.7
Not certain	4.0	0.0	2.0
Disagree	52.5	46.0	49.3
Total	100.0	100.0	100.0
Number	200	200	400

It is just known that most of respondents misunderstood that pregnancy termination is family planning method. Therefore, there is question now is that whether a woman who consider pregnancy termination as family planning method is likely to get more it than the others. This is clearly observed in table 4.30. Data in this table show that in induced abortion group, the percentage of women with one pregnancy termination increased from the women who agreed pregnancy termination is family planning method to the women who did not agree it (42.3 per cent compared with 57.3 per cent). In contrary, the proportion of women with two pregnancy and above decreased from the

women who agreed pregnancy termination is family planning method to the women who did not agree it (57.7 per cent compared with 42.7 per cent). In menstrual regulation group, the situation is similar, the highest percentage of women with more than two pregnancies were among women who agreed pregnancy termination is family planning method (76.6 per cent). The association between the opinion toward pregnancy termination and number of pregnancy termination was found significant at 0.05 level. Therefore, it can be said that the women who considered pregnancy termination as family planning method were more likely to get more pregnancy termination than who did not consider it. In other words, the lack of information as well as the misinformation on pregnancy termination is also the reason explained why women adopted and relied on it.

**Table 4.30** Number of pregnancy termination by women's opinion on ' pregnancy termination is a family planning method'

**Induced abortion group**

Number of pregnancy termination	Pregnancy termination as family planning method		Total per cent
	Yes per cent	No per cent	
One	42.3	57.3	49.5
More than two	57.7	42.7	50.5
Total	100.0	100.0	100.0
Number	104	96	200
Chi-square value = 4.48	P-value = 0.034	Cramer's V= 0.14	

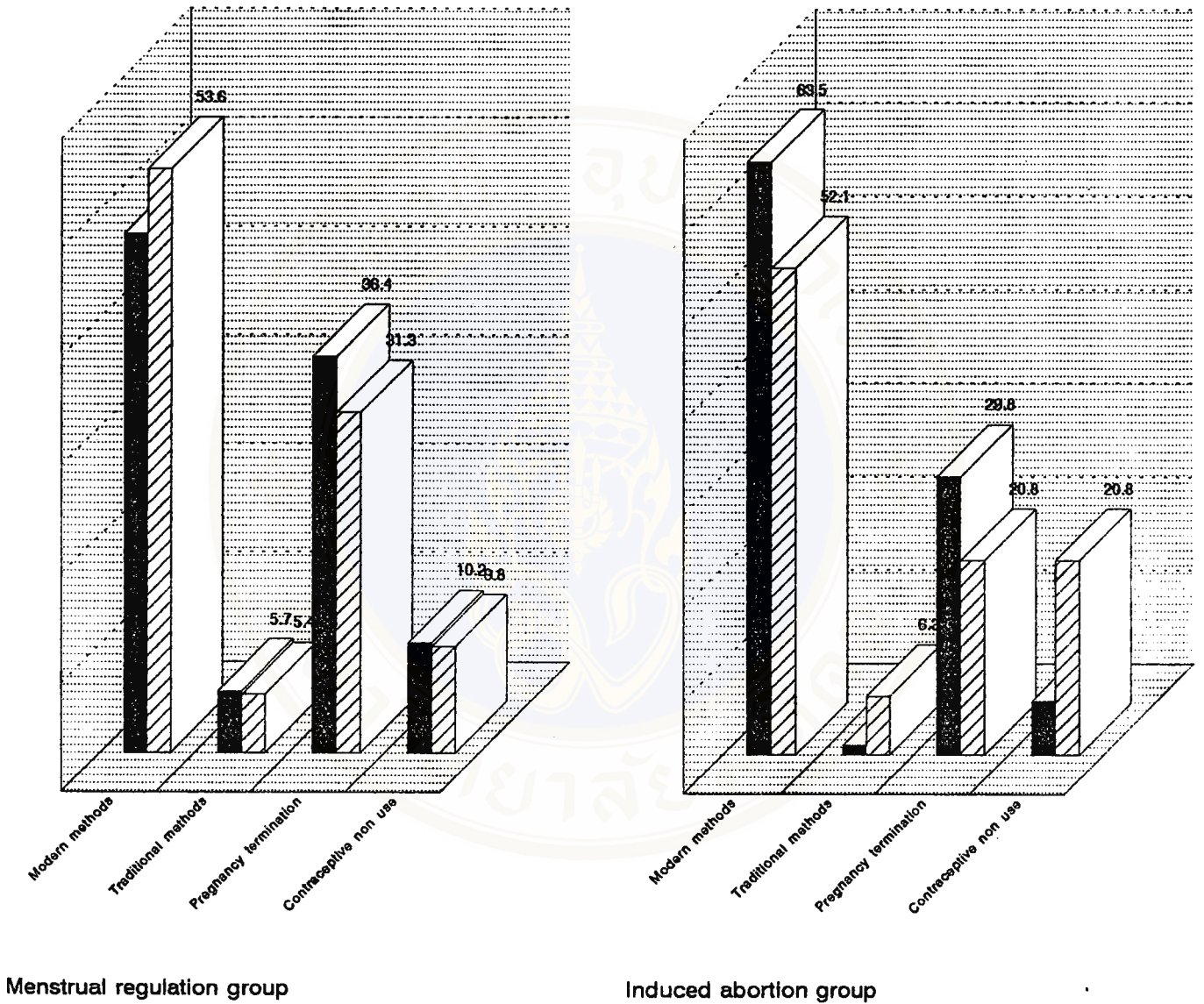
Menstrual regulation group

Number of pregnancy termination	Pregnancy termination as family planning method		Total per cent
	Yes per cent	No per cent	
One	23.4	66.7	43.5
More than two	76.6	33.3	56.5
Total	100.0	100.0	100.0
Number	107	93	200
Chi-square value = 37.959	P-value = 0.000	Cramer's V= 0.43	

Regarding to the intention of use of birth control method after this pregnancy, data in figure 3 show that more than half of both women with desire for more children and desire for no more children in two groups reported that they will use modern contraceptive methods to prevent the pregnancy. In contrast, with the exception of women who desire for children after this pregnancy, there is only about 5.8 per cent and 10.2 per cent of women who wanted more children in induced abortion and menstrual regulation group stated they did not have intention to use any type of birth control method. However, there is the substantial proportion of women stated that they use pregnancy termination again to avoid the next pregnancy (36.4 per cent and 29.8 per cent of women who wanted no more children in menstrual regulation and induced abortion group and 31.3 per cent and 20.8 per cent of women who want children, respectively).

To sum up, from above findings it could be suggested that the lack of information and the misinformation about pregnancy termination also was important factor which motivated women to adopt it as a mean to control their fertility.

**Figure 3 Percentage distribution of future methods use among women with desire for children and women with desire for no more children**



■ Women with desire for no more children    ▨ Women with desire for more children

#### 4.3.7 The association between contraceptive practice and pregnancy termination

##### Contraceptive failure and pregnancy termination

From the literature review, we know that the couple who want to limit or space birth but failed in using contraceptive will resort to the pregnancy termination. In this study, the results in Table 4.31 shows that there was the association between type of contraceptive failure and type of pregnancy termination ( $P < 0.05$ ). Most of women who used contraceptive regular (but use ineffective method) resorted to induced abortion (59.3 per cent). In contrary, most of women who used contraceptive irregular resorted to menstrual regulation (63.0 per cent).

Table 4.31 Types of pregnancy termination by types of contraceptive failure

Types of pregnancy termination	Contraceptive use		Total per cent
	Regular use per cent	Irregular use per cent	
Induced abortion	59.3	37.0	50.9
Menstrual regulation	40.7	63.0	49.1
Total	100.0	100.0	100.0
Number	140	135	275
Chi-square value = 13.622		P-value = 0.0002	Cramer's V = 0.37

The reason for this depend on the time to register in hospital for treatment. Of those whose their pregnancy were less than 5 weeks, they will take menstrual regulation procedure to terminate their unwanted pregnancy. Of those whose their pregnancy were more than 5 weeks, they will take induced abortion procedure. Based on this principle, it

can suggest that women who use method regular believed that their pregnancy can not occur, therefore they did not detect their unwanted pregnancy in time and consequently, they get induced abortion more than the women who use method irregular.

### **Contraceptive non use and pregnancy termination**

Theoretically, women who use no contraceptive will resort to pregnancy termination. In order to test the hypothesis on the association between contraceptive non use and pregnancy termination as well as to identify whether there is the choice of type of pregnancy termination among non users. Contraceptive non users will be divided into two groups : (1) Non user with prior pregnancy termination experience and (2) Non user with no prior pregnancy termination experience. The rationale for this based on the assumption that prior pregnancy termination experience will be the factor which influence to the choice of method among non users. The education of wife is chosen as control factor because the knowledge of woman may affect to their choice of methods.

For the women with secondary educational level and under, the results in Table 4.32 show that most of the nonusers who had no experience with prior menstrual regulation resorted to induced abortion (61.9 per cent) whereas most of nonuser who had experience with prior menstrual regulation resorted to menstrual regulation again (68.8 per cent). The statistical test show that there was the association between type of contraceptive non use and type of pregnancy termination. Most of non users who ever experienced with menstrual regulation were likely to practice it again. In other words,

menstrual regulation experience is important factor which impact to the choice of type of pregnancy termination use among non users with secondary education level and less.

For the women with high school educational level and above, data in Table 4.32 also show that the proportion of non users who practiced induced abortion increased from those who had no experience with prior menstrual regulation to those who had experience with it (50.0 per cent compared with 53.8 per cent, respectively). In contrast, the proportion of non users who practiced menstrual regulation decreased from those who had no experience with prior menstrual regulation to those who had experience with it (50.0 per cent compared with 46.2 per cent, respectively). However, the statistical test show that there is no relationship between type of contraceptive non use and type of pregnancy termination for women with higher education level . Therefore, it can be concluded that menstrual regulation experience did not influence the choice of type of pregnancy termination use among women with high school education level and above. For this group, the practice of induced abortion or menstrual regulation of these woman depend on the time that they detected they get pregnant soon or late.

**Table 4.32 Types of pregnancy termination by contraceptive non user with menstrual regulation experience by women's educational level**

**Secondary educational level and under**

Type of pregnancy termination	Types of contraceptive non user		Total per cent
	Having no experienced with prior M.R per cent	Having experienced with prior M.R per cent	
Induced abortion	61.9	31.6	54.9
Menstrual regulation	38.1	68.4	45.1
Total	100.0	100.0	100.0
Number	63	19	82
Chi-square Value = 5.4      P value = 0.019      Cramer's V = 0.25			

**High school educational level and above**

Type of pregnancy termination	Type of contraceptive non user		Total per cent
	Having no experienced with prior M.R per cent	Having experienced with prior M.R per cent	
Induced abortion	50.0	53.8	51.2
Menstrual regulation	50.0	46.2	48.8
Total	100.0	100.0	100.0
Number	30	13	43
Chi-square Value = 0.05      P value = 0.816      Cramer's V = 0.04			

It is also found that prior induced abortion experience did not influence to the choice of types of pregnancy termination among women with secondary education level and under as well as women with high school education level and above (see Appendix A Table A13).

To sum, for women who were non user of contraceptive, menstrual regulation experience was factor which influence to their decisive choice in eliminating the unwanted pregnancy, especially for women with secondary educational level and under. The repeat menstrual regulation may be stem from the misunderstanding about pregnancy termination that just mentioned above. The survey of Chau (1992) in Hochiminh city also indicated that people misunderstand and abuse menstrual regulation because they think that it is a mild method and don't have complications. Chau also stated that this resulted from the limitations of the role of mass media in family planning program. Furthermore, according to Vietnamese term, it is to note that induced abortion means "pha thai" (destroying fetus) while menstrual regulation has less strictly meaning, that is "dieu hoa kinh nguyet" (only regulating menstruation and not taking into account to fetus). This also may influence to perception as well as the decisive choice of people on method.

Our discussion so far lead us to a conclusion that the reliance on pregnancy termination was the consequence of discordance between women's need to limit family size and the unacceptability, ineffective use of contraceptive method. This discordance is caused by a complex array of factors, including insufficient and inaccurate knowledge of contraception, psychological barrier to contraceptive use which arising from husband's objection, noncompliance behavior and passive attitude towards contraceptive use. In addition, obviously, misinformation and lack information about pregnancy termination also involved in pregnancy termination's decision and choice of women.

#### **4.4 Familial support and pregnancy termination**

According to Bandura (1969), human beings attribute meaning to events and interpret the significance of their situations as a result of their reciprocal exchange with key members of their social group making judgments. Viewed in this context, a pregnancy that is unwanted can be a crisis for a woman, she is most likely to approach her family support network for emotional reassurance and reinforcement for her decision, which will determine her coping responses to this crisis. Therefore, this section will examine whether the husband's support is the factor which influences the pregnancy termination use of the women.

##### **4.4.1 Husband's support and pregnancy termination**

Under the motivation of desire for no more children or birthspacing, the women has made the decisive choice of ending their unwanted pregnancy via pregnancy termination. The question now is that whether the husband support for them in such decision. From the results in Table 4.33, it can be seen that nearly of all husbands (91.5 per cent in induced abortion and 89.5 per cent in menstrual regulation group) approved the current practice of pregnancy termination of their wives.

More over, it is found that there was the relationship between the husband support related to pregnancy termination and number of pregnancy termination ( $P < 0.05$ ). As recorded in Table 4.34, in induced abortion and menstrual regulation group the percentage of women who get three pregnancy terminations and above decreased from

the women who usually received the husband's support to the women sometimes received the husband support (46.3 per cent and 53.2 per cent compared with 15.2 per cent and 16.7 per cent, respectively).

**Table 4.33 Percentage distribution of husband's opinion related to the use of pregnancy termination by types of pregnancy termination**

Husband's opinion	Types of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Approve	91.5	89.5	91.5
Disapprove	8.5	10.5	9.5
Total	100.0	100.0	100.0
Number	100	113	213

In contrary, the percentage of women who get two pregnancy termination's increased from women who usually received the husband's support to the women who sometimes received the husband's support (53.7 per cent and 46.8 per cent compared with 84.8 per cent and 83.3 per cent , respectively). It is, thus, concluded that the women who usually received their husband's support to pregnancy termination were likely to use more pregnancy termination than the others. In other words, the husband's support also was considered factor which motivated women to practice pregnancy termination.

**Table 4.34** Number of pregnancy termination by husband 's support related to pregnancy termination

**Induced abortion group**

Number of pregnancy termination	Husband's support		Total per cent
	Usually per cent	Sometimes per cent	
Two	53.7	84.8	64.0
Three or more	46.3	15.2	36.0
Total	100.0	100.0	100.0
Number	67	33	100
Mean of P.T	2.6	2.2	2.5
Chi-Square value = 9.291			P value = 0.002
			Cramer's V= 0.30

**Menstrual regulation group**

Number of pregnancy termination	Husband's support		Total per cent
	Usually per cent	Sometimes per cent	
Two	46.8	83.3	58.4
Three or more	53.2	16.7	41.6
Total	100.0	100.0	100.0
Number	77	36	100
Mean of P.T	2.8	2.2	2.6
Chi-Square value = 13.511			P value = 0.002
			Cramer's V= 0.34

Note: No cases of 'Never': Women who have not received husband' s support at any time.

**4.4.2 Factors related to the husband's support and pregnancy termination**

In order to understand more about the relationship between the familial support and pregnancy termination use as well as to identify which type of husband support the

pregnancy termination, the role of husband and wife in family will be examined. The reason for this based on the view that the person who have authority in family is likely the one who make important decisions including pregnancy termination use.

In this study, decision-making was considered as the indicator to measure the role of husband and wife in family. Decision in family including the main decisions and the financial decision.

As shown in Table 4.35, in menstrual regulation group most of women whose their husband make main decisions in the family had three pregnancy terminations and above (61.3 per cent) whereas most of women who make decisions in family by themselves had two pregnancy terminations (65.9 per cent). Hence, it can be said that the husband who had more authority in family were likely to support the pregnancy termination use than the husband who had less authority in family. ( $P < 0.05$ ).

In induced abortion group, however, person who make main decisions (including future plans, number of children and familial finance) in family did not affect on the number of pregnancy termination (see Table 4.35). That is husband with more authority were just as likely to be the one who support pregnancy termination as were the husband with less authority in family.

Further analysis in Table 4.36 show that there was the association between who make financial decision in family and pregnancy termination use. In menstrual regulation group, the couple whose husband make financial decision in family are likely to support pregnancy termination use more than the couple whose husband did not make financial in

family ( $P < 0.05$ ). Most of the couple whose husband make financial decision in family had three pregnancy terminations and above (62.5 per cent) whereas most of couple whose wife make financial decision had two pregnancy terminations (70.8 per cent).

**Table 4.35** Number of pregnancy termination by person who make main decisions in family

**Induced abortion group**

Number of pregnancy termination	Main decisions			Total per cent
	Husband per cent	Both per cent	Wife per cent	
Two	65.6	63.6	63.2	64.0
Three and more	34.4	36.4	36.8	36.0
Total	100.0	100.0	100.0	100.0
Number	32	11	57	100
Chi-Square value = 0.054      P value = 0.972      Cramer's V = 0.02				

**Menstrual regulation group**

Number of pregnancy termination	Main decisions			Total per cent
	Husband per cent	Both per cent	Wife per cent	
Two	38.7	57.1	67.6	58.4
Three and more	61.3	42.9	32.4	41.6
Total	100.0	100.0	100.0	100.0
Number	31	14	68	113
Chi-Square value = 7.350      P value = 0.025      Cramer's V = 0.25				

In induced abortion group, there was no association between person who make financial decision in family and number of pregnancy termination (Table 4.36).

**Table 4.36** Number of pregnancy termination by person who make financial decision in family

**Induced abortion group**

Number of pregnancy termination	Financial decision in family			Total per cent
	Husband per cent	Both per cent	Wife per cent	
Two	65.4	71.0	58.1	64.0
Three and more	34.6	29.0	41.9	36.0
Total	100.0	100.0	100.0	100.0
Number	26	31	43	100
Chi-Square value = 1.315      P value = 0.517      Cramer's V= 0.11				

**Menstrual regulation group**

Number of pregnancy termination	Financial decision in family			Total per cent
	Husband per cent	Both per cent	Wife per cent	
Two	37.5	53.1	70.8	58.4
Three and more	62.5	46.9	29.2	41.6
Total	100.0	100.0	100.0	100.0
Number	16	49	48	113
Chi-Square value = 6.506      P value = 0.038      Cramer's V= 0.24				

Besides the role in decision-making in family, the educational level between husband and wife also influence to number of pregnancy termination use. In induced

abortion group the couple whose husband's educational level was higher than his wife's educational level were likely to have the higher number of pregnancy termination than the others ( $P < 0.05$ ). As shown in Table 4.37, most of women whose their educational level were higher than their husbands had two pregnancy terminations (75.0 per cent). In contrast, most of women whose their educational level were lower their husbands had three pregnancy terminations and above (56.7 per cent). In menstrual regulation group, the educational level between husbands and wives did not influence to the number of pregnancy termination use.

**Table 4.37** Number of pregnancy termination by educational level of husband  
( compared with education level of wife)

Induced abortion group

Number of pregnancy termination	Husband's education level *			Total per cent
	Lower per cent	Equal per cent	Higher per cent	
Two	75.0	72.2	43.3	64.0
Three and more	25.0	27.8	56.7	36.0
Total	100.0	100.0	100.0	100.0
Number	54	16	30	100
Chi-Square value = 7.986      P value = 0.018      Cramer's V = 0.28				

Menstrual regulation group

Number of pregnancy termination	Husband's education level*			Total per cent
	Lower per cent	Equal per cent	Higher per cent	
Two	70.0	56.9	58.1	58.4
Three and more	30.0	43.1	41.9	41.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number	72	10	31	113
Chi-Square value = 0.618		P value = 0.734		Cramer's V = 0.07

\* Compared with the education level of wife

To sum, the use of pregnancy termination of the woman was influenced by the support of her husband. The more husband support, the more women will practice pregnancy termination. In induced abortion group, the husband who make the main decisions and financial decision in family were likely to support pregnancy termination use. In menstrual regulation group, the husbands whose educational level were higher than their wives tend to support the pregnancy termination use than the others. Therefore, the husband with authority and better educated husband played significant role in fertility decision including pregnancy termination decision.

## CHAPTER FIVE

### SUMMARY AND RECOMMENDATION

This chapter includes two parts. The first part summarizes the main results and from which it point out the main important findings of this study. The second part includes the recommendations were drawn from these main findings.

#### 5.1 Summary

Hochiminh city was one of the three cities had the highest rate of pregnancy termination. In 1993, there was 145,033 women terminated their pregnancy. This pointed out the problems that related with contraceptive use and women's health. This study examined the socio-demographic, cultural differentials between women practice induced abortion and menstrual regulation, and the extent to which related factors such as desire for no more children, contraceptive practice and husband's support associated with pregnancy termination use among married women age 18-49 in Hochiminh city, Vietnam. The analysis focuses on the sample of 400 married women who were interviewed from the survey that took place during September 15 through October 30, 1995 in Hochiminh city.

The results showed that the average age of the women practicing pregnancy termination was 29.7 years with most of the respondents belong to the age group of 25-29. The average education level of studied woman was 9 years with three-fourths of the

women have secondary education and above and only 1.2 per cent was illiterate. Similarly, more than three-fourth of their husbands have secondary education and above and only 0.8 per cent was illiterate. The employment status of the respondents was high with more than three-fourths of the women and nearly all their husbands (96.5 per cent) were economically working at the time of survey. The women practicing pregnancy termination have small family size, in average each women has 1.6 living children. Most of respondents are practicing Buddhist, followed by Catholics, Caodaism, Confucian and Muslim. Slightly more than three-fifths of the women practicing pregnancy termination are in low and moderate income class.

In comparison the socio-economic, demographic and cultural differentials of women practicing induced abortion and menstrual regulation. It is observed that most of women practicing menstrual regulation were older than women practicing induced abortion. The average educational level of both husband and wife in menstrual regulation was higher than in induced abortion group. For the remain factors such as occupation, religion, monthly income and number of living children- it was found that there was no much difference between women using induced abortion and menstrual regulation.

Regarding the past experience with pregnancy termination. It was found that pregnancy termination is not an uncommon experience for the respondents. More than half of the women (53.2 per cent) had at least one prior pregnancy termination. In average, each woman has 1.5 pregnancy terminations. Menstrual regulation accounted for nearly three-fourths of prior pregnancy termination.

In examining the hypotheses concerning the association between the socio-demographic and cultural factors (including desire for no more children, contraceptive practice, and familial support) and pregnancy termination. The results are as following:

- The married women who have desire for no more children were likely to practice pregnancy termination than those who have desire for more children because they were older and had higher number of living children. More over, most of them have completed family size and had living son for the purpose of continuation of linear. It is emphasized that these women ever used it in the past with the same purpose.

- The married women who experience with contraceptive failure were likely to practice pregnancy termination. The married women who used contraceptive irregular were likely to use menstrual regulation whereas the married women who used contraceptive regular were more likely to use induced abortion. The non compliance behaviors in contraceptive use, the psychological barriers and passive behavior in sexual life were the main reasons for contraceptive irregular use. For women used contraceptive regular but still get pregnancy, the main reason was that most of them practiced ineffective or unreliable methods such as rhythm and withdrawal.

- The married women who use no contraceptive were likely to practice pregnancy termination. For the non users with secondary education level and under, those who had experience with prior menstrual regulation were likely to use it again to eliminate unwanted pregnancy. For the non users with secondary education level and above, menstrual regulation experience did not influence to the choice of method. The main

reasons of contraceptive non use were the husband's objection, the availability of methods and the lack of knowledge of method. The number of living children, woman's age and educational level were the important factors that influence to the contraceptive use of women.

It is observed that there is the limitations of the role of mass media in family planning program that to enable women to make choices about their contraceptives as well as to concern the adverse effects of pregnancy termination. The statistic showed that misinformation on pregnancy termination was popular among women practiced it. Therefore, beside contraceptive non use and contraceptive failure, misinformation on pregnancy termination also was factor to explain why women adopted it.

- The married women who have husband's support were likely to practice pregnancy termination than who did not receive it. The findings showed that the women who were usually have the husband's support related pregnancy termination were likely to use it than the others. Husbands who make main decisions and financial decision in family and husbands whose their educational level were higher than their wives were likely to support pregnancy termination than the others.

Therefore, it can conclude that desire for no more children, contraceptive practice (including contraceptive non use, contraceptive failure) and husband's support appeared the important determinants of pregnancy termination use among married women in Hochiminh city.

### **Major findings of the study**

**The most important findings of this review of above results are the following.**

- 1. Most of women resorted to pregnancy termination because they completed their family size and did not want any more children. It should be noted that some of them ever used pregnancy termination in the past with the same purpose.**
- 2. Apart from the fact that contraceptives are not 100.0 per cent effective, there were both technical and psychological restrains on their use that resulted in contraceptive failure and pregnancy termination. These restrains motivated women to pregnancy termination use.**
- 3. For contraceptive non users, of particular interest is the unavailability of method, the lack of information of contraceptive and the husband's objection. In other words, the lack of social and partner's support for contraceptive use were the factors that impede decisions about birth control and consequently, women had resorted to pregnancy termination to eliminate their unwanted pregnancy.**
- 4. The lack of information and misinformation on pregnancy termination has been the important factor that explained why women relied on it**
- 5. The high proportion of women having repeat pregnancy termination suggest that menstrual regulation, and to a lesser degree induced abortion, was used as a substitute for family planning methods or as a back-up method for repeated contraceptive failure.**

6. The evidences from the examine the husband's support towards pregnancy termination as well as their role in family supported the view that husband played important role in fertility as well as in contraceptive acceptance and pregnancy termination use.

## 5.2 Recommendations

The conclusion that desire for no more children, contraceptive practice and husband's support, can not be generalized, and therefore, should be viewed with caution, since no comparable studies exist for the general population of Hochiminh city. However, it seems reasonable to infer, on the basic of the study and significant observed effects of these variables on pregnancy termination use, that these effects are likely to be stronger in the general population.

Based on the six main important findings, the recommendations are suggested with the purpose of reducing the demand of pregnancy termination among married women in Hochiminh city are as follow.

1. The strong effect of desire for no more children on pregnancy termination use suggests that there are the needs for effective contraceptive methods to regulate fertility among these women. Moreover, in the condition that most of these women have completed their family size therefore, it is necessary to encourage and educate them to adopt the effective and permanent contraceptive method, that is male or female sterilization.

2. The findings that women have to resort to pregnancy termination because of contraceptive failure and contraceptive non use pointed out the important improvements for family planning program . These improvements are including:

2.1 Program implementers should promote the effective modern methods by expanding the availability and affordability of these methods to the grassroots, since they appear to be the most desired by women.

### 2.2 Pregnancy counselling

Provide accurate, understandable information about sexuality and various modern contraceptive methods and assist the woman to choose one best suited for her age, her religious scruples, her ability to implement contraceptive responsibility and her current sexual act.

It is essential that counselling program help women manage sexuality as well as provide for them both amount and the quality of information available on the effective use of contraceptive techniques.

### 2.3 Pregnancy termination counselling

#### 2.3.1 Pre-pregnancy termination counselling

If the women choose the pregnancy termination option, it is essential to provide accurate, understandable information on the mechanics of the surgical procedure, the post-operative precautions for them. For women who desire for no more children, sterility should be fully discussed prior to the procedure.

### **2.3.2 Post-pregnancy termination counselling**

To assist the women who have difficulties in resolving their pregnancy and pregnancy termination experience.

3. The repeat pregnancy termination and misinformation on pregnancy termination suggested that the role of mass media in family planning in Hochiminh city should be improved. It is important to inform widely the differences between contraceptive and pregnancy termination as well as to educate people to understand that “contraception is better than pregnancy termination”. For long term plan, family planning program have to take appropriate steps to assist women avoid pregnancy termination, which is no case should be promoted as a method of family planning.

4. The women with repeat pregnancy termination should be considered as an important target group for Maternal and Child Health (MCH) / Family Planning Program activities.

5. The husband played a significant role in fertility decision as well as pregnancy termination decision. Therefore, pregnancy counselling program should encourage the husbands involve in sharing contraception. It is important to enable them to understand the various risks and responsibilities of sexuality and reproduction. More over, encourage them to support their partners in doing so.

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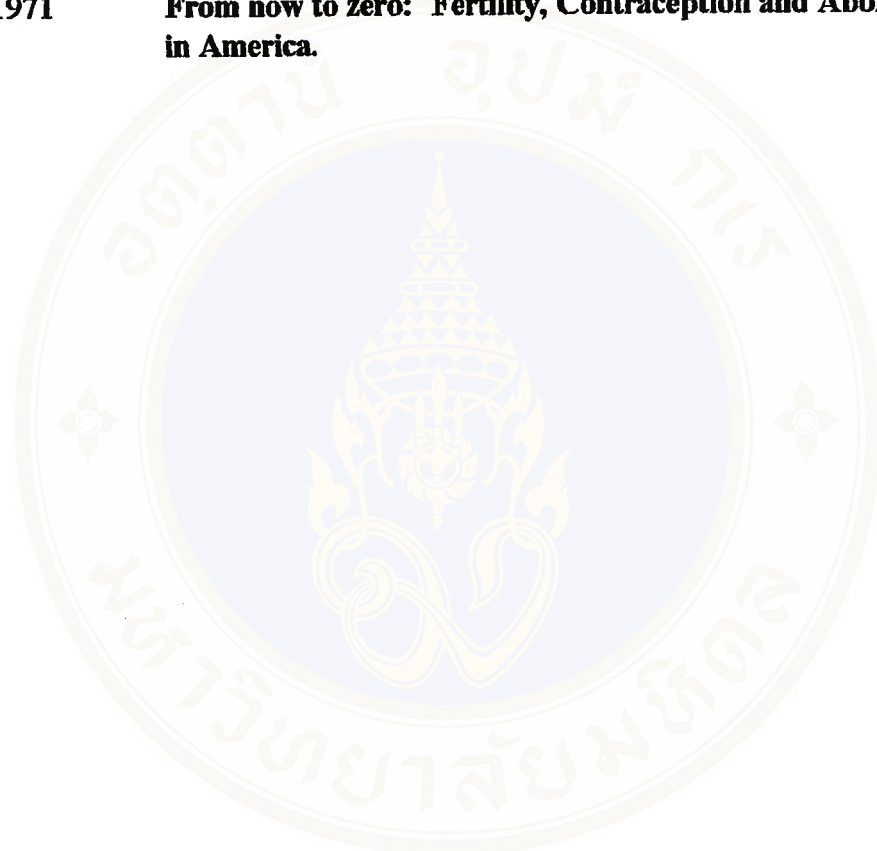
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## APPENDIX A

Table A1 Reason of desire for no more children by number of living children

Induced abortion group

Reason of desire for no more children	Number of living children			Total per cent
	One per cent	Two per cent	Three + per cent	
Completed family size	11.1	72.1	86.0	63.5
Economic burden	27.8	16.3	9.3	23.1
Too old or poor health	61.1	11.6	4.7	13.5
Total	100.0	100.0	100.0	100.0
Number	18	43	43	104
Chi-square value = 38.42		P value = 0.000		Cramer's value = 0.42

Menstrual regulation group

Reason of desire for no more children	Number of living children			Total per cent
	One per cent	Two per cent	Three + per cent	
Completed family size	18.8	74.4	78.8	65.9
Economic burden	43.8	12.8	12.1	18.2
Too old or poor health	37.5	12.8	9.1	12.9
Total	100.0	100.0	100.0	100.0
Number	16	39	33	88
Chi-square value = 19.57		P value = 0.000		Cramer's value = 0.33

**Table A2 Mean living children by reason of desire for no more children**

Reason of desire for no more children	Type of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
Completed family size	2.9	2.7	2.8
Economic burden	2.0	1.8	1.9
Too old or poor health	1.2	2.0	1.6
Total	2.4	2.4	2.4
Number	104	88	200

**Table A3 Mean living children by age**

Age	Type of pregnancy termination		Total
	Induced abortion	Menstrual regulation	
18-24	0.6	0.6	0.6
25-29	1.1	1.1	1.1
30-34	1.9	1.7	1.8
35-49	2.7	2.7	2.7
Total	1.6	1.5	1.6
Number	200	200	400

Table A4 Reason of desire for no more children by age

Induced abortion group

Reason of desire for no more children	Age			Total per cent	Mean Age
	18-30 per cent	31-35 per cent	36-49 per cent		
Completed family size	40.0	69.7	85.4	67.3	34.7
Economic burden	40.0	12.1	0.0	15.4	30.7
Too old or poor health	20.0	18.2	14.6	17.3	34.8
Total	100.0	100.0	100.0	100.0	33.5
Number	30	33	41	104	104
Chi-square value = 23.99			P value = 0.000		Cramer's value = 0.33

Menstrual regulation group

Reason of desire for no more children	Age			Total per cent	Mean Age
	18-30 per cent	31-35 per cent	36-49 per cent		
Completed family size	41.4	69.0	86.7	65.9	34.5
Economic burden	44.8	10.3	0.0	18.2	30.2
Too old or poor health	13.8	20.7	13.3	15.9	32.1
Total	100.0	100.0	100.0	100.0	33.2
Number	29	29	30	88	88
Chi-square value = 23.03			P value = 0.000		Cramer's value = 0.36

Table A5 Reason of desire for no more children by living son

**Induced abortion group**

Reason of desire for no more children	Living son		Total per cent
	Had living son per cent	Had no living son per cent	
Completed family size	78.8	15.8	67.3
Other reasons	21.2	84.2	32.7
Total	100.0	100.0	100.0
Number	85	19	104
Chi-square value = 28.04			P value = 0.000
			Cramer's value = 0.51

**Menstrual regulation group**

Reason of desire for no more children	Living son		Total per cent
	Had living son per cent	Had no living son per cent	
Completed family size	72.2	37.5	65.9
Other reasons	27.8	62.5	34.1
Total	100.0	100.0	100.0
Number	72	16	88
Chi-square value = 7.02			P value = 0.008
			Cramer's value = 0.28

\* Other reasons include economic burden, too old and poor health.

Table A6 Husband 's desire for children by wife's desire for children

Induced abortion group

Husband's desire	Wife's desire		Total per cent
	Desire more children per cent	Desire for no more children per cent	
Desire for more children	63.4	10.2	40.0
Desire for no more children	36.6	89.8	60.0
Total	100.0	100.0	100.0
Number	112	88	200
Chi-square value = 58.03			P value = 0.000
			Cramer's value = 0.53

Menstrual regulation group

Husband's desire	Wife's desire		Total per cent
	Desire more children per cent	Desire for no more children per cent	
Desire for more children	66.7	11.5	38.0
Desire for no more children	33.3	88.5	62.0
Total	100.0	100.0	100.0
Number	96	104	200
Chi-square value = 64.39			P value = 0.000
			Cramer's value = 0.56

Table A7 Number of pregnancy termination by number of living children

Induced abortion group

Number of pregnancy termination	Number of living children				Total per cent
	None per cent	One per cent	Two per cent	Three + per cent	
1	72.7	48.3	41.8	37.2	49.5
2	20.5	36.2	38.2	30.2	32.0
3+	6.8	15.5	20.0	32.6	18.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number	44	58	55	58	200
Mean of P.T	1.4	1.8	1.9	2.0	1.7
Chi-square value = 17.81		P value = 0.006		Cramer's value = 0.21	

Menstrual regulation group

Number of pregnancy termination	Number of living children				Total per cent
	None per cent	One per cent	Two per cent	Three + per cent	
1	3.7	45.8	33.3	22.2	43.5
2	21.1	34.7	38.9	33.3	33.0
3+	5.3	19.4	27.8	44.4	23.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number	38	72	54	36	200
Mean of P.T	1.3	1.8	2.0	2.5	1.9
Chi-square value = 28.37		P- value = 0.000		Cramer's value = 0.22	

Table A8 Number of pregnancy termination by women's age

**Induced abortion group**

Number of pregnancy termination	Age				Total per cent
	18-24 per cent	25-29 per cent	30-34 per cent	35-49 per cent	
1	70.6	56.3	32.6	37.9	49.5
2	23.5	27.1	51.2	29.3	32.0
3+	5.9	16.7	16.3	32.8	18.5
Total	100.0	100.0	100.0	100.0	100.0
Number	51	48	43	58	200
Mean pregnancy termination	1.4	1.7	1.9	2.0	1.7
Chi-square value = 26.62		P value = 0.000		Cramer's value = 0.25	

**Menstrual regulation group**

Number of pregnancy termination	Age				Total per cent
	18-24 per cent	25-29 per cent	30-34 per cent	35-49 per cent	
1	65.2	44.1	31.3	34.0	43.5
2	23.9	35.6	33.3	38.3	33.0
3+	10.9	20.3	35.4	27.7	23.5
Total	100.0	100.0	100.0	100.0	100.0
Number	46	59	48	47	200
Mean pregnancy termination	1.5	1.8	2.1	2.2	1.9
Chi-square value =15.90		P value = 0.014		Cramer's value = 0.19	

**Table A9** Number of pregnancy termination by desire for children (controlling by husband's education)

**Induced abortion group**

**Secondary educational level and under**

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	50.0	46.3	47.8
2 +	50.0	53.7	52.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>38</b>	<b>54</b>	<b>92</b>
Chi-square value = 0.1226      P value = 0.7262      Cramer's value = 0.036			

**High school educational level and above**

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	65.5	34.0	50.9
2 +	34.5	66.0	49.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>58</b>	<b>50</b>	<b>108</b>
Chi-square value = 10.672      P value = 0.0010      Cramer's value = 0.314			

Menstrual regulation groupSecondary educational level and under

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	54.2	42.5	48.9
2 +	45.8	57.5	51.1
Total	100.0	100.0	100.0
Number	48	40	88
Chi-square value = 1.188			P value = 0.2756
			Cramer's value = 0.116

High school educational level and above

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	53.1	20.8	39.3
2 +	46.9	79.2	60.7
Total	100.0	100.0	100.0
Number	64	48	112
Chi-square value = 11.991			P value = 0.0005
			Cramer's value = 0.327

**Table A10 Number of pregnancy termination by desire for children (controlling by wife's education)**

**Induced abortion group**

**Secondary educational level and under**

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	57.1	47.6	52.4
2 +	42.9	52.4	47.6
Total	100.0	100.0	100.0
Number	63	63	126

Chi-square value = 1.1454      P value = 0.2845      Cramer's value = 0.095

**High school educational level and above**

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	63.6	29.3	44.6
2 +	36.4	70.7	55.4
Total	100.0	100.0	100.0
Number	33	41	74

Chi-square value = 8.740      P value = 0.0031      Cramer's value = 0.343

Menstrual regulation groupSecondary educational level and under

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	53.3	34.5	44.3
2 +	46.7	65.5	55.7
Total	100.0	100.0	100.0
Number	60	55	115
Chi-square value = 4.1040			P value = 0.0427
			Cramer's value = 0.1889

High school educational level and above

Number of pregnancy termination	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
1	53.8	24.2	42.4
2 +	46.2	75.8	57.6
Total	100.0	100.0	100.0
Number	52	33	85
Chi-square value = 7.246			P value = 0.007
			Cramer's value = 0.291

Table A11 Contraceptive use by desire for children

Induced abortion group

Contraceptive use	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
Use	63.5	69.2	66.5
No use	36.5	30.8	33.5
Total	100.0	100.0	100.0
Number	96	104	200
Chi-square value = 0.725			P value = 0.394
			Cramer's value = 0.06

Menstrual regulation group

Contraceptive use	Desire for children		Total per cent
	Desire for more children per cent	Desire for no more children per cent	
Use	62.5	81.8	71.0
No use	37.5	18.2	29.0
Total	100.0	100.0	100.0
Number	112	88	200
Chi-square value = 8.931			P value = 0.002
			Cramer's value = 0.21

Table A12 Contraceptive use by women's educational level

Induced abortion group

Contraceptive use	Women's educational level			Total per cent
	Primary per cent	Secondary per cent	High school and above per cent	
Use	61.1	65.6	70.3	66.5
No use	38.9	46.4	29.7	33.5
Total	100.0	100.0	100.0	100.0
Number	36	90	74	200
Chi-square value = 0.977		P value = 0.613		Cramer's value = 0.06

Menstrual regulation group

Contraceptive use	Women's educational level			Total per cent
	Primary per cent	Secondary per cent	High school and above per cent	
Use	67.6	67.9	75.3	71.0
No use	32.4	32.1	24.7	29.0
Total	100.0	100.0	100.0	100.0
Number	37	78	85	200
Chi-square value = 1.325		P value = 0.515		Cramer's value = 0.08

**Table A13** Type of pregnancy termination by contraceptive non user with induced abortion experience by women's educational level

Secondary educational level and under

Type of pregnancy termination	Type of contraceptive non user		Total per cent
	Having no experienced with prior I.A per cent	Having experienced with prior I.A per cent	
Induced abortion	50.7	76.9	54.9
Menstrual regulation	49.3	23.1	45.1
Total	100.0	100.0	100.0
Number	69	13	82
Chi-square Value = 3.032      P value = 0.081			Cramer's V = 0.10

High school educational level and above

Type of pregnancy termination	Type of contraceptive non user		Total per cent
	Having no experienced with prior I.A per cent	Having experienced with prior I.A per cent	
Induced abortion	50.0	60.0	51.2
Menstrual regulation	50.0	40.0	48.8
Total	100.0	100.0	100.0
Number	38	5	43
Chi-square value = 0.125      P value = 0.674			Cramer's V = 0.07





1. Desired for no more children
  2. Economic burden
  3. Poor health
  4. Contraceptive failure
  5. Others (specify):.....
48. Do you think which method is better or more desirable for preventing pregnancy ?
1. Induced abortion
  2. Menstrual regulation
  3. Modern contraceptive method
  4. Both above methods
  7. Don't know / don't answer
49. Have you considered I.A (M.R) as a family planning method ?
1. Yes
  2. No
  7. Don't know
50. Have you intended to use family planning method to avoid pregnancy in the future ?
1. Yes
  2. No (skip to Q.52)
  7. Don't know (skip to Q. 52)
51. If yes , which method ?
- 1 . IUD
  - 2 . Pill
  - 3 . Female sterilization
  - 4 . Condom
  - 5 . Male sterilization
  6. Withdrawal
  7. Rhythm
  8. Induced abortion
  9. Menstrual regulation
  10. Other (specify):.....
52. Before you decided to get I.A (M.R) have you ever considered the effects of that ?
1. Yes
  2. No
  7. Don't know
53. Before practicing this I.A (M.R) how about your feeling ?
1. More tense
  2. More relaxed ( skip to Q.55 )
  3. No change (skip to Q.56)
  7. Don't know (skip to Q.56)
54. If more tense , why ?
1. Fear of health problem
  2. Emotional problem
  3. No confidence in I.A (M.R) procedures
  4. Others ( specify ) : .....
  7. Don't know
55. If more relaxed , why ?
1. Having confidence in I.A (M.R) procedures
  2. No more concerning about economic problem
  3. Others ( specify ) : .....
  7. Don't know
56. Having undergone I.A (M.R) how about the relationship with your husband
1. Better
  2. The same
  3. Worse
57. Having undergone I.A (M.R) how about the relationship with your relatives and friends ?
1. Better
  2. The same
  3. Worse
58. Did you have any problems or difficulties since using the I.A (M.R) in the past ?
1. Yes
  2. No
  7. Don't know
59. If yes, what is your problem ?
1. Husband dislike
  2. Medical problem
  3. Mental problem
  4. More active in sexula behavior
  5. More passive in sexual behavior

**PART 5: FAMILIAL SUPPORT**

60. Who generally making decision in your family ?
1. Husband
  2. Wife
  3. Joint decision by husband and wife
  4. Others ( specify ) : .....
61. Who generally making decision in buying the expensive things (television, radio, motorcycle,...)
1. Husband
  2. Wife
  3. Joint decision by husband and wife
  4. Others ( specify ) : .....
62. Who generally spent money for shopping in your family ?
1. Husband
  2. Wife
  3. Joint decision by husband and wife
  4. Others ( specify ) : .....
63. Who generally making decision in having number of children in your family ?
1. Husband
  2. Wife
  3. Joint decision by wife and husband
  4. Others ( specify ) : .....
64. Which following matters do you decide on ?
1. Religion
  2. Children's nurture
  3. Plans in the future
  4. Household tasks
  5. Others ( specify ) : .....
65. When you get unwanted pregnancy , who will you discuss
1. Husband
  2. Relatives
  3. Friends
  4. Others ( specify ) : .....
66. Is the I.A (M.R) that you have this time approved by your husband ?
1. Yes
  2. No
  3. Don't know first ?
67. If no , what is the main reason ?