

**FACTORS RELATED TO PERCEPTION OF BIRTH CONTROL  
AMONG MARRIED WOMEN IN HUAININ ANHUI PROVINCE,  
CHINA**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
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**ABSTRACT**

This cross sectional descriptive study aimed to identify factors related to perceptions of birth control among married women in HuaiNin AnHui province, China. 255 women were selected randomly and interviewed by structured questionnaire. Statistical descriptive analysis was used and tested by Chi square and Fisher Exact tests.

The women's ages ranged from 15-49 years. Most had only secondary education, or less and an average income of less than RMB 2400 per month. Nearly 60 percent of them had no job, an average, they had 2.04 children, boys more than girls.

58.82 percent of women had good knowledge and 41.18 percent had poor knowledge of birth control. 32.94 percent of women had a positive attitude and 67.06 percent of them had negative attitude about traditional beliefs about birth control. 14.12 percent of women had high perception, 60.78 percent and 25.10 percent of them had moderate and low perception of birth control. There was significant association between the perception of birth control and age ( $p=0.001$ ), gender of living children ( $p=0.000$ ), women's knowledge levels ( $p=0.000$ ), and women's attitude level ( $p=0.000$ ). Though, no other factors were found a significantly association with perception of birth control.

This study indicated that motivation, counseling, effective communication and appropriate strategy is essential for improving birth control acceptance in rural areas.

**KEY WORDS: PERCEPTION/BIRTH CONTROL/MARRIED WOMEN**

89 pp.

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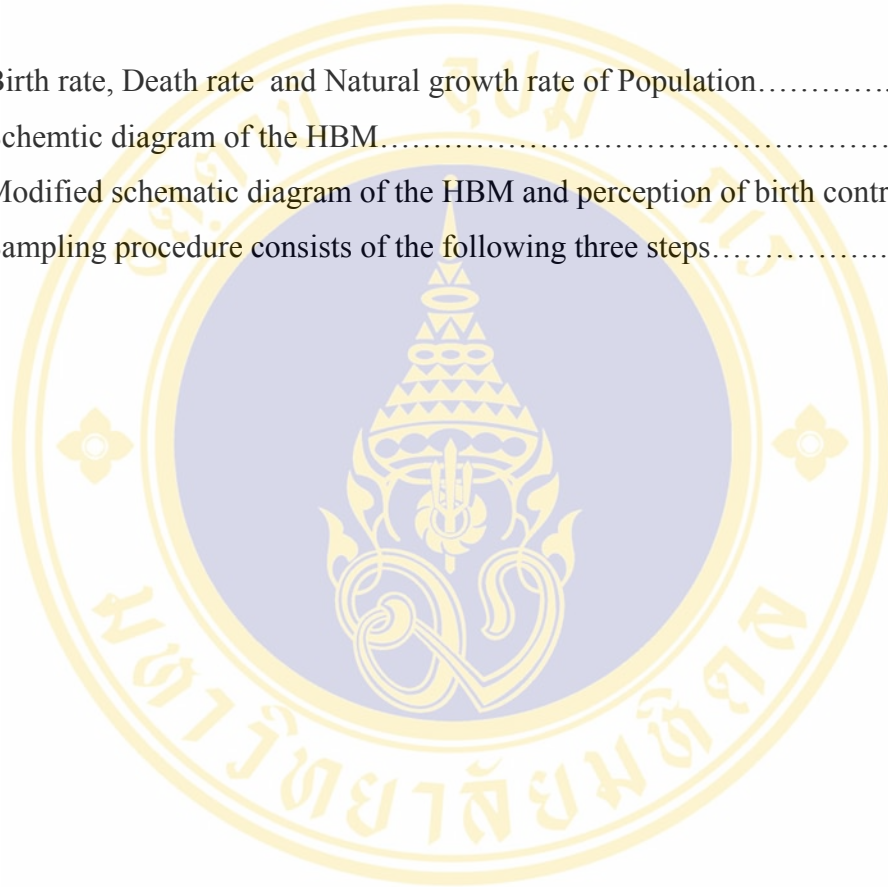
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## LIST OF ABBREVIATIONS

BR	:	Birth Rate
DR	:	Death Rate
NGR	:	Natural Growth Rate
TFR	:	Total Fertility Rate
PDA	:	Population and Community Development Association
RMB	:	Mark for Chinese Money
WHO	:	World Health Organization
FP	:	Family Planning

## CHAPTER 1

### INTRODUCTION

#### 1.1 Rational and Justification

The population explosion is the major concern in present time. The alarming increase in the world population poses certain crucial economic, political and social problems in all most all spheres of life and to all sectors of human race. Most developing countries realize the implication of rapid population growth on the socio-economic status and welfare of the people. We are living in a world of unprecedented demographic change. After growing very slowly for most of human history, the world population more than doubled in the last half century to reach 6 billion in late 1999. By 2006 it had reached 6.7 billion. Lower mortality, longer life expectancy and a youthful population in countries where fertility remains high all contributed to the rapid population growth of recent decades (1).

Currently the world's total population of 6.4647 billion, the population growth rate is 1.2 percent. The population of developed countries is 1.2113 billion, the growth rate is 0.3 percent; population of developing countries nearly 5.2535 billion, the growth rate is 1.4 percent. Each woman has 2.6 children by average in the world, the developed countries only 1.5, and the developing countries to 2.8 (6).

Achieving the predicted projections will require expanded access to birth control, especially in the poorest countries. The urgency of this is clear: If fertility were to 10.6 billion, instead of the 7.9 billion that is projected. Even if fertility rates are lower remain at current levels, the population of less developed regions would increase to

than projected, the large proportion of young people still makes population growth until 2050 virtually inevitable (3).

Rapid population growth has multiple and complex effects on economic development. At the household level, investments per child in education and health are reduced when households have many children, that is, when fertility rates are high. At the societal level, rapid rural population growth in particular puts enormous stress on the physical environment (e.g., deforestation, as forests are cut for firewood and new farm land) and on food productivity as land-labor ratios in agriculture decline (4).

Birth control is not only controlling the growth of population, but also reducing the mortality rate of pregnant women and their babies. Every year almost 515,000 women die from problems linked to pregnancy and childbirth, and approximately 30 more develop serious and disabling problems. Birth control could prevent many of these deaths and much of this disability (5).

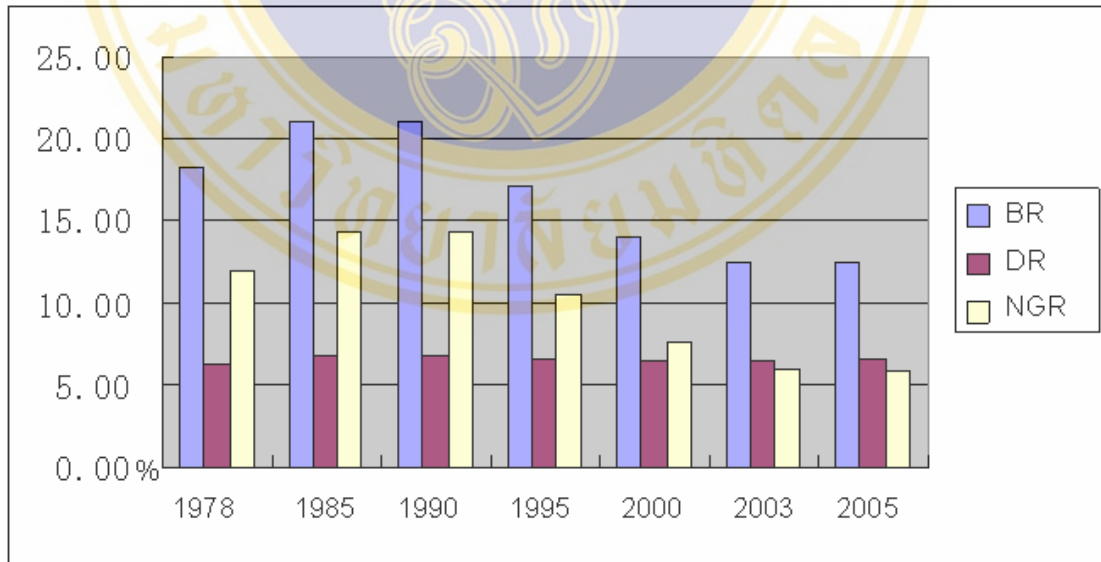
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China is a developing country with the biggest population in the world. A sample survey shows that China's population had reached 1.30 billion by the end of 2005 (excluding the population of the Hong Kong and Macao Special Administrative Regions and Taiwan Province), accounting for about 21% of the world population. This data is from "National Bureau of Statistics of China".

China has a huge population, but a weak economic foundation with relatively inadequate resources per capita. These are its basic national conditions. Many

contradictions and problems in China's economic and social development are closely associated with the issue of population, which has become the key factor and primary problem restricting China's economic and social development. Whether the population problem can be properly solved has the direct bearing on the improvement of the population quality and the living standards of the Chinese people, as well as the prosperity of the Chinese nation. It also concerns the world peace and development (7).

From the early 1970s, the Chinese government had become increasingly deeply aware that the over-rapid growth of population was unfavorable to economic and social development and decided to energetically carry out birth control in both urban and rural areas and integrated the plan for population development into the plan of national economic and social development. Consequently, family planning work entered a new phase of development.



Source: National Bureau of Statistics of China (2006)

**Figure 1:** Birth rate, Death rate and Natural growth rate of Population

After more than 30 years of efforts, China has successfully found its own way to have an integrated approach to the population issue with its own national

characteristics. The excessive population growth has been brought under effective control. The birth rate and natural growth rate decreased from 33.43‰ and 25.83‰ in 1970 to 12.4‰ and 5.89‰ in 2006 respectively. (From figure 1). The total fertility rate of Chinese women went below the replacement level, making China one of the countries with a low fertility level in the world. When economically still underdeveloped, China has accomplished a historic transition in population reproduction pattern from one featuring high birth rate, low death rate and high growth rate to one featuring low birth rate, low death rate and low growth rate in a relatively short period of time, a change that took decades or even up to a hundred years for developed countries to realize in the past (8).

**Table 1** The average age of first birth and total fertility rate of women under the age 35 years of urban and rural contrast

YEARS	The average age of first birth			Total fertility rate of women under the age 35		
	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL
1996	24.17	25.61	23.69	1.90	1.27	2.24
1998	24.51	26.02	23.96	1.88	1.21	2.12
1999	24.58	25.91	24.13	1.88	0.94	2.17
2000	24.63	26.47	24.03	1.84	1.22	2.07
2001	24.59	26.88	23.65	1.81	1.19	2.11
2002	25.12	26.59	23.23	1.79	1.11	2.18

Source: Data from “National family planning / reproductive health survey in 2003”

In China nowadays, population problem is an integrated socio-economic issues. The Chinese Government soberly understands that the contradiction between population and development in China has remained sharp, and that there still exist many difficulties and challenges. People also aware that the problems for the excessive population growth to their own and society. Along with the implementation

of the birth control policy from government, and raise the level of perception of birth control, China's birth rate deciling year by year.

But from table 1, we found that there was still great difference of birth rate between urban and rural. From Table 1, we can conclude that the average age of first birth in China increased and birth rate decreased. It showed that the perception of birth control has changed greatly, while the difference between urban and rural still remains. So, from the data, we can see the average age of first birth of urban is higher than rural. And we also can see rural women's total number of children was higher than that of urban women.

This study therefore addresses factors related to perception of birth control among married women in Huainin AnHui, China. It was designed and conducted data collection four villages in Huainin. Huainin is in rural area. Based on the above facts, the researcher would like to found out why had such a big difference between rural and urban areas, from this study the researcher would found the major factors to related the perception of birth control among women living in rural area.

## **1.2 Research questions**

1.2.1 What are the factors related to perception of birth control among married women in Huainin Anhui province China.

## **1.3 Objectives**

### **1.3.1 General objectives**

To find out the factors related to perception of birth control among married women in Huainin Anhui province China.

### **1.3.2 Specific objectives**

(1) To describe relationship between Socio-demographic factors and the perception of birth control.

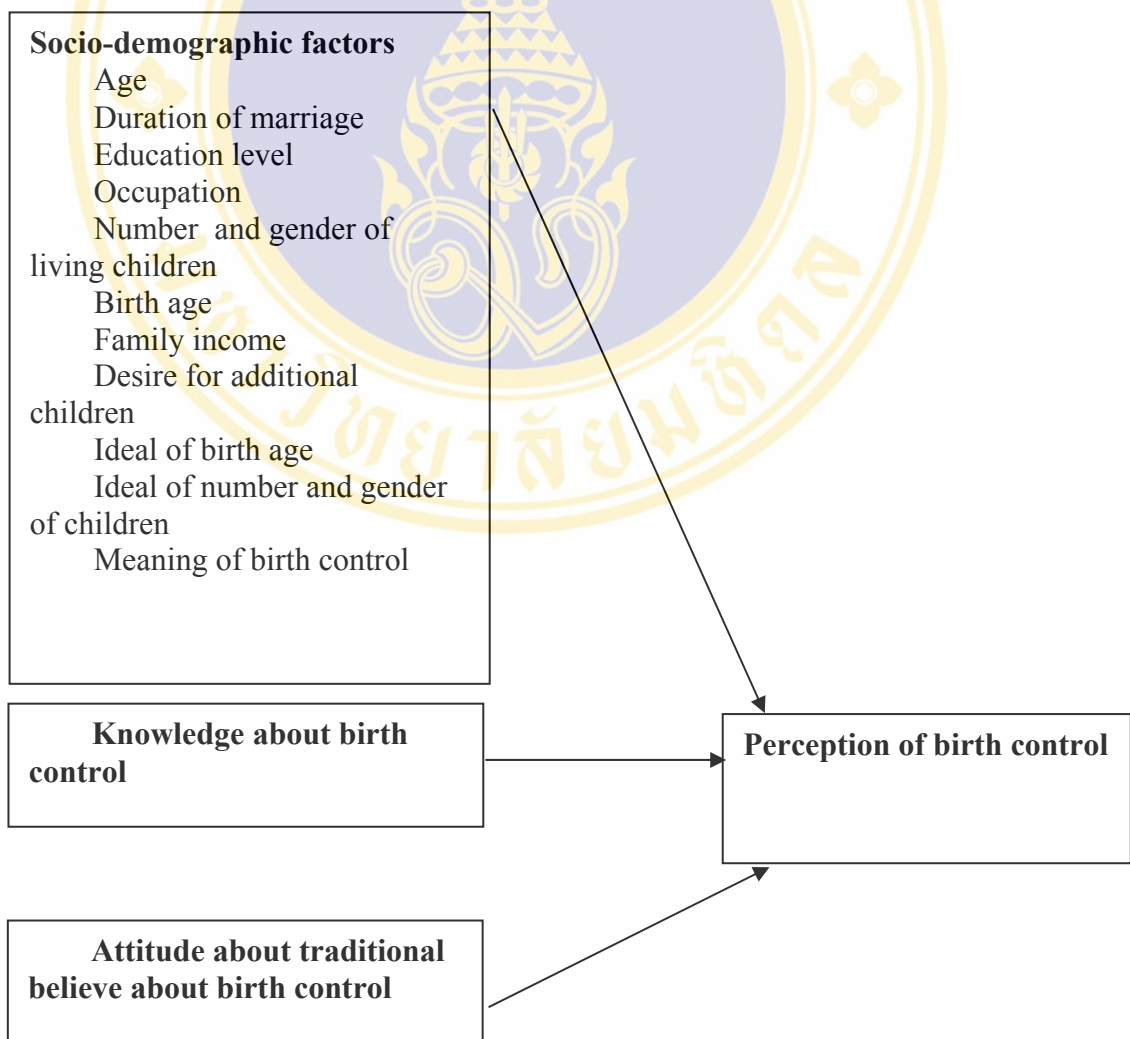
(2) To describe relationship between knowledge about birth control and the perception of birth control.

(3) To describe relationship between attitude of traditional believe and the perception of birth control.

### 1.4 Conceptual Framework

**Independent variable**

**Dependent variable**



## **1.5 Operational definition of studied variables**

### **Perception of Birth control**

Birth control means the ability and activities of couples to space pregnancies in births and to choose the number of their children. And perception of birth control can be divided into two aspects to explain, personal significance and social significance. For personal means the opinion of personal significance about “birth control” by respondents in this study, but for social means the opinion of social significance about “birth control” by respondents in this study.

### **Married women**

Married women can be defined as currently married women aged 15-49 years old and living with spouse, not conceiving.

### **Family planning policy in china**

Family planning policy in china, a basic state policy to promote family planning in an all-round way so as to slow-down population growth and improve its quality in terms of health and education. The Government encourages late marriage and late childbearing, and advocates the practice of “one couple, one child” and of “having a second child with proper spacing in accordance with the law regulations”. Family planning is also advocated among the ethnic minorities. Various provinces, autonomous regions and municipalities directly under the Central Government have formulated their own policies and regulations according to local conditions.

### **Traditional believe of birth control**

Traditional believe of birth control means people’s traditional thinking about birth control in China, including “More children bring more happiness”, “Early marriage and early bearing”, “Boy is more important than girl”, etc.

**Age**

Age was determined as complete years of women at the time of interview. The age of married women was grouped in to three categories. (By WHO)

15-29 yrs

30-39yrs

40-49yrs

**Duration of marriage**

Refers to how long they have married.

**Education**

Refers to the highest education level for which respondents has passed an examination or successfully completed the course requirements. It was defined as follow; no education (illiterate), primary school, secondary school and higher secondary or degree.

**Occupation**

Occupation refers to the job of respondents. It is mainly categorized into five categorized as 1) house wife, 2) service, 3) business, 4) farmer 5) labor 6) government employee 7) others

**Family income**

Family income refers to the total family income of all family members per month. Total family income was grouped as (The average of family income is RMB 1715 per month, the data from National Bureau of Statistics of China 2006):

RMB <1600 = Low Income

RMB 1600-3200 = Moderate Income

RMB >3200 = High Income

### **Knowledge of birth control**

Refers to knowledge of birth control, consist of 10 questions about the meaning of birth control, efficacy, advantage or side effects and etc. Each correct answer was given '1' score and incorrect answer was given '0' score. Following total score, the knowledge was classified into two groups following by mean of the full score:

1. Good knowledge :  $> \text{Mean}$
2. Poor knowledge :  $\leq \text{Mean}$

### **Attitude of traditional believe about birth control**

China's traditional culture deeply affecting the views of the above for women in reproductive issues, especially for rural women, we have to understand what is the traditional believe of birth control among married women in rural area.

To score attitude, for the positive statement, a score 3 was given for an agree answer, 2 was given for the answer "not sure" and 1 was given for a disagree answer. For the negative statement, a score 1 was for agree, 2 for not sure and 3 for disagree answer. Finally, the total scores were calculated. Before analyzing, the normality of the distribution of the total scores was examined. For descriptive analysis, women's level of attitude was classified for attitude in which cut-off points were determined by mean of the full score (30 score),

1. Positive attitude :  $> \text{Mean}$
2. Negative attitude :  $\leq \text{Mean}$

### **Perception of birth control**

Birth control for women in rural areas can be interpreted differently, this is the cause of their different concept of the important reasons for fertility.

To score perception, for the positive statement, a score 3 was given for an agree answer, 2 was given for the answer "not sure" and 1 was given for a disagree answer. For the negative statement, a score 1 was for agree, 2 for not sure and 3 for disagree

answer. Finally, the total scores were calculated. Before analyzing, the normality of the distribution of the total scores was examined. For descriptive analysis, women's level of perception was classified based on bloom's cut-off points for perception (72) in which cut-off points were determined by mean and SD of the full score (42 score),

High perception : Score  $>$  Mean + SD

Moderate perception : Score Between Mean + SD and Mean - SD

Low perception : Score  $<$  Mean - SD

### 1.6 Limitation of the study

However, it was still found some limitations from this study. Firstly, due to the limitation of time and budget, this study was conducted only four villages of Huainin as a case study of Huainin AnHui province so that the findings might not be represented the information of the whole province. Secondly, there are many factors relates to the perception of birth control. This study will not cover all factors. The basic factors such as, age, duration of marriage, income, education, knowledge, perception and etc. A only focused, the random was chosen. The interviewers were the Family Welfare Assistant, so there was possibility of bias during collection of data.

## CHAPTER 2

### LITERATURE REVIEW

In this chapter we reviewed the literature to provide the theoretical background to understand the concept of the study on birth control and factors related to perception of birth control among married women in Huaining Anhui province. The literature review consists of following parts:

- 2.1 General information on birth control
- 2.2 General information on Population state and birth control in China
- 2.3 Factors related to Perception of birth control
- 2.4 Theoretical model

#### **2.1 General information on birth control**

Out of the country's economic development and comprehensive national strength development needs. Different countries government took appropriate family planning policy to control the country's population growth too fast or too slowly. Generally speaking, the developed countries take the policy is to encourage childbirth, and have a good social security system. While the developing countries because of its low economic level and large population base, are mostly restricted to reproductive way.

Germany is the developing country. According to the German Federal Bureau of Statistics, the birth rate in Germany since 1975 has been below the basic mortality.

The average for German women only has 1.4 children. "World Journal" survey showed that only half of the German want have the family with children. To making the young people have more children, the German government launched reward policy, women can get big money every month for having children. The governments

want to set up 230,000 kid's park in the 2010 year, extended school teaching time to help working mothers (6).

The birth control program is one of Bangladesh success stories and has seemingly made a major impact in curbing population growth in the country. In 1980 the Government envisaged replacement levels of fertility in ten years by increasing the contraceptive prevalence rate (CPR) to 60 % (Planning Commission 1980). By 1993-94 the CPR was almost 50 % (Kamal 2000), reflecting significant achievements of the program. The population growth rate had also slowed down rather impressively from 2.5 % per annum to 2.2 % during the period 1981-91, while the national total fertility rate (TFR) fell from 6.5 births per woman in 1975 to 3.3 in 1996-97 (Mitra, et al. 1997). According to UN projections, the population growth rate is expected to further decline to 1.86 % by 2015 (UN 1998). And the recent Human Development Report (2002) by the United Nations Development Program reaffirms that while the annual population growth rate averaged 2.4% between 1975-2000, it was projected to come down to 1.9% between 2000-2015 (75).

In Thai, where the government pursued a ponytails policy until the late 1950s, the policy risk for FP programmers stemmed from its aim to reverse two centuries of promoting large families and population growth for “the greatness of the nation”. These views were maintained by two committees of the National Research Council which, in a report submitted to the Cabinet in 1960, insisted that Thailand's population should continue to grow as an engine for economic development. Furthermore, the report argued that a FP policy might lead to deterioration in public morality (Wongboonsin, 1994). To address this policy risk, supporters of FP (the coalition of policy elites described above) involved different institutions within and outside of government by using a broadly appealing rationale for FP programmers. Reconciling FP with the country's Buddhist culture, notably the strong reverence for life in all forms, strong emphasis was placed on the need to reduce population growth in order to improve the “quality of life” of all Thais. In this way, policy risk was tempered by arguing that FP programmers were in the collective interest of all citizens (76).

According to other UN projections, India's population may stabilize at around 1.7 billion by 2060 (73). Population growth has long been a concern of the government, and India has a lengthy history of explicit population policy. In the 1950s, the government began, in a modest way, one of the earliest national, government-sponsored family planning efforts in the developing world. The annual population growth rate in the previous decade (1941 to 1951) had been below 1.3 percent, and government planners optimistically believed that the population would continue to grow at roughly the same rate (73). India's high infant mortality and elevated mortality in early childhood remain significant stumbling blocks to population control (see Health Conditions). India's fertility rate is decreasing, however, and, at 3.4 in 1994, it is lower than those of its immediate neighbors (Bangladesh had a rate of 4.5 and Pakistan had 6.7). The rate is projected to decrease to 3.0 by 2000, 2.6 by 2010, and 2.3 by 2020 (74).

## **2.2 General information of birth control in China**

In the 1970s, the principle of the family program was late marriage, fewer births, and spacing of births. Fewer births were advocated - one is good, two are acceptable and three are too many. In China, it is estimated that approximately 300 million births were averted between 1970 and 1994 due to the implementation of the family planning program. In spite of the program, the large population base and annual net increase still placed tremendous pressure on China's economic development, resources and environment. Therefore, while adhering to the policy of reform and opening up to the outside world so as to sustain a rapid and healthy development of the national economy, China must adopt a strategy of sustainable development, further promote its family planning program, and provide quality reproductive health service to eligible couples (84).

In the early 1980s, central government advocated one child per family in urban areas. For rural area couples, one child is impractical, which causes difficulties; therefore, couples are encouraged to have a second child after a gap of around 4 years.

At present in large cities, the fertility rates are lower than other levels, for example in Shanghai the natural growth rate in 1994 was -1.20, but in minority areas the growth rates were still higher than 15%. The national average for each family is to now have two children, except for in minority areas where women may still raise between four and five children(8).

Since the implementation of the policy of family planning in China, profound changes have been taking place in people's concepts of marriage, birth and family along with the reform and opening to the outside world as well as socio-economic development; the traditional ideas of "early marriage and early births," "more children, greater happiness," and "looking up on men and down on women" are being discarded by more and more people at the child-bearing ages. Late marriage and late births, fewer and healthier births, viewing male and female children as the same, establishing happy, perfect and harmonious small families and seeking a modern, scientific and civilized way of life have become an irresistible trend of the times. The rate of early marriage for women has come down and their average age at first marriage has gone up. In 1992, the proportion of women entering first marriage before the age of 20 dropped to 12.9 percent of the total number of firstmarriage women. In 1970, women's average age at first marriage was 20.2 years, while in 1993 it was 22.67 years, up 2.47 years. The family size has become gradually smaller and nucleus family is becoming the major form of modern Chinese families. According to China's fourth national census, the average size of families in 1990 was 3.96 persons, 0.88 person less than the 4.84 persons in 1971. The major reason for the reduction of family size is a reduction in the number of births. Compared with 1970, of the babies born in 1993 the first-birth rate and second-birth rate increased from 20.7 percent and 17.1 percent to 61.3 percent and 27.5 percent respectively, and the multiple-birth rate dropped from 62.2 percent to 11.2 percent. By 1994, a total of 46.76 million couples had volunteered to give birth to only one child throughout the country, accounting for 20.3 percent of the total married women at child-bearing age. At the current level of economic development and living standards in China, the reduction of family size and

fewer children to support have obviously reduced the economic burden and the burden of family chores on the families and improved their quality of life (9).

## **2.3 Factors related to Perception of birth control**

### **2.3.1 Socio demographic factors**

#### **Age and duration of marriage**

Marriage in the most Asian societies defines the onset of the socially acceptable time for childbearing. Women who marry early will have, on average, a long period of exposure to pregnancy, often leading to a higher number of children ever born (37).

The age at which women marry is a major factor in Population growth. Marriage often represents the socially sanctioned initiation of sexual activity and childbearing for women. Then, early marriage is associated with high fertility and late marriage with vice versa. Late marriage of women is also associated with many of the beneficial and productive aspects of developed society. It permits women to achieve more education, to train for useful career, to earn money and to contribute in a more meaningful way to family, community and national life. Late marriage may also encourage women to make decisions about childbearing and rising based more on their own abilities and their children's needs than on traditions encouraging high fertility (38).

Marriage during the teenage years is common in developing countries. Nevertheless, the situation varies greatly by country and region. Women are most likely to marry at a young age in Sub-Saharan Africa: In all but a few countries in that region, 60-92% of all women aged 20-24 had entered their first union by age 20. In Bangladesh, Guatemala, India and Yemen, 60- 82% of all women aged 20-24 had married by age 20. Although marriage during the teenage years is less common in Latin America, Asia, North Africa and the Middle East than in Sub-Saharan Africa, it is by no means rare. Typically, one-fifth to one-third of 20-24-year-olds in those regions had entered their first marriage by age 18, and one-third to one-half had

married by age 20. Even in France and the United States, 11% of all 20-24-year-olds had begun their first marriage or cohabiting union by age 18, and 32% had done so by age 20. Japan is exceptional in the rarity of marriage during adolescence: Only 2% of 20-24 year-olds had married by age 20. In a few developing countries, marriage by age 18 is relatively uncommon. The proportions of women married by age 18 (10-14%) in Botswana, Namibia, the Philippines, Sri Lanka and Tunisia are similar to those in France and the United States, and the proportions married by age 20 (19-29%) are lower. Beginning the first marriage before age 15 is common only in Bangladesh and Niger, where about half of women aged 20-24 had married by that age. Nevertheless, the incidence of very early marriage ranges from 10% to 27% in seven Sub-Saharan African countries (Cameroon, Liberia, Mali, Nigeria, Senegal, Togo and Uganda) and six countries in other regions (Guatemala, India, Indonesia, Pakistan, Sudan and Yemen)(39).

According to the Population Report, there are at least three important demographic reasons that individual woman who marry early tend to have more children than those who marry late and to hasten population growth. If women marry at young age:

(1) They are likely to have sexual intercourse most frequently throughout their most fecund years;

(2) They begin childbearing at an earlier age and thus live throughout with a longer period of exposure to contraception;

(3) They shorten the interval before the next generation is born and began childbearing (78).

In 2001 Japan, the mean age of a couple marrying reached an all time high of 28.1 years. The average age of the bride tying the knot was 27.2 years and the corresponding figure for the groom was 29 years. Official figures for 2001 show that

the average age of first time motherhood was 28.2 years which is exactly one year after the average female age of marriage. One of the consequences of the late marriage trend has been the emergence of smaller families which is reflected in the declining birthrate. The birthrate represents the average number of babies born to a woman in her lifetime and it hit an all-time low of 1.33 in 2001. In large cities, the birthrate was even lower than the national average. For example, Tokyo recorded a birthrate of just 1.0 in 2001 (77).

### **Education**

Education is a key determinant of the life style and status an individual enjoy in a society. It affects many aspects of life, including demographic and health behavior. Studies have shown that educational attainment has strong effects on reproductive behavior, contraceptive use, fertility, mortality, morbidity, and attitude and awareness related to family health and hygiene (37).

Education is the most important factor for acceptance of family planning. Usually the educated women have more awareness and opportunities to know the importance of contraceptive in respect to birth control. The educated women are more likely to marry late, to the first pregnancy to leave more time between births and have few children in total. In accordance with the many studies, there is a positive relation between education and contraceptive use specially studies in El Salvador, England and Philippines have shown this relationship (44).

Many studies show a positive relationship between education and contraceptive prevalence such as special studies in El Salvador England and the Philippines (44). It has been observed that there is and inverse relationship between fertility and literacy. Women without education have Total Fertility Rate (TFR) of one child higher than women with primary education and two children higher than those who have gone beyond middle education level. Also illiterate women more fearful of the side effects of contraceptives (45).

Piseth S (44) in his study found that more than half (54.5%) of the respondents had primary education, followed by high school and higher level (20.7%). Only 11.3% had no education. However, the association was not found significant.

A study on Factors affecting family planning behavior among married women of reproductive age in Ratchaburi Province of Thailand found that majority (62%) of the respondents had primary level of education and this was followed by elementary level (17.7%). Only 2.3% had higher level and 6.3 had no education. He also not found any significant association between family planning behavior and education (45).

Another study by Nhan TD (47) found that those who use contraceptive among them 83.9% respondents had educational level secondary school or higher. In contrast, about 62% non-user had educational level equal or less than primary. He found significant association between contraceptive use and educational status.

### **Occupation**

An article presents an updated overview of the relationships between women's education and fertility. Data from the Demographic and Health Surveys for 26 countries were examined. The analysis confirmed that higher education is consistently associated with lower fertility. However, a considerable diversity exists in the magnitude of the gap between upper and lower educational strata and in the strength of the association. In some of the least-developed countries, education might have a positive impact on fertility at the lower end of the educational range. Yet, compared with patterns documented a decade ago, the fertility-enhancing impact of schooling has become increasingly rare. The study also examined the impact of female education on age at marriage, family-size preference, and contraceptive use. It confirmed that education enhances women's ability to make reproductive choices (48).

Contraceptive Prevalence Survey Report (49) showed that although the highest percentages of married women currently practicing contraception were in the professional and in the sales and business categories, the percentages of women in

other occupation groups currently practicing contraception were also in the range of 70 or higher. It indicated that influence of this factor on contraceptive was dissipating. The lowest contraceptive prevalence rates were among those who were not working and housewife. There was still positive relationship between women labor force participation and contraception.

A study done by Win H (1993) on Factors Affecting birth control of women of reproductive age in Ratchaburi province of Thailand revealed that the majority of women with current users were farmers and labors in 70.4% and 69.6% respectively and followed by house wife at 57.1 percent. It was found that there was a significant relationship between wife's occupation and birth control (43).

### **Income**

It was found that high income status, is being more exposed to family planning communication and having greater access to medical facilities, will be more likely to have contraception and continue such practice and to practice more effectively than others (50).

About economic status, it was found that many studies done by Banouvang V 1999 (51), Nhan TD 2002 (49) and Laing JE 1985 (52), were concluded that family income was significantly associated with preception of birth control, and was one of several main factors related to the continuation of preception of birth control among married women.

A study of Chamrathiron et al (53) in Bangkok concluded that working women had higher continuation rates than who did not work. This may suggest that labor force participation is directly related to contraceptive continuation. For combine monthly income, women in higher income were not likely to continue than women in other lower income. However, continuation rates for Pill and IUD did not appear to be correlated with family income.

### **Number and gender of living children**

The focus of our discussion is preception of birth control, preception of birth control really be able to influence by living children.

A study in Thailand found that the percentage of childless women practicing contraception was still low, about 24 percent. However, the percentage of birth control, increased sharply to a much higher level among women with children, reaching the peaks among with 3 children declining thereafter. The relationship between current birth control and the number of living children is curvilinear (69).

There was a positive relationship between family planning practice and the number of living children. Pitaktepsombat P. and Prachuabmob V. (70) found that it is likely the eligible women who have more living children will accept birth control more easily than those who have fewer children. Among currently married women aged 15-44 who had two living children, nearly 65 percent wanted more, 55 percent of those with no son wanted no more, and 85 percent of women with two sons wanted no more, whereas 72 percent of those with a son and a daughter wanted no additional children.

In addition, women with a son and a daughter were more likely to practice contraception at around 72 percent than women with two children in the same sex (66% of those with two sons and 63% of those with two daughters). Furthermore, 84 percent of women with three children said they wanted no more and these two- third of such women used contraception(11).

There was a positive relationship between number of living children and the ideal number of children in the future. (71)37% of the families have one child, 39% of the families have two children, 24% of families have three or more children. 83% of families with one child would like to have at least more one child in the future; and has two children of the family, only 27% would like to have children in the future. As

for the families have three or more than three children, only 3% would like to continue in the future, which six percent believe that their children are too much.

### **2.3.2 Attitude about traditional believe about birth control**

In remote rural areas, a machine that can determine sex before birth remains an unheard-of luxury. Despite the reluctance of mothers here to give birth to girls, the ratio of girls to boys in this district is higher than in more prosperous areas of the India: 941 girls for every 1,000 boys at birth, higher than the national average of 927(58).

Even in the cities the preference for sons remains powerful. A new culture of ostentatious consumption has pushed dowry prices up, further eroding enthusiasm among middle-class families for daughters.

In urban areas, the traditional bias has morphed into an efficient modern form, with the arrival of ultrasound technology that allows women to avoid giving birth to girls. Prenatal sex determination is illegal, but widely practiced. Across India, as many as 10 million female fetuses may have been aborted over the past 20 years, according to a study published in the British medical journal, the Lancet, last year (64).

The traditional household consists of three or four generations living together, with the elderly surrounded by their grand children. This is still the vision towards which many people strive. Apart from the enjoyment of being an elder and a parent, the elder generation can often displace their own ideals and hopes onto the younger generation and watch as they grow up into adulthood. "Without sons or daughters old people go to the old age home, and even though the government gives support life still seems to be lacking something. If you can live with your own children, that's good—it just feels more heart-warming."(74).

Even though most people have come to recognize the role of daughters in livelihoods, farmers who have been strongly influenced by traditional Chinese culture think that only a son can pass on the family line and continue the family line. If one does not have sons then the family 'root' is said to have 'broken' and the ancestors dishonoured. When households without sons argue with their neighbours they may be insulted as "a breaker without grand children" (9).

In more developed areas, farmers are less dependent on sons, but traditional reproductive culture still influences people's perceptions, and psychologically there is still a strong demand for sons. In the less developed central and western areas of China, farmers not only have strong psychological demands for sons but are also very dependent on their sons for their daily livelihoods. In these areas family planning has been referred to as 'the greatest disaster' (54).

In addition to needs deriving from the practical demands of daily life, Chinese farmers' perception of birth control is also influenced by traditional culture, habits and traditional life styles. To give birth to a son is to bring honour to one's ancestors. As the saying has it: "If one gives birth to a son the roof is three feet higher, if one gives birth to a daughter the roof is three feet lower" (54).

### **2.3.3 Knowledge about birth control**

Knowledge of birth control including content and implementation approach about birth control, significance for personal and social.

Today, all countries in the world on their own population policy reproductive broadly divided into three categories. The first is to encourage the growth of the national population, and the second category is the country with a population of family planning, the third category is neither encourages nor restricts, with its natural fertility countries. Encourage birth to the first category of countries are Japan, Russia, Spain, and other Western European countries. Most of the economies of these countries are relatively well developed. The second type of national family planning

is the China and India. With the third category of countries are the United States and most of the developing countries (62).

For Western Europe, Russia, and Japan, and other developed countries, birth control means to encourage more births.

Spain total population is 44 million. Due to historical, economic and concepts, and other reasons, Spanish women do not want to have children. Fertility rate has decreased year after year trend, and there has been the issue of ageing society. Spain elderly population accounts for 14 per cent of the total population (62).

According to Japan's National Institute of Social Security population in January 1997 estimates, from the beginning of 2007, Japan's population will be 1.2778 billion people at the peak annual rate of 0.56 percent decline, to 2050 to 1.0050 billion people, by 2100 for 67.37 million people.

Japan is reluctant to family birth, because the high cost of care. Including raising fees on the child's investment in human capital, as well as mothers to foster children must sacrifice the work of the charges. The Japanese Government is also taking measures to encourage childbirth. However, the effect is not clear (62).

In the late 1990s, the Indian population of 180 million net increases in May 2000 officially over 10 billion mark. Become the world's fastest population growth in one of the regions. According to the United Nations published the "World Population Prospects" report predicts that by 2050, India's population will increase to 1.593 billion(58).

Rapid growth of the huge population of Indian society to the dangers clearly, the ordinary people can not understand birth control. : "The number of children should be to decide by myself, children are all of the joys in my life" Some people

even believe is one of the things to be proud .that India will become the largest population country in the world.

India also has some academics who oppose birth control. India's current population size is not a burden, but the biggest advantage of economic development. India's population to the high birth rate, the average age of only 26 years old, in the situation about ageing in global population and labor shortage, and low-cost labor in India can promote economic development (63).

For a long time, because of population problem in China people understand significance for birth control to the personal and national. To achieve the purpose of birth control (65).

During the past 30 years, China government efforts to implement birth control education. And has a great success. The birth rate and natural growth rate decreased from 33.43‰ and 25.83‰ in 1970 to 12.4‰ and 5.89‰ in 2006 respectively. The total fertility rate of Chinese women went below the replacement level, making China one of the countries with a low fertility level in the world. When economically still underdeveloped, China has accomplished a historic transition in population reproduction pattern from one featuring high birth rate, low death rate and high growth rate to one featuring low birth rate, low death rate and low growth rate in a relatively short period of time, a change that took decades or even up to a hundred years for developed countries to realize in the past (7).

Those of us who easily become discouraged by population issues will do well to focus on the extraordinary gains of Thailand's family planning program. With 54 million people living in an area slightly larger than California, Thailand once faced a population growth rate as daunting as that of other developing countries. But as a result of a far-reaching family planning effort - officially launched in 1971 with the adoption of a national population policy - Thailand has gained impressive control over its growth rate. Use of contraceptives among married couples has increased from 15

to 70 percent, and in 15 years Thailand's population growth rate has been cut in half, from 3.2 percent to 1.6 percent(66).

Thailand has lowered its birth rate quickly - and substantially - thanks to the creativity of family planning approaches, the openness of the Thai people to new ideas, and the willingness of the government to work with the Population and Community Development Association (PDA), a private non-profit organization and the largest nongovernmental agency in Thailand(69).

Primary to the effort is the character of the Thai people and their culture. Relationships between men and women in Thailand are more egalitarian than in most of the developing world. Thai spouses share equally in decisions regarding children, family life, and contraception. And the prevalence of Buddhism (95 percent of Thais are Buddhist) has also supported the family planning effort in Thailand. Buddhist scripture preaches that "many children make you poor."(66).

The problem of population growth and illiteracy requires making the population functionally literate in order to help them understand the concept of a small family and to enjoy the benefits of planned parenthood. Functional literacy programs and family life education programs require integration and delivery directly to the rural population, the majority of who are out-of-school youths and adults working in both agricultural and nonagricultural occupations. Such a task requires the workers to be involved, committed, tolerant, and patient in their efforts with the rural families who respect tradition and resist change. The government of India's early family planning program is reorganized and named the Reorganized Extended Family Planning Program in 1963. Priorities of the program in the 4th year plan have been integration of family planning into general health services, integration of maternal and child health services, intensive work in high density areas, and family life education. The educational component of the extended family planning program is broadly based and scientifically designed. It includes mass communication activities along with both a group and an individual approach. In order to get action, the extension teaching effort

needs to concentrate on developing successful means of influencing people to change their behavior. Since to date only 11% of the nearly 100,000 couples have been served by the family planning program, the problem continues as does the need to educate the rural population by means of an integrated functional literacy and family life planning education program that uses extension teaching methods and involves voluntary organizations. As the effort to educate the population concerning family welfare planning is of recent origin in India, it requires study, experimentation, research, and innovation in order to achieve successful implementation. (67). India accounted for 25 per cent of the population in the upper echelons of society is a support birth control and the main force. They are worried that the population growth will be a threat to their safety and happiness. 35% of the poor do not think that population growth is an important thing; the poor people think that big family is beneficial. 40% of the middle class between them. In fact, Most of the Indians did not know the content and significance of birth control (68).

## **2.4 Theoretical model**

### **2.4.1 The health belief model**

**Theory Summary:** The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors by focusing on the attitudes and beliefs of individuals. The HBM was developed in the 1950s as part of an effort by social psychologists in the United States Public Health Service to explain the lack of public participation in health screening and prevention programmes (e.g., a free and conveniently located tuberculosis screening project). Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS. The key variables of the HBM are as follows (Rosenstock, Strecher and Becker, 1994): (80) (81) (82)

**Perceived Threat:** Consists of two parts: perceived susceptibility and perceived severity of a health condition.

**Perceived Susceptibility:** One's subjective perception of the risk of contracting a health condition.

**Perceived Severity:** Feelings concerning the seriousness of contracting an illness or of leaving it untreated (including evaluations of both medical and clinical consequences and possible social consequences).

**Perceived Benefits:** The believed effectiveness of strategies designed to reduce the threat of illness.

**Perceived Barriers:** The potential negative consequences that may result from taking particular health actions, including physical, psychological, and financial demands.

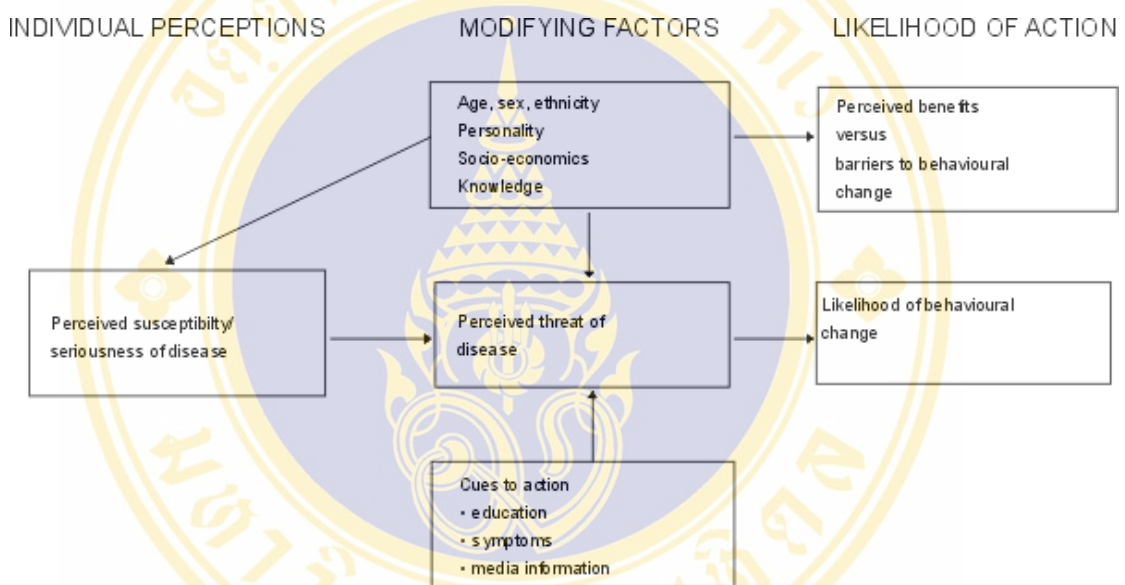
**Cues to Action:** Events, either bodily (e.g., physical symptoms of a health condition) or environmental (e.g., media publicity) that motivate people to take action. Cues to actions is an aspect of the HBM that has not been systematically studied.

**Other Variables:** Diverse demographic, socio psychological and structural variables that affect an individual's perceptions and thus indirectly influence health-related behavior.

**Self-Efficacy:** The belief in being able to successfully execute the behavior required to produce the desired outcomes. (This concept was introduced by Bandura in 1977).

"The Health Belief Model (HBM) was one of the first models that adapted theory from the behavioral sciences to health problems, and it remains one of the most widely recognized conceptual frameworks of health behavior. It was originally introduced in the 1950s by psychologists working in the U.S. Public Health Service

(Hochbaum, Rosenstock, Leventhal, and Kegeles). Their focus was on increasing the use of then-available preventive services, such as chest x-rays for tuberculosis screening and immunizations such as flu vaccines. They assumed that people feared diseases, and that health actions were motivated in relation to the degree of fear (perceived threat) and expected fear-reduction potential of actions, as long as that potential outweighed practical and psychological obstacles to taking action (net benefits)."(79)(83).

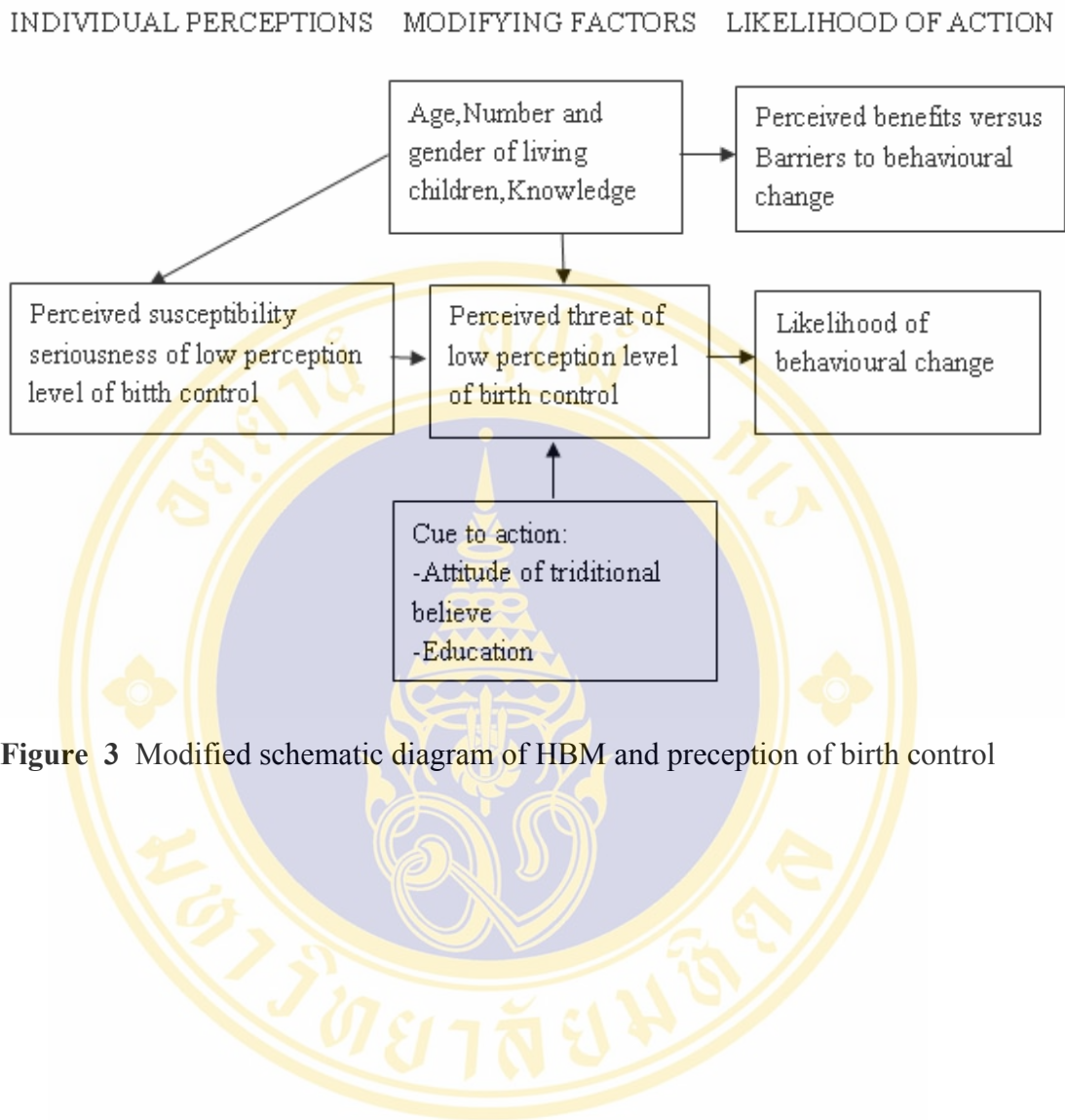


Source: Glanz et al, 2002, p. 52

**Figure 2** Conceptual Model

**2.4.2 The health belief model and this study**

There were applied the model based on the design of factors and the dependedt variable according to the components of the HBM with conversing to the modified (applied) model (Figure 4). The HBM was the model could be explaining the process of relationship among independent factors and dependent factors in this study. The factors of socio demographic of the married women were selected key factors these may relate and effect to the married women’s preception of birth control and effect to other factors i.e. the women’s knowledge and attitute. These socio demographic factors were age, occupation, family income, education level, number and gender of living children etc...



**Figure 3** Modified schematic diagram of HBM and preception of birth control

## CHARTER 3

### RESEARCH METHODOLOGY

#### 3.1 Research design

The study design was a descriptive cross sectional study, which aims to discover the factors related to perception of birth control in rural of china.

#### 3.2 Study population

The study population of this study was married women of reproductive age (15-49 yrs), who were staying with their husband, not conceived during the study period and residing in selected county of Huainin.

#### 3.3 Study place

The study was conducted in Huainin County. Huainin is 1576 square kilometers in rural area, from geography, Huainin could be divided into to 2 parts (northern part and southern part) by railway, it consists of 26 towns and having a population 781,306. Out of 26 towns two was selected by simple random sampling from northern part and southern part. Each town consists of 5-12 villages. Out of these villages two were selected from each two towns by simple random sampling. Each village had a population more than 2,500.

The researcher choose 2 towns name ShiPai and JinGong. There were 12 villages in ShiPai with population 56487 people, women in group of 15-49 years old was 17424, and 12632 of them had married. Main occupation is agriculture, rice cultivation. There were 7 villages in JinGong with population 25797 people, women in group of 15-49 years old is 6378, and 4718 of them had married. People occupation was agriculture(59).

### 3.4 Sample size and sampling technique

#### 3.4.1 Sample size

The sample size was estimated using following formula:

$$n = \frac{z_{\alpha/2}^2 p(1 - P)}{d^2}$$

n = Sample size

Z = level of statistical significance in this study, is set at 95% confidence interval=1.96

d = Degree of accuracy =5%

d= 0.05

Prevalence = 19.5% (In this research, I choose four towns has 3879 married women, but we have population 19931, so we can get  $p=3879/19931=0.195$ )

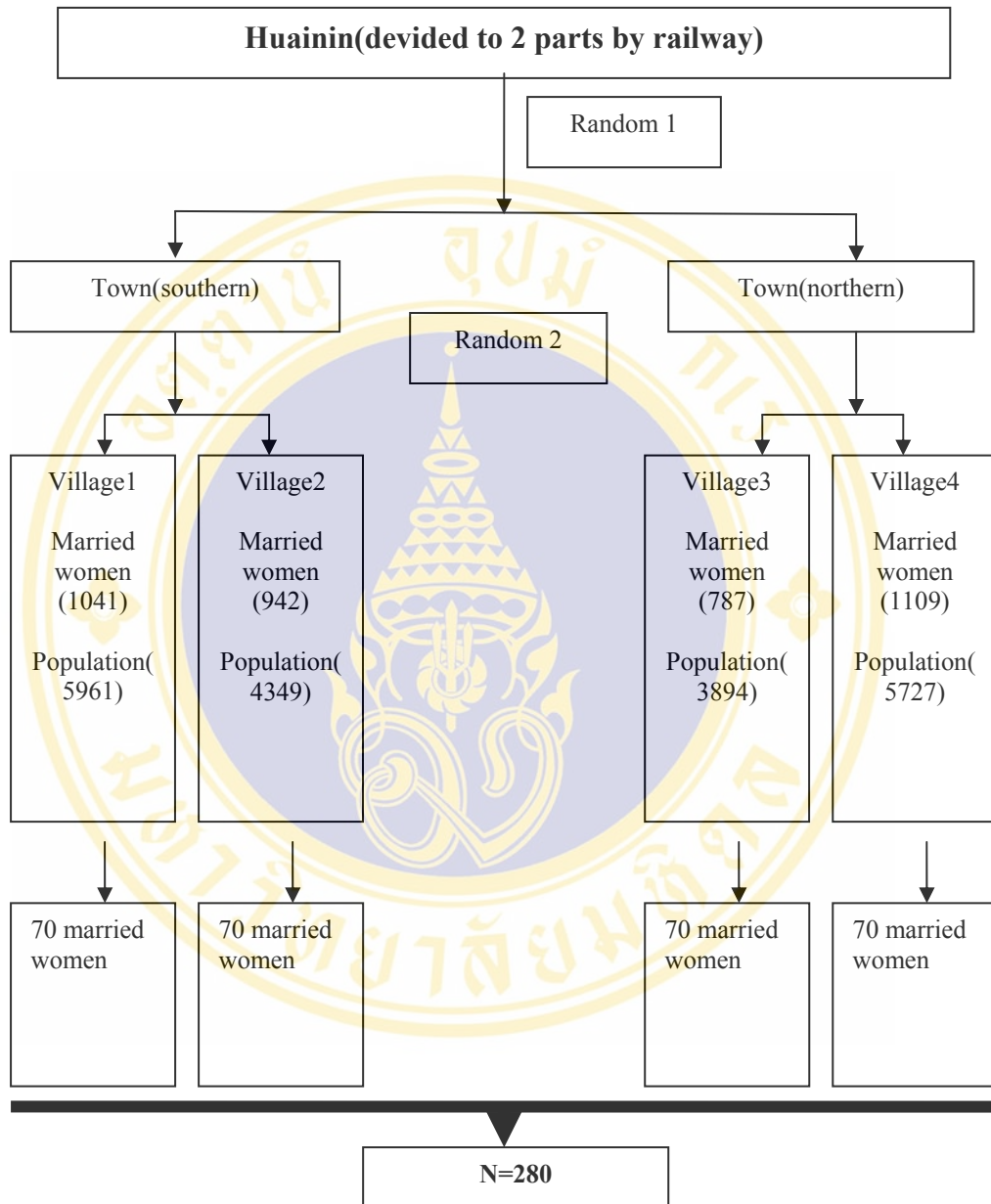
P = 0.195

$$n = \frac{(1.96)^2 0.195(1-0.195)}{(0.05)^2}$$

n = 241

According to the above data calculated, the required sample size should be no less than 241 to analysis. In this study, the sample size was added 10% for preventing insufficiency information or inappropriate questionnaires, rounded 280 married women were interviewed.

### 3.4.2 Sampling technique



**Figure 4** Sampling procedure.

**Technique:**

1. A structured questionnaire was used for data collection. Initially, the questionnaire was prepared in English by the researcher, and then translated into Indonesian for convenience to collecting data (The questionnaire was provided in Appendix A).

2. There was the railway in the middle part of HuaiNin, the railway can divided Huainin to two parts, the researcher chosen the two towns from northern part and southern by the drawing of lots, and used the same way to chosen four villages.

3. Information about married women got from health center in each village.

4. Simple Random sampling to selected 61 women from each village. Took into account the possible 10% of the error, so the researcher could chosen when samples collected more 10%. During January 5<sup>th</sup> to 25<sup>th</sup>, every family must surrendered the tax to the government office, so the researcher asked women came to the office and chosen 70 women form each village by random. Every women who had answered the questionnaire can get small gift.

### **3.5 Research instruments for data collection**

We can divide into 2 parts.

Independent variables and dependent variables

#### **Part 1 Independent variables**

Socio demographic factors

This part consisted of questions dealing with socio demographic factors including age, duration of marriage, education level, occupation, family income, etc.

Knowledge of birth control factors

This part consisted of questions dealing with knowledge of birth control factor including ten questions to judge the knowledge level of birth control among married women.

Attitude about traditional believe factors.

This part consisted of questions dealing with attitude about traditional believe factor including ten questions to judge the attitude level of traditional believe among married women.

### **Part 2 dependent variables**

#### Perception of birth control

This part consisted of questions dealing with perception of birth control including 14 questions to judged the perception level of birth control among married women.

### **3.6 Data collection tools and methods**

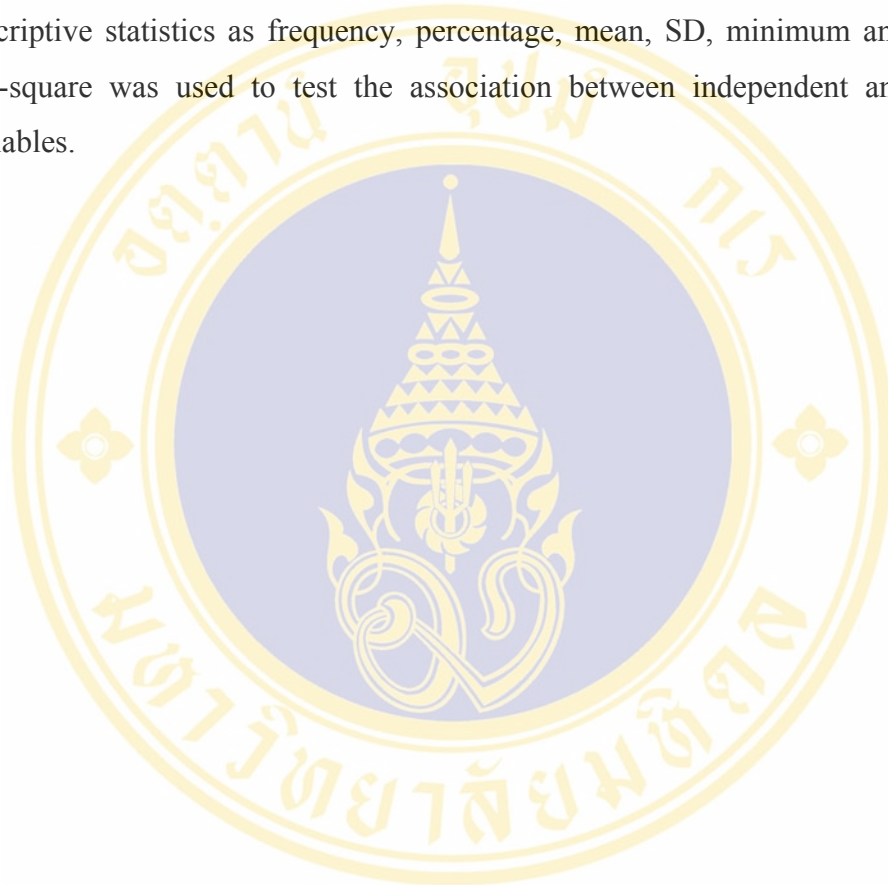
The instrument was used for data collection was a structured questionnaire and using interview method and observation. And from face to face discussion, the researcher can collect extra data from the respondents. The married women were interviewed by the trained interviewers. Before data collection the questionnaire was pre-tested for validity and reliability. As Kuder-Richardson formula (K20 & K21). The interviewers were selected and trained for two days before data collection. The researcher carried out the interview from another town in Huainin, the prepared questionnaire was pre-tested with 30 married women. According to the reliability test of the questionnaire revealed the reliability  $KR20=0.6827$  of the married women's knowledge and cronbach's  $\alpha=0.7658$  of the married women's attitude about traditional believe of birth control, the cronbach's  $\alpha=0.7276$  of the married women's preception of birth control.

### **3.7 Data collection procedure**

Data was collected by the researcher and trained interviewers with criteria of respondent.

### 3.8 Data analysis procedure and statistics used

The questionnaires were labeled and used data analysis by EpiData Version 3.0 and Statistical Software Minitab 14 for windows. Data was cleaned and edited before entering in computer at the end of each day. Variables were described by used for descriptive statistics as frequency, percentage, mean, SD, minimum and maximum. Chi-square was used to test the association between independent and dependent variables.



## CHAPTER 4

### RESULTS

A total of 280 married women of reproductive age were interviewed from 5<sup>th</sup> to 25<sup>th</sup> January 2008. After screening for missing data and multiple responses, 255 data were used for analysis. The rest 25 data were discarded. The data were collected from four villages selected outreach centre of Huainin AnHui province China. Only 91.07% of respondents were selected to analysis data.

Descriptive statistics were used to describe different variables such as age, duration of marriage, occupation, education, knowledge, opinion and etc. Chi-square test was used to found out the association between the socio-demographic status, knowledge, attitude and the perception of birth control of married women. The level of significance for all comparisons was set up at 5% level, and the results were presented in 6 parts according to the conceptual framework including:

1. Socio-demographic factors
2. The married women's knowledge on birth control
3. The married women's Attitude about traditional believe about birth control
4. The married women's perception of birth control
5. Association between independent variables and dependent variables.
6. Association between the attitude levels about traditional believe about birth control and Socio demographic factor

#### 4.1 Socio-demographic characteristics

**Table 2** Frequency distribution of socio-demographic characteristics

Characteristics	Frequency N = 255	Percentage (%)
<b>Age groups (years)</b>		
15-20	18	7.06%
21-30	152	59.60%
31-40	64	25.10%
41-49	21	8.24%
Mean = 29.345	SD=6.23	Min = 18
Max = 45		
<b>Married age groups (years)</b>		
15-20	102	40.00%
21-30	152	59.61%
31-40	1	0.39%
41-49	0	0%
Mean = 20.89	SD=2.42	Min = 17
Max = 33		
<b>Occupation</b>		
House wife	15	5.88%
Service holder	69	27.06%
Business	30	11.76%
Farmer	128	50.20%
Laborer	3	1.18%
Government employee	7	2.74%
others	3	1.18%
<b>Family Income</b>		
RMB.<1600	51	20.00%
RMB.1600-3200	169	66.27%
RMB.>3200	35	13.73%
Mean = 2409	SD=1136	Min =800
Max =8000		
<b>Education level</b>		
No education	31	12.16%
Primary	86	33.73%
Secondary	116	45.49%
Higher secondary	18	7.06%
B.A.degree	4	1.56%
Master degree	0	0%
P.h.D	0	0%

The descriptive statistics for socio-demographic factors was analyzed in Table 2. It showed that 59.61% of the respondents belonged to the age group 21-30 years; this was followed by the age group 31-40 years (25.10%). Only 8.24% of women were belong to 41-49 years group. The smallest group is 15-20 years group, only 7.06%

belong to this group. The mean age of the respondents was 29.35 years with standard deviation of 6.23 years. The minimum and maximum age was 18 years and 45 years respectively.

According to the married age, the minimum was 17 years and the maximum was 33 years. The study revealed that 59.61% of respondents had married between 21-30 group, while the percentage of married age between 15-20 was 40.00%, and the age group 31-40 years old was smallest (0.39%). Nobody married above 40 years old. The average of married age and the standard deviation were 20.89 years and 2.42 years respectively. The minimum and maximum age was 17 years and 33 years respectively.

Concerning the women's occupations, majority of the married women were farmer (50.20%) and service (27.06%) respectively. Only 5.88% of women were engaged in housewives, 1.18% work as laborer, and 11.76% were doing business. About 2.75% work as government employee. About 1.18% work as others (factory owners).

Regarding the monthly family income of the respondents, it revealed that, the minimum family income was RMB 800 and the maximum was RMB 8,000. The average family income of the respondents was RMB 2,409. Majority (66.27%) of the respondents belonged to the income group RMB 1,600-3,200. The group with family income per month below to 1,600 was 20.00%. The group with family income per month above 3200 was 13.73%.

Majority of the respondents were in the no education (12.16%) and primary level education (33.73%) groups. The group had secondary education was 45.49%. Only 7.06% had higher secondary and 1.57% had B.A.degree level of education.

**Table 3** Frequency distribution of information about the children of the respondents

Characteristics	Frequency N	Percentage
<b>Distribution of the respondent by having of living child</b>		
Yes	221	86.67%
No	34	13.33%
<b>No. of living Children N=221</b>		
1 Child	28	12.67%
2 Children	165	74.66%
3 Children	20	9.05%
4 Children	8	3.62%
Mean = 2.04	SD = 0.62 Min = 1	Max = 4
<b>No. of living Son(s) N = 221</b>		
No son	14	6.33%
1 son	169	76.47%
2 sons	37	16.75%
3 sons	1	0.45%
Mean = 1.1131	SD = 0.487 Min = 0	Max = 3
<b>No. of living daughter(s) N = 221</b>		
No daughter	37	16.74%
1 daughter	165	74.66%
2 daughters	18	8.14%
3 daughters	1	0.46%
Mean = 0.9231	SD = 0.5121 Min = 0	Max = 3
<b>First birth age N=221</b>		
1 15-20	42	19.00%
2 21-30	177	80.09%
3 31-40	2	0.91%
4 >40	0	0%
<b>Desire of additional child N =255</b>		
Yes	44	17.25%
No	211	82.75%

Table 3 showed the information about the children of the respondents. The result showed that the majority of the respondents (86.67%) had living child. The minimum and maximum number of living children was 0 and 4 respectively. The percentage of women, who had 2 children, was 74.66%. The women had 1 child was 12.67%, followed by 9.05% and 3.62% had 3 and 4 children respectively. The average number of living children was 2.04, and the minimum and maximum number was 1 and 4 respectively.

Regarding the number of living son of the married women, 76.47% had 1 son, followed by 16.74% had 2 sons, 0.45% had 3 sons and 6.33% had no sons. The average number of son was 1.11, and the minimum and maximum number was 0 and 3 respectively.

The percentage of women having 1 daughter was 74.66%. Only 8.14% had 2 daughters. The number of women had no daughter was 16.74%. The average number of daughter was 0.92. The minimum and maximum number of daughter was 0 and 3 respectively.

The percentage of age women had first birth was 21-30 years (80.09%). Only 0.90% and 19% had first birth during 31-40 years and 15-20 years.

Following the result, there were only 17.25% of women would like to have additional children.

**Table 4** Frequency distribution of respondents by opinion about meaning of birth control

Meaning of birth control	Frequency (N)	Percentage
1. Child spacing and choosing the number of children	145	56.86%
2. Family planning policy	78	30.59%
3. Having only one child	18	7.06%
4. Way to avoid abortion	2	0.78%
5. Contraceptive methods	9	3.53%
6. Others	3	1.18%

Concerning the 6 meanings of birth control in table 4, it showed that 56.86% of the respondents understood it as “Child spacing and choosing the number of children”, 30.59% told “family planning policy” as the meaning of birth control, while only 3.53% expressed “Contraceptive methods” as the meaning of birth control. 7.06% and 0.78% of the respondents understood it as “Having only one child” and “Way to avoid abortion”.

**Table 5** Frequency and percentage distribution of information about the family should have children of the respondents’ opinion

Characteristics (N)	Frequency	Percentage
<b>No. of Children which the family should have N = 255</b>		
No child	1	0.39%
1 Child	2	0.78%
2 Children	203	79.61%
3 Children	41	16.08%
4 Children and more	8	3.14%
Mean = 2.22	SD = 0.59	Min = 0
		Max = 6
<b>Sex preference among those, Family should have the 2 children N = 203</b>		
1 Son & 1 daughter	202	99.5%
2 sons	1	0.5%
<b>Sex preference among those, Family should have the 3 children N = 41</b>		
2 sons and 1 daughter	38	92.68%
2 daughters and 1 son	3	7.32%

Form table 5, in response to the number of children family should have, majority (79.61%) of the respondents expressed their view in favor of two children. 0.78% of the respondents expressed their view in favor of 1 child and 16.08% of the respondents expressed their view in favor of 3 children .Only 3.13% stated that the family should have four children. The minimum number of children a family should have was 0 and the maximum was 6. The mean and standard deviation of the number of children was 2.22 and 0.59 respectively.

## 4.2 The married women's knowledge on birth control

**Table 6** Frequency and percentage distribution of respondents by knowledge items of birth control

<b>Knowledge items correct answer</b>	<b>n =255</b>	<b>Frequency</b>	<b>Percentage</b>
<b>knowledge of birth control</b>		<b>(N)</b>	<b>(%)</b>
1. Birth control means the government can control your mind about childbearing		222	87.06%
2. Birth control is the worldwide problem		159	62.35%
3. There is no need to implement birth control in china unbar area.		183	71.76%
4. Currently in China's rural areas, not suitable for the purposes of birth control		153	60.00%
5. The reasons for the purposes of Birth control to control the excessive growth of population, the quality of the exaltation population, promote development of economy.		209	81.96%
6. Birth control with certain mandatory, Every citizen must abide by the family planning policy		216	84.71%
7. The government will release free contraceptives, such as condoms, pills, etc		217	85.10%
8. The government will provide women with unwanted pregnancies of medical help		214	83.92%
9. Government should compulsory abortion approach to suspend unwanted pregnancy		45	17.65%
10. If there is the phenomenon of multiple births(eg, Twins), the government will provide financial difficulties funded family		35	13.73%

Regarded the knowledge of advantage, side effect and procedure of birth control, it revealed that 62.35% of respondents knew that birth control is the worldwide

problem and 85.10% respondents knew that the government will release free contraceptives. About 84.71% accepted that every citizen must abide by the family planning policy. Majority (87.06%) of respondents knew that birth control not means the government can control your mind about birth control and 81.96% of women knew that the reasons for the purposes of birth control to control the excessive growth of population, the quality of the exaltation population, promote development of economy. So, the percentage of correct answer was high in five statements. The percentage of correct answer was very poor in the statements regarding the government will provided financial difficulties funded family when you got the phenomenon of multiple births (13.73%) and government should compulsory abortion approach to suspend unwanted pregnancy(17.65%).

**Table 7** Frequency and percentage distribution of level for knowledge on birth control

<b>Characteristic N = 255</b>		<b>Frequencies</b>	<b>Percentage</b>
<b>Knowledge on birth control</b>			
Good (> mean)		150	58.82%
Poor (≤ mean)		105	41.18%
<b>Mean = 6.48</b>	<b>SD= 1.99</b>	<b>Min = 0</b>	<b>Max = 9</b>

The knowledge of birth control was categorized into 2 groups, Good (>mean =6.48, so there are 7 to 10) 58.82% and poor (≤ mean =6.48, 1 to 6). (41.18%).

### 4.3 Distribution of The married women's perception of birth control

**Table 8** Percentage distributions of respondents by perception of birth control

Perception Statement	Agree	Not sure	Disagree
1. Birth control is most important for China, can effectively control population growth	87.45%	10.98%	1.57%
2. The knowledge of Birth control should be taught before getting married	69.41%	27.06%	3.53%
3. The knowledge of Birth control should be taught in junior high school	65.88%	30.59%	3.53%
4. Birth control is still primarily oriented to the wishes of the individual	67.84%	28.63%	3.53%
5. Birth control is applicable for all of family	12.55%	10.98%	76.47%
6. The Government should adopt policies reward those who take the initiative to birth control	65.10%	13.33%	21.57%
7. The Government should adopt corresponding policies to punish those who did not birth control	16.47%	79.22%	11%
8. Birth control should focus on different groups of people treated differently	84.31%	10.98%	4.71%
9. Birth control depends on the objective conditions (such as economic, education) about you.	29.80%	65.88%	4.31%
10. Birth control can improve our standard of living.	84.31%	10.59%	5.10%
11. Too many children may lead to excessive pressure of life.	88.63%	9.02%	2.35%
12. Birth control must start with improving population comprehensive quality.	25.49%	70.59%	3.92%
13. Birth control is good for women's reproductive health	83.92%	12.16%	3.92%
14. Birth control is good for your living children's growth	74.90%	10.20%	14.90%

Table 8 showed that the highest percentage of agree was 88.63% and the lowest was 16.47% for positive statements. The highest percentage of not sure was 70.59% and the lowest was 09.02% for positive statements. The highest percentage of disagree was 21.57% and the lowest was 1.57% for positive statements. The highest percentage of agree for negative statement was 29.80% and the lowest was 12.55%. The highest percentage of disagree was 76.47% and the lowest was 4.31%, the highest percentage of not sure for negative statement was and 65.88% and the lowest was 10.98%.

**Table 9** Frequency and percentage distribution of respondents by levels of perception of birth control

<b>Characteristic N = 255</b>	<b>Frequencies</b>	<b>Percentage</b>
<b>Perception of birth control</b>		
High perception (score>39)	36	14.12%
Moderate perception (score between 33 and 39)	155	60.78%
Low perception (score<33)	64	25.10%
<b>Mean = 35.79</b>	<b>SD= 3.983</b>	<b>Min = 21</b>
		<b>Max = 40</b>

Form table 9, we can divided the perception levels into 3 groups, among 255 selected married women, 36 women (14.12%) had high perception level, 155(60.78%) of them had moderate level and 64 (25.10%) women had low perception level.

#### **4.4 Distribution of The married women's attitude about traditional believe about birth control**

**Table 10** Frequency and percentage distribution of the married women's attitude about traditional believe about birth control

<b>Attitude Statement</b>	<b>Agree</b>	<b>Not sure</b>	<b>Disagree</b>
1. Wife must give a birth after married	89.80%	4.71%	5.49%
2. The husband is not sure be the householder in the family	19.61%	5.88%	74.51%
3. More children bring more happiness	30.59%	8.63%	60.78%
4. Women should married before 18 years old	33.33%	56.08%	10.59%
5. Women should give a birth before 20 years old	34.12%	57.25%	8.63%
6. Families rely mainly on the continuation of son	35.29%	56.08%	8.63%
7. Family estate and family skills not only be inherited by son	74.51%	22.35%	3.14%
8. The family will let others look down on the lack of son	33.33%	57.65%	9.03%
9. Only the son can take care the parents on the future, but the daughter will married with other man and leave family.	85.10%	4.71%	10.20%
10. Marriage is the most important thing in women life, in any case can not be divorced	94.51%	3.53%	1.96%

Table 10 showed that the highest percentage of agree was 94.51% and the lowest was 19.61% for positive statements. The highest percentage of not sure was 56.08% and the lowest was 3.53% for positive statements the highest percentage of disagree was 60.78% and the lowest was 1.96% for positive statements. The highest percentage of agree for negative statement was 74.51% and the lowest was 19.61%. The highest percentage of disagree was 74.51% and the lowest was 3.14%, the highest percentage of not sure for negative statement was and 22.35% and the lowest was 5.88%

**Table 11** Frequency and percentage distribution of respondents by level of attitude about traditional believe about birth control

Characteristic N = 255	Frequencies	Percentage
<b>Attitude about traditional believe about birth control</b>		
Positive (> mean)	84	32.94%
Negative (≤ mean)	171	67.06%
<b>Mean = 23.043</b>	<b>SD= 4.019</b>	<b>Min = 12</b>
		<b>Max = 29</b>

Form table 11, we can divided the attitude levels into 2 groups, among 255 selected married women, 84 women (32.94%) were positive level, 171 (67.06%) of them were negative level.

#### 4.5 Association among the married women’s perception of birth control with the married women’s knowledge, attitude, and socio-demographic factors

**Table 12** Association between the socio-demographic factors and perception levels of birth control among married women

Characteristics	Perception of birth control among married women N=255						$\chi^2$	df	p - value
	High proper		Moderate proper		Low proper				
	N=	%	N=	%	N=	%			
	36		55		64				
<b>Age group(years)</b>							13.132	1	0.001
15-30	30	17.65	108	63.53	32	18.82			
31-49	6	7.14	47	55.95	31	36.91			
<b>Married age groups (years)</b>			Moderate+		Low		10.989	1	1.000*
15-29	32	12.90	216	87.10					
30-40	4	57.14	3	42.86					

**Table 12** Association between the socio-demographic factors and perception levels of birth control among married women (cont.)

Characteristics	Perception of birth control among married women N=255						$\chi^2$	df	p - value
	High proper		Moderate proper		Low proper				
	N=	%	N=	%	N=	%			
	36		55		64				
<b>Occupation</b>			Moderate+		Low		3.837	1	0.050*
House wife and farmer and laborer	26	17.81	120	82.19					
Others**	10	9.17	99	90.83					
<b>Family Income</b>							2.905	4	0.574
RMB.<1600	4	9.80	34	64.71	13	25.49			
RMB.1600-3200	28	15.98	100	59.76	41	24.26			
RMB.>3200	4	11.43	21	60.00	10	28.57			
<b>Education level</b>							7.438	4	0.114
No education and primary	16	13.68	64	54.70	37	31.62			
Secondary	15	12.93	76	65.52	25	21.55			
Higher secondary and B.A degree	5	22.73	15	68.18	2	9.09			

\*\*= (Service, Business and Government employee) \*=fishexact

Table 12 showed that the percentage of Moderate proper for perception of birth control were more (63.53% and 55.95%) in all of the groups. Significant association (p-value = 0.001) exists between age of women and perception level on birth control.

Regarding the married age, it found that 87.10% of the women have married between 15-29 years in moderate proper group among perception of birth control, 57.14% have married during 30-49 years in high proper. Since, there are more than 20% of the cells that have expected count less than 5, the chi-square test could not be applied, so the married age was grouped as 15-29 and 30-49 and fisher exact test performed. There was no significant association found between married age group and perception level of birth control (p-value = 1).

The study revealed that among the respondents. Since, there were more than 20% of the cells that had expected count less than 5, the chi-square test could not be applied, so the occupation was grouped as in house worker and outside worker and fisher exact test performed. There was no significant association found between occupation of married women and perception level of birth control ( p-value = 0.05).

Concerning the family income of the respondents were found that the percentage of moderate proper for perception of birth control was more (64.71% and 59.76% and 60.00%) in all of the groups. There was no significant association found between occupation of married women and perception level of birth control (p-value = 0.574)

Regarding education, the respondents it was found that the percentage of Moderate proper for perception of birth control were more (54.70 % and 65.52% and 68.18%) in all of the groups. There was no significant association found between education of married women and perception level of birth control (p-value = 0.114).

**Table 13** Association between the perception levels of birth control and information about the living children

Characteristics	Perception of birth control among married women N=255						$\chi^2$	df	p-value
	High proper		Moderate proper		Low proper				
	N=36	%	N=155	%	N=64	%			
<b>Have living children</b>							5.570	2	0.062
Yes	33	14.93	138	62.44	50	22.63			
No	3	8.82	17	50.00	14	41.18			
<b>No. of living children N= 221</b>							5.215	2	0.074
1-2	32	16.58	121	62.69	40	20.73			
3-4	1	3.56	17	60.72	10	35.72			

Regarding had children or not, the respondents it was found that the percentage of moderate proper for perception of birth control were more (62.44% and 50.00%) in all of the groups. There was no significant association found between having a living child by married women and perception level of birth control (p-value = 0.062)

Regarding number of living children it was found that, those who had 1-2 children among them, 62.69% was moderate proper and 20.73% was low proper. Only 16.58% were high proper, the same situation happened in 3-4 children group. Significant association also was not found between number of living children and perception level about birth control (p-value = 0.074).

**Table 14** Association between the perception levels of birth control and gender of living children among married women

Characteristics	Perception of birth control among married women who has living children N=221					
	High proper		Moderate proper		Low proper	
	N=33	%	N=138	%	N=50	%
<b>Gender of children</b>						
<b>Son&gt;daughter</b>	2	4.00	30	60.00	18	36.00
<b>Son=daughter</b>	27	11.12	99	63.45	22	25.43
<b>Son&lt;daughter</b>	4	17.39	9	39.13	10	43.48
$\chi^2 = 20.014$ df=4 P-value=0.000						

Table 14 showed that the percentage of Moderate proper for perception of birth control were more (60% and 63.45%) when son  $\geq$  daughter. More (43.48%) of the low proper in the son<daughter group .Significant association (p-value = 0.026) exists between gender of children and perception level on birth control.

**Table 15** Association between the perception levels of birth control and desire of additional child in the future

Characteristics	Perception of birth control among married women N=255						$\chi^2$	df	p - value
	High proper		Moderate proper		Low proper				
	N=36	%	N=155	%	N=64	%			
<b>Desire of additional child</b>							14.591	2	0.001
<b>Yes</b>	5	11.36	18	40.91	21	47.83			
<b>No</b>	31	14.69	137	64.93	43	20.38			

Table 15 showed that the percentage of Moderate proper for perception of birth control was more (64.93%) when women don't want to have children in the future.

The percentage of low proper for perception of birth control was more (58.33%) when women want to have children in the future. Significant association ( $p$ -value = 0.001) exists between desire of additional child in the future of women and perception level on birth control.

**Table 16** Association between the perception levels of birth control and opinion about meaning of birth control among married women

Characteristics	Perception of birth control among married women N=255						$\chi^2$	df	p-value
	High proper		Moderate proper		Low proper				
	N=	%	N=	%	N=	%			
	<b>36</b>		<b>55</b>		<b>64</b>				
<b>Meaning of birth control</b>							20.591	4	0.000
1. Child spacing and choosing the number of children	11	7.59	120	82.80	14	9.61			
2. Family planning policy	39	50.0	29	37.18	10	12.82			
3. Others*	3	9.38	13	40.62	16	50.00			

Others= (Having only one child, Way to avoid abortion, Contraceptive method and other)

Table 16 showed that the percentage of moderate proper of perception of birth control were more (82.76%) in the group married women's opinion about birth control (Child spacing and choosing the number of children ). Majority (50.00%) of the opinion group (Family planning policy) was found in high proper. Majority (50.00%) of the opinion group (others) was found in low proper. Significant association ( $p$ -value = 0.000) exists between meaning of birth control and perception level on birth control.

**Table 17** Association between the knowledge levels on birth control and perception levels of birth control among married women

Characteristics	Perception of birth control among married women N=255						$\chi^2$	df	p - value
	High proper		Moderate proper		Low proper				
	N=36	%	N=155	%	N=64	%			
<b>Knowledge on birth control</b>							67.674	2	0.000
<b>Good</b>	30	20	110	73.33	10	6.67			
<b>Poor</b>	6	5.71	45	42.86	54	51.43			

Table 17 showed that the percentage of high and moderate proper of perception of birth control were more (73.33% and 20.00%) in the good level about knowledge about birth control. Majority (51.43%) of the low proper in the poor level knowledge about knowledge on birth control. Significant association (p-value = 0.000) exists between knowledge level of birth control and perception level on birth control.

**Table 18** Association between the attitude levels about traditional believe about birth control and perception levels of birth control among married women

Characteristics	Perception of birth control among married women N=255						$\chi^2$	df	p - value
	High proper		Moderate proper		Low proper				
	N=36	%	N=155	%	N=64	%			
<b>Attitude about traditional believe about birth control</b>							47.642	2	0.000
<b>Positive</b>	0	0	43	51.17	41	48.83			
<b>Negative</b>	36	21.05	112	65.50	23	13.45			

Table 18 showed that the percentage of high proper of perception of birth control were more in negative group than positive group for attitude about traditional

believe about birth control. Significant association ( $p$ -value = 0.000) exists between attitude level on traditional believe about birth control and perception level on birth control.

#### 4.6 Association between the attitude levels about traditional believe about birth control and Socio demographic factors

**Table 19** Association between the attitude levels about traditional believe about birth control and socio-demographic factors among married women

Characteristics	Attitude levels about traditional believe about birth control				$\chi^2$	df	p value
	Positive		negative				
	N=84	%	N=171	%			
<b>Age group(years)</b>					49.930	1	0.000
15-30	31	18.24	139	81.76			
31-49	53	62.35	32	37.65			
<b>Family Income</b>					13.163	2	0.001
RMB.<1600	27	52.94	24	47.06			
RMB.1600-3200	44	26.04	125	73.96			
RMB.>3200	13	37.14	22	62.86			
<b>Occupation</b>					26.446	1	0.000
House wife and farmer and laborer	29	19.86	117	80.14			
Others*	55	50.46	54	49.54			

**Table 19** Association between the attitude levels about traditional believe about birth control and socio-demographic factors among married women (cont.)

Characteristics	Attitude levels about traditional believe about birth control				$\chi^2$	d	p - value
	Positive		negative				
	N=84	%	N=171	%			
<b>Education level</b>					22.159	2	0.000
No education and primary	55	47.01	62	52.99			
Secondary	21	18.10	95	81.90			
Higher secondary and B.A degree	8	36.36	14	63.64			
<b>Family should have number of children</b>					65.100	1	0.000
□2	44	21.36	162	78.64			
>2	40	81.63	9	18.37			

\*= (Service, Business, and Government employee)

Table 19 showed that significant association between the attitude levels about traditional believe about birth control and socio-demographic factors among married women. From result. It could be found that included age, family income, occupation and education level all has relationship between them. When respondents belonged to younger age group, or her family income more than RMB 1600, had a job only at home or had higher education, her level of attitude must be low.

Table 19 also showed that the percentage of respondents who think that few number of children suit for the family( $\leq 2$ ) were less (21.36%) in positive group than negative group(81.63%) of attitude about traditional believe about birth control. Significant association (p-value = 0.000) exists between the attitude about traditional believe about birth control and opinion about family should have number of children among married women.

## CHAPTER 5

### DISSCUSSION

The cross section study was designed to explore the factors related to the perception of birth control among the married women of Huainin AnHui province of China. A total of 280 women of 15-49 years were interviewed by four trained interview. Out of 280 collected data, 255 were used for analysis. The rest 25 data were discarded for missing and multiple responses. There are many factors related to the perception of birth control, but this study focused only some selected factors such as, socio-demography, knowledge, attitude accessibility and availability. The discussion as followed is from the finding of the study related to the factors affecting the perception of birth control among the married women.

#### **5.1 The perception of birth control among married women of reproductive age in Huainin AnHui province China**

In this study, the perception of birth control among married women of reproductive age described as the mother's opinion about birth control. The women's perception of birth control level was assigned into three levels in which, the frequency distribution of the women's high perception level was about one seventh (14.12%). The moderate perception level was nearly three fifth (60.78%), and the low perception level was one fourth(25.10%). This result is closed to the result of "Analyzing the Factors Affecting the Stability of the Low Fertility Rate in China." HuLiangGang (Journal of Nanjing College for Population Programmer Management Jan 2003)(57).

In his research showed that more than 70% women have moderate perception level of birth control.

In this study, I used 14 questions to determine the level of perception of birth control, and divided the questions into two parts, one of them is focus to personal, and the other is focus to society.

For personal part, Majority of the respondents agreed with “birth control can improve our standard of living” (84.31%) and “Too many children may lead to excessive pressure of life” (88.63%). About two third of them agreed with “the knowledge of birth control should be taught in junior high school” (65.88%, “birth control is still primarily oriented to the wishes of the individual”(67.84%) and “The knowledge of Birth control should be taught before getting married”(69.41%). Only 29.80% of women agree with “Birth control depend on the objective conditions (such as economic, education) about you”.

For society part, Majority of the respondents agreed with “Birth control is most important for China, can effectively control population growth”(87.45%), “Birth control should focus on different groups of people treated differently”(84.31%), “Birth control is good for women’s reproductive health” (83.92%) and “Birth control is good for your living children’s growth”(74.90%). About two third of them agreed with “The Government should adopt policies reward those who take the initiative to birth control”(65.10%). Nearly one fourth agreed with “Birth control must start with improving population comprehensive quality”(25.49%). Only 12.55% and 16.47% agreed with “Birth control is applicable for all of family” and “The Government should adopt corresponding policies to punish those who did not birth control”.

## **5.2 Association between socio-demographic factors and married women’s perception of birth control.**

### **5.2.1 Association between personal and family circumstances and perception levels of birth control among married women.**

In this study, it was found that the percentage of the women's high and moderate proper on perception of birth control in two group of women with their age above thirty years old (17.68%) was higher than age under thirty years old(7.14%) group. Normally, the younger women's perception can be influenced by many factors, meanwhile, the younger women also easier to accept new and correct opinion for birth control. And the percentage of the women's poor proper on perception of birth control in two group of women with their age above thirty years old (18.82%) was lower than age under thirty years old(36.91%) group. Significant association exists between age of women and perception level on birth control. Studies by Zhou XueXin, also found that the same result. The women's perception level is the best in group age 16-29(55).

Regarding to married group, because almost all of women belong to 15-29 years old group, so has no significant association exists between married age of women and perception level on birth control (p-value=1.000).

Regarded the occupation, in this study, the occupation divided to two kinds of job, one is working in the family ,like housewife, farmer and laborer, and the others working outside, like service business and government employee. So between these two groups, the situation was not so much different. We also found there was no significant association exists between occupation and perception of birth control.(p-value>0.05). And from other research, for perception of birth control, it was found that the group who has no education much lower than the group who educated (55).

Regarded monthly family income, the perception level almost same in each group. There was no significant association found between income and perception of birth control (p-value>0.05). It should be mentioned that FengZC (56) also did not find any significant association between monthly income and perception of birth control.

In this study, regarded to education level of women, the secondary school level was almost same with the low education group (no education and primary school). It was found no significant association between education and perception of birth control. ( $P\text{-value} > 0.05$ ), but we could find from the other studies, they usually found that high education must be had higher perception of birth control. From study by Zhou XX (55), it was found that women's high proper on perception of birth control in two group of women with their education level above primary school (24.68%) was higher than education level under primary school (5.33%). That means high education can make the women expand range of experience, the growth knowledge and have right viewpoint to the affair (including the perception of birth control). In this study, maybe the sample size is too small or any respondents haven't received the correct answer about education level.

### **5.2.2 Association between the information about children and perception of birth control among married women**

In this study, the most important question is distribution of the respondent by having of living child.

**First**, majority of women had living children (86.67%), but had no significant association between having children and perception of birth control. Because from the question "Do you think the family should have child?" in this study, nearly 100% of the respondents accepted it, so whatever they having children or not, their perception of birth control must be same. On the other hand, this study also focused about the number of living children in the family. From the result, we found no had any significant association between the number of children and perception level of birth control ( $p\text{-value} > 0.05$ ). Another study in more than ten villages in HeBei province China in 2002 found that more children can reduce the perception level of birth control (61).

**Second**, among the women who had living children, the important factor to influenced their perception of birth control is "Gender of children", in this study, they

were divided into three groups by their gender of children (son > daughter, son = daughter and son < daughter). When respondents had sons more than daughters, their perception of birth control level was lower than the other two groups (4% and 11.12%, 17.39%) (P-value=0.000). So, that means in this study, we can find the importance of son in family. However, the family has more sons, it can improve their perception of birth control. But I haven't found any other studies talking about this association.

**Third**, in this study, regarding desire for additional children, it showed that the respondents, who opined to have additional children in the future among them, only 11.36% had a high proper level of perception of birth control, and majority were low proper level (58.33%). In contrast, the respondents who said, "No" regarding the need for additional children in the future among them, majority were moderate proper level of perception of birth control (64.93%). The relationship between desire for additional children and perception of birth control level was statistically significant (p-value ≤ 0.001). We also could find by result in this study, the desire to stop childbearing increased with the number of living children, reaching 92.75% among women with one or two living children and 92.86% among those with 3 or more children. That is the proportion of women who wanted to have another child decreased with the number of living children. From other studies (61), if married women have more than two living children, seldom of them want to have more children in the future.

### **5.2.3 Association between perception levels of birth control and opinion about meaning of birth control among married women.**

The women's opinion about meaning of birth control had significantly with the perception level of birth control (p-value=0.000).

Association between perception levels of birth control and opinion about meaning of birth control was found. It revealed that the proportion of married women who has chosen "family planning policy" as the meaning of birth control had high proper level about birth control.

### **5.3 Association between married women's knowledge about birth control and perception levels of birth control.**

In this study, the researcher had designed 10 questions to judge the knowledge level about birth control among respondents. And divided to two groups (positive and negative) depended on the score above or under the mean. 58.82% of respondents belonged to positive group and 41.18% belonged to negative group. Concerned the knowledge of the married women on birth control, it found that 81.96% knew about the reason for the purposes of birth control and most of the respondents knew about the government would help women who met the problem in birth control (Question 7 and 8). However, the majority of respondents believed that birth control or had some mandatory (Question 4, 9 and 10). In this study, even it was significantly association between the women's knowledge levels and perception levels of birth control ( $p\text{-value}=0.000$ ). In this study, it was found that the percentage of the women's high proper on perception of birth control in two groups of women with positive (20.00%) was four times higher than negative (5.71%) group. And the percentage of the women's low proper on perception of birth control in two groups of women with negative (51.43%) was nearly eight times higher than positive (6.67%) group. That means in this study, anyone who had good level of knowledge about birth control must be high proper level perception of birth control.

From other studies, even the questions were not same, but the result was almost same, the study from Ge Xiaoping (61) found that 54.3% respondents had good knowledge. Therefore, the finding of Ge Xiaoping is very close to the finding of this study. The same result also can be found from LiangHongbin and WuZhengjiang's research(65). These result can improved the higher knowledge level means women can have a good understanding of birth control, so it must could increased their perception level of birth control. If they were very poor knowledge in "birth control", it also could lead to the low proper of perception of birth control.

#### **5.4 Association between perception levels of birth control and attitude levels of traditional believe about birth control among married women.**

In this study, all of the respondents were living in the rural area, so they must be influenced by traditional believe about birth control deeply. The researcher had chosen 10 questions to judged the attitude levels of traditional believe about birth control among married women.

The result from this study. First, inside the family, the status of women is still not high. 80.39% of respondents believed that “the husband must be the householder in the family”, 89.80% of respondents chosen “women must take birth after married”. Second, only 30.59% of respondents agreed with “more children bring more happiness”. Third, nearly one third of respondents agreed with early married and early bearing. Fourth, still have more than half women trust “Patriarchal” (heavy son and light daughter). 85.10% believed that “Only the son can take care the parents on the future, but the daughter will married with other man and leave family”, 74.51% of women in this study agreed with “Family estate and family skills not only be inherited by son”. The attitude levels of traditional believe about birth control were divided to 2 groups, it was found that the percentage of the women’s high proper on perception of birth control in two groups of women with their attitude level was positive (0%) was much lower than negative (21.05%) group. It also found that the percentage of the women’s low proper on perception of birth control in two groups of women with their attitude level was positive (48.83%) was much higher than negative (13.45%) group.

In this study, it could be found that there was significantly association between the perception levels of birth control and attitude levels of traditional believe about birth control (p-value=0.000).

Almost from all of other studies which focus birth control or family planning, the attitude about traditional believes about birth control must be the most important factor to influence the perception of birth control.

The study from YuXia in ShanDong province, the respondents who had high attitude level of traditional believe about birth control must be lower in perception of birth control (60).

### **5.5 Association between the attitude levels about traditional believe about birth control and socio-demographic factors among married women.**

From the result, The traditional believe about birth control means “early married and early bearing”, “heavy son and light daughter”, “more children bring more happiness” and “husband must be master in the family”. From this study, the respondents were influenced by these opinion must want to have more children, the result can be found that which women believed the family should have more than 2 children, the positive group (78.64%) were more than negative group (18.67%) about traditional believe about birth control among married women, that mean the traditional believe about birth control can make women want more children. So their perception level of birth control must be low.

In this study, the researcher also found any significant association between the attitude levels about traditional believe about birth control and socio-demographic factors among married women. From result. It can be found that included age, family income, occupation and education level all has relationship between them. When respondents belong to younger age group, or her family income more than RMB 1600, working only at home or had higher education, her level of attitude must be low. That means if any younger women had chance to get more education and also can increase her family income, she will changed her traditional believe about birth control and had advanced opinion about it.

## CHAPTER 6

### CONCLUSION AND RECOMMENDATION

#### 6.1 Conclusion

Population growth is widespread problem in the world and global concerns in developing countries. The situation is really alarming, especially for the least developed countries like China. Though birth control has made substantial improvement in perception level about it, but still the progress is not worthy. So, an attempt was made to explore the factors related to the perception of birth control among the married women of a rural community of China.

This study has highlighted some of the factors related to the perception of birth control in rural China. In particular, it had shown how the socioeconomic characteristics of married women related to the perception of birth control. The results indicated that 74.90% of respondent had high and moderate level of perception of birth control. However it found to be consisted with the nation finding.

Concerning about association between perception of birth control and independent variable. There was find some variable had significant association with perception of birth control. The significant association with perception of birth control was found in desire of additional children in the future ( $p=0.001$ ), meaning of birth control ( $p=0.000$ ), knowledge about birth control ( $p=0.000$ ), attitude about traditional believe ( $p=0.000$ ), respectively.

Regarding association between socio demographic factors and attitude of birth control. There also was some variable had significant association with attitude of birth control. The significant association was found in age ( $p=0.000$ ), Family income ( $p=0.001$ ), occupation level( $p=0.000$ ), Education level ( $p=0.000$ ), and how many children should have in the family ( $p=0.000$ ), respectively.

Result from this study showed that the percentage of high and moderate proper levels were more in good knowledge group.

The attitude level of traditional believe about birth control was the important factor related to perception of birth control, traditional believe to a large extent determined the perception of birth control.

## **6.2 Recommendations**

### **6.2.1 Recommendations form this study**

Perception of birth control is essentially the psychology of people fertility reflected by a certain socio-economic conditions. Perception of birth control always changes form socio-economic conditions change. Factors related the preception of birth control main economic factors, social factors and cultural factors.(61)

**Increase women's access to education improve the status of women. Raise the employment rate of women, increase family income, extensive publicity, elimination of the influence of traditional believe.**

In this study, the result showed that more than half women had low education (no education or primary school), the government should provided women with more opportunities to receive education and also conducivly to raising their educational qualities. Because form result, we can found the traditional believe about birth control can depend on education level, and level of traditional believe about birth control can influenced perception of birth control, this also will be conducive to enhancing the status of women, can improve their perception level about birth control.

The government must provide more employment opportunities for rural women, This can increase family income, pioneering vision, also can improve their position in the family. Form result, we can found the traditional believe had association with occupation and family income, we also can found level of traditional believe about birth control can influenced perception of birth control, so, We must attach importance to the above factors.

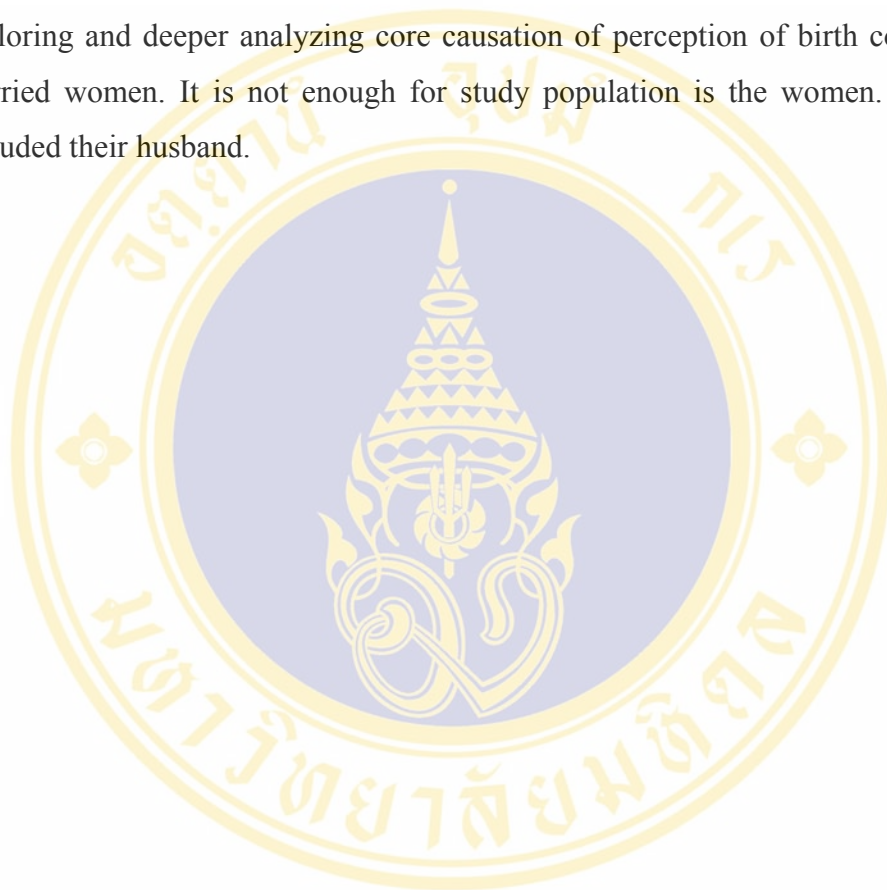
We have to change the traditional believe about birth control, the most effective way is to use a variety of means to educate, change attitudes, profound changes have been taking place in people's concepts of marriage, birth and family along with the reform and opening to the outside world as well as socio-economic development; the traditional ideas of "early marriage and early births," "more children, greater happiness," and "looking up on men and down on women" are being discarded by more and more people at the child-bearing ages. Late marriage and late births, fewer and healthier births, viewing male and female children as the same, establishing happy, perfect and harmonious small families and seeking a modern, scientific and civilized way of life have become an irresistible trend of the times. They can feel the benefits of birth control.

#### **Provide "birth control" measures to women**

The government should implemented the system of combining the supply of free contraceptives with retail sales in the market, thus widening the supply channels, providing conveniences to the people, satisfying their needs and raising the utilization rate of contraceptives. The women in reproductive age must be given the knowledge about "birth control" before they married. The government should against promoting induced abortion as a means of birth control. The government allows women who require induced abortion to have such an operation under safe and reliable conditions. The government has made efforts to improve medical and health care conditions and strengthen health care services for women and children while doing a job in birth control. Ensure that women have the confidence of birth control.

### 6.2.2 Recommendations for future study

This study was carried out in 4 villages with small sample size, thus the results had limited generalization and representative. Therefore it is suggested to study the same objectives with expanded areas or representative regions before conducting with larger study scale in whole the country and with qualitative approach, focus on exploring and deeper analyzing core causation of perception of birth control among married women. It is not enough for study population is the women. It should be included their husband.



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## APPENDIX-A QUESTIONNAIRES

### FACTORS RELATED TO PERCEPTION OF BIRTH CONTROL AMONG MARRIED WOMEN IN HUAININ ANHUI PROVINCE CHINA

Date of registration \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

House number. \_\_\_\_\_

Please inform married women that this questionnaire is for research purpose and all her answers will be kept completely confidential and not exposed to other purpose.

#### Part I General characteristic sample

Please fill in the blank or check (√) in the appropriate box to answers the question:

1. How old are you ? ..... years
2. what age you married?..... years
3. What is your main occupation?
  - 1. House wife
  - 2. Service
  - 3. Business
  - 4. Farmer
  - 5. Laborer
  - 6. Government employee
  - 7. Others (Please specify .....)
4. How much is your family total income monthly from all sources?  
.....RMB
5. What is your educational level?
  - 1. No education
  - 2. Primary school
  - 3. Secondary school
  - 4. Higher secondary
  - 5. B.A. degree
  - 6. Master degree
  - 7. Ph.D.

6. Do you have children?

- 1. yes
- 2. no(skip to Q10)

7. How many children do you have now? .....

- 1. Sons(s).....
- 2. Daughter(s) .....

8. How old are you have first child?

- 1. 15-20
- 2. 21-25
- 3. 26-30
- 4. >30

9. Why do you have children ?

- 1. Let me lives be on the continuation of the child
- 2. An emotional sustenance
- 3. Can support by my child after I become old
- 4. Is a kind of social responsibility
- 5. No reason, it's natural
- 6. Increase household labor
- 7. Can improve the overall quality of children
- 8. Others (Please specify .....

10. Do you want to have children in the future?

- 1. yes(skip to Q12)
- 2. no

11. Why don't you want to have a children in the future?(If you answer this question , please skip to Q14)

- 1. No have enough money
- 2. Want to enjoy life with my husband only
- 3. Too busy to have time
- 4. Disease
- 5. Scare bearing
- 6. Don't like child
- 7. Others (Please specify .....

12. Why do you want to have children in the future?
- 1. Let me lives be on the continuation of the child
  - 2. An emotional sustenance
  - 3. Increase household labor
  - 4. Is a kind of social responsibility
  - 5. No reason, it's natural
  - 6. Increase household labor
  - 7. Can improve the overall quality of children
  - 8. Others (Please specify .....)
13. How many children do you want to have in the future?
1. Sons(s).....
  2. Daughter(s) .....
14. What is the suitable childbearing age do you think ?
- 1. 15-20
  - 2. 20-25
  - 3. 26-30
  - 4. >30
15. What is birth control?
- 1. Child spacing and choosing the number of children
  - 2. Family planning policy
  - 3. Having only one child
  - 4. Way to avoid abortion
  - 5. Contraceptive methods
  - 6. Others (specify.....)
16. How many children do you think is appropriate in the family?
1. Sons(s).....
  2. Daughter(s) .....

## Part II .Attitude about Traditional opinion of childbearing

Please check (✓) in the appropriate box to mark the correct answer of the question:

Sl. No	Statement	Agree	Not sure	Disagree
	Do you think:			
17	Wife must give a birth after married			
18	The husband is not sure be the householder in the family			
19	More children bring more happiness			
20	Women should married before 18 years old			
21	Women should give a birth before 20 years old			
22	Families rely mainly on the continuation of son			
23	Family estate and family skills not only be inherited by son			
24	The family will let others look down on the lack of son			
25	Only the son can take care the parents on the future, but the daughter will married with other man and leave family.			
26	Marriage is the most important thing in women life, in any case can not be divorced			

## Part III. Perception of birth control

Please check (✓) in the appropriate box to mark the correct answer of the question:

Sl. No	Statement	Agree	Not sure	Disagree
	Do you think:			
27	Birth control is most important for China, can effectively control population growth			
28	The knowledge of Birth control should be taught before getting married			
29	The knowledge of Birth control should be taught in junior high school			
30	Birth control is still primarily oriented to the wishes of the individual			
31	Birth control is applicable for all of family			
32	The Government should adopt policies reward those who take the initiative to birth control			
33	The Government should adopt corresponding policies to punish those who did not birth control			
34	Birth control should focus on different groups of people treated differently			

35	Birth control depend on the objective conditions (such as economic, education) about you.			
36	Birth control can improve our standard of living.			
37	Too many children may lead to excessive pressure of life.			
38	Birth control must start with improving population comprehensive quality.			
39	Birth control is good for women's reproductive health			
40	Birth control is good for children's growth			

#### Part IV. Knowledge about birth control

Please check (√) in the appropriate box to mark the correct answer of the question:

Sl. No	Statement	True	False
	Do you think:		
41	Birth control means the government can control your mind about childbearing		
42	Birth control is the worldwide problem		
43	There is no need to implement birth control in china unbar area.		
44	Currently in China's rural areas, not suitable for the purposes of birth control		
45	The reasons for the purposes of Birth control to control the excessive growth of population		
46	Birth control with certain mandatory, Every citizen must abide by the family planning policy		
47	The government will release free contraceptives, such as condoms, pills, etc		
48	The government will provide women with unwanted pregnancies of medical help		
49	Government should compulsory abortion approach to suspend unwanted pregnancy		
50	If there is the phenomenon of multiple births(eg, Twins), the government will provide financial difficulties funded family		

Please say “thank you” to interviewee for their kind cooperation

Name of the Interviewer:

Signature of the interviewer:

Date:



**APPENDIX-B**

**Table A** Association between the perception levels about birth control and the reason about having children now

Characteristics	Perception of birth control among married women N=221						$\chi^2$	df	p-value
	High proper		Moderate proper		Low proper				
	N	%	N	%	N	%			
<b>Reason</b>									
1. Let me lives be on the continuation of child	High+moderate						0.469	1	0.494*
Yes	15	71.43			6	28.57			
No	156	78.00			44	22.00			
2. An emotional sustenance							32.519	2	0.000
Yes	5	5.75	46	52.87	36	41.38			
No	28	20.90	92	68.66	14	10.44			
3. Can rely on my child after I become old							0.123	2	0.940
Yes	28	15.30	114	62.30	41	22.40			
No	5	13.16	24	63.16	9	23.68			
4. It's a kind of social responsibility							7.734	2	0.021
Yes	24	20.69	64	56.14	28	24.57			
No	9	8.57	74	70.48	22	20.75			

**Table A** Association between the perception levels about birth control and the reason about having children now(cont.)

Characteristics	Perception of birth control among married women N=221						$\chi^2$	df	P-value	
	High proper		Moderate proper		Low proper					
	N	%	N	%	N	%				
5. No reason, it's natural							1.423	2	0.491	
Yes	22	13.84	98	61.64	39	24.53				
No	11	17.74	40	64.51	11	17.75				
6. Increase in the labor force within the family							3.313	1	0.191	
Yes	18	12.00	98	65.33	34	22.67				
No	15	21.13	40	56.34	16	22.53				
7. Can the overall quality of children improve							20.390	2	0.000	
Yes	5	16.67	9	30.00	16	53.33				
No	28	14.66	129	67.54	34	17.80				
8. Others(Inherit inheritance, Influence by the neighbor surrounding me .etc)							5.330	1	0.021*	
	High+moderate									
Yes	10	55.55			8	44.45				
No	161	79.41			42	20.59				

\* fishexact

**Table B** Association between the perception levels about birth control and the reason about don't want to have children in the future

Characteristics	Perception of birth control among married women N=211						$\chi^2$	df	p - value
	High proper		Moderate proper		Low proper				
	N	%	N	%	N	%			
<b>Reason</b>									
1. No have enough money							4.182	2	0.124
Yes	26	15.85	111	67.68	29	17.68			
No	5	11.11	26	57.78	14	31.11			
2. Want to enjoy life with my husband only							1.498	2	0.473
Yes	7	16.67	24	57.14	11	26.19			
No	24	14.20	113	66.86	32	18.94			
3. Too busy to have time							12.253	2	0.002
Yes	21	20.39	70	67.96	12	11.65			
No	10	9.26	67	62.04	31	28.70			
4. Disease							5.123	2	0.077
Yes	8	28.57	16	57.14	4	14.29			
No	23	12.57	121	66.12	39	21.31			
5. Scare bearing			(moderate+low)				2.689	1	0.101
Yes	5	27.78	13		72.22				
No	26	13.47	167		86.53				

**Table B** Association between the perception levels about birth control and the reason about don't want to have children in the future(cont.)

Characteristics	Perception of birth control among married women N=211						$\chi^2$	df	p - value
	High proper		Moderate proper		Low proper				
	N	%	N	%	N	%			
<b>Reason</b>									
6. Don't like child			(moderate+low)				0.674	1	0.412*
Yes	27	14.06	165	85.94					
No	4	21.05	15	78.95					
7. Because of government policy							3.873	2	0.144
Yes	4	8.00	32	64.00	14	28.00			
No	27	16.77	105	65.22	29	18.01			
8. Others(too old to have children .etc)							77.104	2	0.000
Yes	26	18.31	109	76.76	4	2.83			
No	5	6.94	28	38.89	39	54.17			

\*=(fishexact)

**Table C** Frequency distribution of the reason for having a children.

Characteristics	Frequency (N)	Percentage (%)
<b>The reason for married women to have children N=221(multi choice)</b>		
1. Let me lives be on the continuation of the child	21	9.50%
2. An emotional sustenance	87	39.37%
3. Can rely on my child after I become old	183	82.81%
4. Is a kind of social responsibility	116	52.49%
5. No reason, it's natural	159	71.95%
6. Increase in the labor force within the family	150	67.87%
7. Can improve the overall quality of children	30	13.57%
8. Others(Inherit inheritance, Influence by the neighbor surrounding me .etc)	18	8.14%

**Table D** Frequency distribution of the reason for women don't want to have a children in the future

Characteristics	Frequency (N)N=211	Percentage(%)
<b>The reason for women don't want to have a children in the future N=211(multi choice)</b>		
1. No have enough money	166	78.67%
2. Want to enjoy life with my husband only	42	19.91%
3. Too busy to have time	103	48.82%
4. Disease	28	13.27%
5. Scare bearing	18	8.53%
6. Don't like child	19	9.00%
7. Because of government policy	139	65.88%
8. Others(too old to have children .etc)	450	23.70%

## BIOGRAPHY

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