#### **MINISTRY OF HEALTH**

NATIONAL HOSPITAL OF GYNAECOLOGY AND OBSTETRICS

REPORT ON FINDINGS OF SCIENTIFIC RESEARCH SUBJECT RESEACH MANAGEMENT LEVEL: MINISTRY OF HEALTH

**RESEARCH THEME:** 

EVALUATION ON CONTRACEPTION EFFICIENCY AND SAFETY OF THE TCU 380A INTRA - UTERINE DEVICE OF SMB COMPANY - INDIA (24 MONTHS REPORT)

**HANOI, 18 JULY 2007** 

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MANAGEMENT AGENCY: MINISTRY OF HEALTH

**EXECUTING AGENCY:** NATIONAL HOSPITAL OF

**GYNAECOLOGY AND** 

**OBSTETRICS** 

HEAD OF RESEARCHER GROUP: Ph.D. NGUYEN VIET TIEN

#### **HANOI, 18 JULY 2007**

#### MINISTRY OF HEALTH NATIONAL HOSPITAL OF GYNAECOLOGY AND OBSTETRICS

SOCIALIST REPUBLIC OF VIETNAM Independence – Freedom – Happiness

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Ref: Findings Report of pilot research TCu 380A IUD – SMB India 24 months

#### To: Department of Science and Training - Ministry of Health

Implementing Decision No. 1891/QĐ-BYT dated 30/5/2006 giving approval to the 2<sup>nd</sup> phase research of the ministerial level research subject "Evaluation on contraception efficiency and safety of TCu 380A IDU produced by SMB – India", the National Hospital of Gynaecology and Obstetrics in cooperation with the Centers for reproductive health care of Ha Nam, Nam Dinh and Thai Binh provinces continued to implement the research subject until April 2007. On 20 June 2007, the Scientific Council of the National Hospital of Gynaecology and Obstetrics checked and took over findings of 24-month research at provincial level. On 18 July 2007, the Scientific Council of the Ministry of Health checked and took over the research findings which had been accepted and evaluated to be good.

National Hospital of Gynaecology and Obstetrics has complemented comments and inputs by members of the Scientific Council members to finalize the final report. We would like to send herewith this Report to Department of Science and Training and other line Departments of the Ministry of Health to consider and complete necessary procedures.

We highly appreciate your consideration and assistance.

Director
National Hospital of Gynaecology
and Obstetrics

(Signed and stamped)

Sent to:

As above

- Leader of MoH (to report)

- Dept. of Equipments and Dept. of RH -MoH

- SMB Co. - India

- Filing

Nguyen Viet Tien

#### **ACKNOWLEDGEMENT**

On the occasion of completion of the Report on findings of the Research subject: Evaluation on contraception efficiency and safety of TCu 380A IDU produced by SMB Company – India", we wish to express our sincere thanks and appreciation to the Communist Party Unit and Directors Board of the National Hospital of Gynaecology and Obstetrics, Leaders of the Ministry of Health, Leaders and specialists of the Department of Science and Training, Department of Reproductive Health, Department of Equipment, Department of Therapy and other line Departments of Ministry of Health, Center of Reproductive Health care and the Association of Gynaecology and Obstetrics and FP of Ha Nam, Nam Dinh and Thai Binh provinces that created favorable conditions for us during the process of interviewing, survey and data collection for the research.

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Hanoi, July 2007 Ph. D. Nguyen Viet Tien

#### **COMMITMENT**

We pledge that this research was conducted by our group of researchers at the Center for Reproductive health care and Association of Gynaecology and Obstetrics and Family Planning of Ha Nam, Nam Dinh and Thai Binh provinces and is not overlapping any research work of other authors. Data in the report is fully true and has not been published in any other work.

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# **ABBREVIATIONS**

IUD Intra-uterine device

RH Reproductive health

FP Family Planning

IUD Intra-uterine device

VCPFC Vietnam Commission of Population, Family and Children

PCPFC Provincial Commission of Population, Family and Children

WHO World Health Organization

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#### PART A

#### **SUMMARY OF MAIN FINDINGS**

#### 1. MAIN FINDINGS OF THE RESEARCH

#### 1.1. New contribution of the research

This is a cutting pilot clinical research which is implemented through a long time period, from the moment of IUD insertion and the whole follow-up process with technical rules. The research aimed to evaluate objectively the contraception efficiency, proportion of failure, giving up, safety level and side effects of TCu 380A IUD provided by SMB. Findings of the research will help provide managers with basis to select one more contraceptive supplying for clients for family planning purpose and to give more options for customers on contraceptives.

The research used combined methods of clinical check-up, testing and gynecological ultrasound through the process of following up the subjects of the research. During 24-month time of the research, subjects received clinical check-up, pap - smear testing of vaginal fluid and gynecological ultrasound.

#### 1.2. Specific findings

The research was conducted on 452 TCu 380A IUD users at 4 districts of 3 provinces: Ha Nam, Nam Dinh and Thai Binh. After 12 months, 16 subjects gave up. 436 subjects continued to use. After 24 months, 13 users migrated to other locations, so the total number of users being followed up through 24 months (till July 2007) is 423 and after April 2007, 392 women continued to use TCu 380A IUD. Below is summary of findings till April 2007:

# 1.2.1. Contraception efficiency and proportion of giving up using TCu 380A IUD of SMB

After 24 months of using TCu 380A IUD of SMB, none of users was pregnant. Contraception efficiency of TCu 380A IUD is high, meeting the family planning demand.

Accumulated proportion of women giving up using TCu 380A IUD after 24 months is 13.27%. Among these women, the proportion of those who gave up because wanting to get pregnant is 5.53%, because of menorrhagia is 3.32%, because of vaginal infection and cervicitis is 0,88%, due to IUD expulsion is 0,67% and because the subjects moved away so unable to follow up is 2.87%.

#### 1.2.2. Safety level of subjects using TCu 380A IUD -SMB

After 24 months of using TCu 380A IUD of SMB, the research found none of cases whose health was effected by IUD usage. The accumulated proportion of women have menorrhagia after 24-month use is 4.42%, in which proportion of users giving up due to menorrhagia is 3,32%.

The accumulated proportion of women suffering from vaginal infection, cervicitis while using TCu 380A IUD of SMB after 24 months is 8,07%. In which, 0,88% users gave up when they had vaginal infection and cervicitis. Other cases of vaginal inflammations were treated and continued to use the IUD. The common causes of vaginitis are bacteria, fungus and trichomonas.

After 24 months of following up the subjects, 95,58% women had normal menstrual period. There is yet any case of gynecological or cervical inflammation, as well as IUD moved into abdomen or extopic pregnancy.

Through clinical check up and gynecological ultrasound for 392 subjects who continued to use TCu 380A IUD of SMB, all subjects still have string in the vagina and IUDs are at right position inside the uterus.

Findings of the research indicated contraception efficiency and safety level of TCu 380A IUD of SMB is as high as that of Nguyen Van Tuong on TC 380A –FaI IUD of India, TCu 380A-FEI IUD of USA, TCu 380A IUD of Canada and that of Ninh Van Minh on TCu 380A IUD of the Netherlands in Vietnam. These are TCu 380A IUDs have been used in the program of family planning of Vietnam with high acceptability over the last many years.

# 1.2.3. Efficiency on training

The research trained and built capacity on professional techniques of IUD insertion and capacity of clinical research for the health staff who are in the researcher group of the Center for Mother and child health care/Family planning (now called Provincial Center for RH care) of 3 provinces (Ha Nam, Nam Dinh, Thai Binh) and 4 Districts (Ly Nhan, My Loc, Nghia Hung, Tien Hai).

Report of the research findings is also a document of reference for the post graduate students.

#### 1.2.4. Social efficiency

The research is a scientific proof for applying techniques of TCu 380A IUD insertion, contributing to increase the proportion of using modern contraceptives, to reduce population growth proportion and help couples in family planning.

Contraception efficiency and safety level of IUD in research will increase credibility of clients when using IUD for contraception.

#### 2. APPLICATION INTO PRODUCTION AND SOCIAL LIVES

Findings of the research will assist the relevant managing agencies and policy makers to consider and select more suitable TCu 380A IUD with the Vietnamese women in the family planning program.

The findings also help reproductive health service providers perceive efficiency and safety level of TCu 380A UD for contraception purpose of users.

#### 3. EVALUATION OF RESEARCH IMPLEMENTATION

#### 3.1. Progress

Progress of the research implementation is timely with the progress approved by the leader of the Ministry of Health.

- Phase I: From April 2005 to February 2006.
- Phase II: Continue to follow up until April 2007 and release findings Report for checking and taking over in June 2007.

# 3.2. Completion of the objectives of the research

All objectives and contents of the research proposed in the approved Proposal were achieved.

# 3.3. Outputs achieved compared with the proposed ones

Results of the research have created sufficient outputs as in the Proposal. The researcher group inserted TCu 380A for 452 women in need of FP and finalized a Report of the findings after 24-month implemention since the insertion.

#### 3.4. Evaluation on budget use

Total budget for the research is USD 17,000, equivalent with VND 260 millions (in which budget the phase I is USD 12,000 and for phase II is USD 5,000). All expenditures were in conformation with the cost norms approved by the Ministry of Health and under the financial control of the Department of Finance and Accounting of the Central Hospital of Gynecology and Obstetrics.

#### 4. Recommendations

- This is a cutting resarch so the research provess encoutered a lot of problems. Due to limited budget, activities to re-train on techniques of inserting TCu 380A IUD and skills to follow up the subjects were only implemented for researchers. Other health staff not involving in the researcher team were not trained. Therefore, Department of Science and Training, MoH Vietnam and SMB Company are requested to suppport more funds for retraining health staff and following up and management of subject who are using TCu 380A IUD of SMB.
- Basing on experience learnt, before inseting IUD, it is needed to better organize counselling on family planning to limit cases where women give up using IUD due to unjustified reasons.
- Campaigns promoting contraceptives are very efficient. Reproductive health service providers and Provinvial Commissin of Population, Family and Children are requested to maintain and organize regularly these campaigns. Ministry of Health and VCPFC are requested to support funds for provinces to organize RH services campaigns for the community.

#### PART B

#### FINAL REPORT ON FINDNGS OF THE 24-MONTH RESEARCH

#### INTRODUCTION

The most commonly used contraceptive in Vietnam today is IUD. This is one the modern contraceptives that have highest efficiency are used popularly in Vietnam as well as throughout the world. In 1909, a German doctor named Richard Richter used intra-uterine device made of silk to insert in the uterus for birth control. By 1960, IUD made of pliant material was invented, followed by IUD covered partly with Copper. Since then, a range of multi national cooperative research program on family planning have helped to improve unceasingly forms and quality of IUD [29]. In 1986, The UN Conference in Geneva accepted efficiency and safey of Copper IUD. It has been used widely in the family planning program of many countries. Each year, throughout the world, dozen of millions women use IUD for contraception. [24]. According to the research of Gaston Farr, Ramesh Amatya, Mahodadhi Shresth and Caroline Hurst in 1995 on efficiency of TCu 380A IUD after 24 months of usage showed that: the proportion of IUD slipping is 8,2%; proportion of removing to get pregnant is 4,6%; proportion of continuity is 82,8% [32].

Since 1960, IUD has been used in the family planning program in Vietnam. The two most popular IUDs used in Vietnam is TCu 380A IUD and Multiload Cu375 SL IUD. These IUDs have been accepted and used by Vietnamese women. The annual mid-term survey of General Office of Statistics indicated proportion of using IUD in 2001 is 55,7% and in 2005 is

55,3% [17]. According to the statistics of VCPFC, each year, the commission provided users from 1.7 – 1.9 million IUD made in India, in which about 70% are TCu 380A IUD. Cutting research of Ninh Van Minh on users of TCu 380A IUD from 18-26 months showed: proportion of pregnancy: 2,0%; proportion of expulsion is 5,33%; Proportion of continuity of usage is 90% [15]. Research of Nguyen Van Tuong on TCu 380A IUD - Pregna India: proportion of pregnancy after 18 months is 1,40% and after 48 months is 0,37%; proportion of giving up after 18 months is 13,48% and after 48 months is 41,9% [18].

TCu 380A IUD of SMB – India were produced clinically from early 2005. Findings of the research after 12 months did not show any case of pregnancy. Proportion of giving up is 3,54%. Proportion of menorrhagia and must remove the device is 2,43% and 96,46% women accepted to continue using/ In order to evaluate the contraception efficiency and safety of TCu 380A IUD-SMB after 24 months of usage, the Sciencetific council and leader of Ministry of Health requested to continue to follow up the users of this device till April 2007.

- \* General objective: to evaluate contraception efficiency and safety of TCu 380A IUD of SMB company of India.
  - \* Specific objective:
- 1. To identify contraception efficiency and failure proportion of TCu 380A-SMB toward married women at reproductive age for family planning purpose.
- 2. To assess safety of this IUD on users.
- 3. To explore the acceptability and giving up while using TCu 380A IUD-SMB.

# Chapter 1

#### **OVERVIEW**

#### 1.1. CONCEPTION PHYSIOLOGY

#### 1.1.1. Definitions

Fertilization is a combination of a male cell which is sperm and a female cell (an ovule) to become a new cell called ovum.

Conception is a fertilization following by the implantation of the embryo. After the conception, embryo grows to become an fetus and its appendage.

Condition of conception is the ovule and sperm must unite. After that, the embryo will move to the uterus. Meanwhile, the uteruswall must fully develop and mature [1].

#### 1.1.2. Mobility of sperm and ovule

Mobility of sperm: During the coitus between a male and a female, after ejeculation, sperms concentrate mainly at the deadlock of the uterus. Here, with the pulsation of vaginal muscular fibles, absorbance of the cervix, appropriate PH degree at the cervix, the sperms move relatively quick to outer hole of the cervix. From there, sperm overcome the cervix to reach the uterus. However, sperms can move quickly and with a large number are because they move themselves and it also dependes on the volume and physicochemical properties of the cervical mucus. By the moment of ovulation, the volume of mucus, mucous level, and clarity of cervix fluid are most appropriate to help the sperms get through the cervix, easier than any other time throughout the menstrual period and this is the most fetile

moment. By passing the cervix, sperms can move up to the fallopian tubes thanks to mobility of sperms, the peristalic of the cervix and the fallopian tubes, movements of fluid currents inside the uterus and the fallopian tubes, exercise of soft hairs of uterine mucous membrance and falloian tubes. Sperm usually unit ovule at around 1/3 of fallopian tubes and fertilization mostly occurs at this position. After that, embryo moves to the uterus to get embedded and grow [1].

Movement of ovum: Ovum, after ovulation, lies on the face of the ovary, then is absorted toward the fallopian tube, to the entry of the fallopian tube, then into the tube to go to the uterus [1].

#### 1.1.3. Fertilization and embedment of the embryo

On around 14th day of the menstrual period, an egg is ovulated from the ovary and is absorted to the fallopian tube, getting into the tube and if it meets sperm, fertilization will occur at around 1/3 out of the tube. After fertilization, embryo continues to head to the uterine cavity to get embedded. It takes approximately 3-4 days to reach the uterus and the embryo lives freely inside the uterus before embedment [1].

Embryo starts to get embedded after fertilization from 6-8 days. By this time, the uterine mucous membrance fully develops so that embryo can get embedded. Position of the embedment is popularly at the fundus of the uterus and at the back more than at the front of the uterus [1].

#### 1.2. INTRA-UTERINE DEVICE

#### 1.2.1. Mechanism of contraception

Intrauterine device is one of the highly efficient and safe contraceptives used popularly in our country. Proportion of contraception is from 95-98%. Contraception mechanism of IUD is as following [2]:

- IUD cause reaction of inflammation of the uteruswall at the position where IUD is inserted. It prevents fertilization between sperm and egg as well as the implantation.
- IUD increases peristaltic of the uterine tubes and the uterus to make ovum move faster to the uterine cavity when the uteruswall is immature for the implantation so the ovum will be driven out without growing to become fetus.
- IUD causes significant change in development of the uteruswall, change the mucus of the uterus, cervix and hinder the movement of sperm into the uterus cavity, prevent the implementation of the embryo for contraception [2].

# 1.2.2. History and development process of intra-uterine device

According to the research of A.Southam, a British, from many centuries. The Arabian, Turkish, Egyptian were on long trading journeys by camels through desserts knew to insert a stone into uterus of the camel to prevent pregnancy for the camel during the trip [25].

In 1909 Richard Richter, a German doctor for the first time inserted silk IUD of 27mm dimension into human uterus for birth control. [22].

By 1929, a research of Ernst Gr"fenberg (German) implemented IUD insertion for 453 women but there were many cases of uterine infection so IUD were not used [31].

Thanks to the invention of antibiotics, one restarted to study usage of IUD for birth control. In 1959, research of Oppenheimet (Israel) used Gr"fenberg IUDs to insert in 1500 cases and found minimal gynecological inflammations. Research of Yshihama (Japan) synthesized over 20,000 Ota IUD users and found high proportion of pregnancy prevention [40].

In 1960, the second generation of IUD was introduced in 1960, which is Margulies Sprial made of plastic and bari sulfate [36]. Research of Jaime Zipper (Chile) experimented on rabbit proved role of IUD with copper to prevent pregnancy and copper was released gradually from copper-covered IUD [28].

In 1962, Hall and Stone (USA) confirmed the relationship between IUD and the endometritis and proved that plastic IUD does not cause big change in the structure of the cell of the endometrium like the case of metal IUD [39]. Since then, the multi-national research program on Family planning was founded. One continued to study to improve and finalize gradually the intrauterine device. There are many kinds of IUDs to be produced and used to prevent pregnancy: Ota, Fr fenberg, Dana, Multiload, T-shape.

By 1970, Jaime Zipper (Chile) introduced the third generation of IUD which contained slowly released copper such as Copper T, Cooper 7 with the smallest copper area was 200mm2[28].

China produced successfully Shanghai V IUD. America produce copper IUD such as Multiload, Multiload Cu375SL, TCu200, TCu220C, TCu380, TCu 380A, FFS Cu 380 [27].

In December 1986, at a Conference in Geneva (Switzerland), UN recommended to use IUD to prevent pregnancy because this method ensure safety and high efficacy in pregnancy prevention [24].

# 1.2.3. Usage of IUD in the world

From 1965, there were 6 millions women used IUD worldwide and after 5 years (1970), this number increased to 12 millions women used IUD for birth control. By 1983, there was over 50 millions women used IUD [40].

In 1999, the report of Skegg DC (German) released a research of 47 countries using IUD showing high safety and efficiency. [37].

Currently, there are 2 types of Intra-uterine Device (IUD) including hormonal IUD and non-hormonal copper IUD. Hormonal type releases hormon to prevent pregnancy. Non-hormonal copper IUD consists of TCu200, Cu220, TCu380, TCU380A, Multiload Cu 375 SL. Cu in IUD is released to prevent pregnancy [24].

One of the prime concerns while using IUD is that IUD using can lead to pelvic inflammatory disease. Proportion of having pelvic imflammatory usually occur in first 4 months from inserting IUD. Thus, this proportion will be remarkably reduced if users selected not having genital inflammation [18]. A number of researches showed that in the relation between IUD use and extopic pregnancy, proportion of women who used copper IUD and got extopic pregnancy is lowest in comparison with other IUD types [24].

Side effects usually found is increase of blood volume during menstruation and probably getting menorrhagia in the first month of using. These effects can be inconvenient to users and affect their health because of profuse bleeding [14].

#### 1.2.4. Situation of IUD usage in Viet Nam

Since 1960, IUD has been used as one of the modern contraceptives of high efficiency. Number of users increase rapidly and IUD is a popular contraceptive in Viet Nam. Mid-term survey of General Statistic Office annually showed that proportion of IUD use is higher than other contraceptives.

Table 1.1. Proportion of contraceptive usage from 2001-2005[19]

Contraceptives	2001	2002	2003	2004	2005
IUD (%)	55,7	56,2	57,0	55,9	55,3
Condom (%)	7,8	8,4	7,5	9,3	9,7
Oral contraceptive (%)	10,0	10,5	11,4	11,9	12,5

Types of IUD used popularly in Viet Nam are TCu 380A and Multiload Cu 375 SL. Proportion of using TCu 380A covers 70% and proportion of using Multiload Cu 375 SL is 30%. Currently, about 1,000,000-1,500,000 TCu 380A of India provided by Pregna Company are used per year in Viet Nam. In 2001, VCPFC distributed 1,250,000 TCu 380A for women in need of family planning. Till 2005, number of TCu 380A provided is approximately 1,500,000. TCu 380A made in India is accepted to use in pregnanncy prevention by Vietnamese women [13].

#### 1.3. TCU 380A

#### 1.3.1. Situation of TCu IUD usage

Since 1982, TCu 380A has been studied by World Population Council and it was used in 70 countries around the world such as America, Africa, Asia and Latin America. Some countries like Canada, Indonesia, India, China, e.g., have produced these IUD.

TCu 380A has T-shaped design like TCu 200 with a length of 36mm and a width of 32mm. It has a cooper collar on two transverse arms and its copper surface area is 380 mm<sup>2</sup>. In comparison with previous copper IUD, TCu 380A have larger cooper surface area and efficiency of preventing pregnancy takes 5-8 years or may be longer till 10 years [18] [3].

Since 1989, TCu 200 and TCu 220, then TCu 380 and since 1993, TCu 380A made in Canada have been used. Viet Nam. TCu 380A made in India has been used in FP program in Viet Nam since 1997. Every year, about 2 millions Vietnamese women use this type IUD. Time of using and researches showed that IUD made in India is safe, efficient in pregnancy prevention and accepted to use by Vietnamese women [18].

TCu 380A provided by India SMB company meet all international standards and has the same composition as other TCu 80A made by other Indian companies and in other countries on the world. Annually, millions of IUDs were provided to UNFPA to implement population and FP program around the world. Its quality was examined by independent international laboratory and it meets international standards [18] [40].

#### 1.3.2. Indication of using TCu 380 A

Ideal indication of IUD is for women who had children, healthy genital organ and want to prevent pregnancy.

Women who had scars because of caesareans still can be inserted IUD [3].

#### 1.3.3. Contraindication of TCu 380A

Strict contraindication: being pregnant, sexually-bacterial disease, hemophely, hearth diseases, and female genital cancer.

Relative contraindication: unusual uterus (deformity, fibroma), who are using clorindione, have anamnesis on sexually-bacterial disease, extopic pregnancy or have not ever been pregnant [3].

#### 1.3.4. Time of inserting and removing TCu 380A

Time of inserting and removing TCu 380A: the best time to insert IUD is right after stop bleeding of menstrual period because at this time. cervix is half-open, and there is no fecundation. IUD should not be inserted after delivery because proportion of IUD expulsion is high; therefore, it should be inserted at least 8 weeks after that. IUD also can be inserted after having abortion [2].

Time of removing TCu 380A IUD: it is recommended that IUD should be removed after 5-10 years; it should be replaced annually if IUD is hormonal type [2].

# 1.3.5. Complications and side-effects of TCu 380A

Some complications or side-effects can occur when using IUD as below:

Pelvic pain: occurs when a foreign object is inserted and hysterospasm appear in the uterus, and analgesic need to be taken in some

beginning months. Sometimes, uterus is too large; therefore it is systaltic to expel IUD.

- Period pain: is the bellyache during the menstrual period. In these cases, IUD must be replaced by another type.
- Menstrual problem: this phenomenon often happen when IUD is inserted; it covers 10-15% of cases who have to replace IUD in the first year of using [2].
- IUD expulsion: happens in the first year of using. Affected factors of IUD expulsion are: age, number of pregnancy, type of IUD, experiences of the one who practice the insertion, time of insertion.
- Uterus thrust: rarely happens. It makes up about 1.2‰ of insertion cases. If this case is detected, IUD will be replaced and uterus will be treated [2].
- IUD goes inside abdominal cavity: IUD can go inside immediately or later.
- Sexually-bacterial disease: is a side-effect resulting in sterility. Proportion is about 3-9%.
- Being pregnant while using IUD: proportion is approximately 0.5-5%.
- IUD and extopic pregnancy: IUD stops embryo to get embedded in the uterus, but it can not prevent embryo to get embedded outside the uterus. However, so far, there is no research that affirms IUDs result in extopic pregnancy [2].

# 1.3.6. Possibility of pregnancy after removing TCu 380A IUD

When women want to be pregnant, they only need to remove IUD and possibility of pregnancy is: 30% after 1 month of removing IUD, 50% after 3 months of removing IUD, 70% after 12 months and 90% after 24 months. However, about 10% of case can have secondary sterility due to bacterial uterine tube [2].

# 1.3.7. Contraception efficiency of TCu 380A IUD

If IUD has not active elements such as Cu, hormone; efficiency of pregnancy prevention is about 95-96%. But in TCu 380A IUD, efficiency is about 99%. IUD is currently the most popular used in Vietnam. High efficiency of contraception contributes to reduce fertility, therefore, result in economical benefit of national development [2].

#### Chapter 2

#### SUBJECT AND RESEARCH METHODOLOGY

#### 2.1. SUBJECT

Subjects of this research include married women who are in RH age, already have at least 1 child, desire to execute family planning, volunteer to use IUD and have no contraindication of inserting TCu 380A IUD. Subjects are selected via check list.

#### 2.1.1. Criteria for subjects selection

- Women in RH age, have at least 1 child.
- Desire to execute family planning and volunteer to use Tcu 380A IUD provided by SMB company, India.
- Have indication to be inserted TCu 380A IUD.
- Have regular menstruation.
- Obey all research conditions.
- Meet all criteria of check list such as: anamnesis, obstetrical anamnesis, result of overall health examination, obstetrical examination.
- Do not use any IUD in present.

# 2.1.2. Criteria to exclude subjects

- Unmarried women or married but have not had children, or out of age of pregnancy, do not have needs to do family planning.
- Un-regular menstruation.
- Do not meet criteria of check list.

- Do not volunteer to use TCu 380A IUD provided by Indian SMB Company.
- Have contraindication with inserting TCU 380A IUD.
- Using other contraceptive currently.

# 2.2. TIME AND RESEARCH SITE

- Researching time: subject choosing was began at 2/2005, TCu 380A-SMB IUD has been insert and this was finished in the end of 4/2005, subjects were monitored till 4/2007. Researching time was divided into 2 stages as below:
- + Stage I: from 4/2005 2/2006 (pursuant to Decision No 1422/QD-BYT dated April 22<sup>nd</sup> 2005 of leader of MOH). 12 month Report of stage 1 was approved by Scientific Council of MOH on 1<sup>st</sup> September 2006.
- + Stage II: The research has been continued to carry out till 4/2007, 24 months report of stage II was approve in 6/2007 (pursuant to Decision No 1891/QD-BYT of leader of MOH dated 30<sup>th</sup> May 2006).
- Research sites: comprise 4 districts of 3 provinces:
  - + Ly Nhan district, Ha Nam province.
  - + My Loc and Nghia Hung districts, Nam Dinh Province.
  - + Tien Hai district, Thai Binh province.

# 2.3. RESEARCH DESIGN

This research is an open clinical test, lengthwise monitoring, none of check sample. It is based on the time-based model of assessing interventions. This research has no check sample because some other TCu 380A IUD of India (TCu 380A produced by Indian Pregna Company) which have same

international quality criteria, had already been studied, approved and used popular in Family planning programs in Vietnam since long time.

- Researching tools:
- + Common questionnaire was used to interview and monitor IUD users. This questionnaire was checked and recorded by health providers. After inserting IUD, subjects had periodical health check-ups in commune health centers. Information, collected via questionnaire and examination, were recorded in a book to monitor.

#### 2.4. SAMPLE SIZE AND SAMPLING

\* Sample size: Formula for calculating sample sixe was applied

$$n = \frac{\left(z_{(1-\alpha/2)}\sqrt{[p_0(1-p_0)]} + z_{(1-\beta)}\sqrt{[p_a(1-p_a)]^2}\right)^2}{(p_0-p_a)^2}$$

Note: Formula of S.K.Lwanga & Lemeshow Sample size determination in health studies WHO 1991, tr:29

*In there:* n = minimum sample size.

p<sub>0</sub>: Proportion of sucessful sterilization of previous researches is 85%.

p<sub>a</sub>: Proportion of expected sucessful sterilization is 90%.

 $\alpha$  = 0,05, confident limits coefficient  $Z_{(1-\alpha/2)}$  =1,96, Confidence interval 95%.

Significant level 5%, sample power 90%;  $\beta = 0.1$  equivalent to  $Z_{(1-\beta)}$ : 1,282.

After calculating, minimum sample size is 382 women. 20% of women for contingency were added to avoid discooperation or giving up of subjects. Number of subjects are: n = 458 women.

#### \* Sampling:

Sample includes all subjects who had husbands and at least 1 child, in reproductive age, in need of family planning and volunteer to use TCu 380A IUD provided by SMB Company, no contraindication on inserting TCu 380A and meet all criteria to participate in research from February-April 2005 in communes of 4 districts of 3 selected provinces. Selected subjects must meet all criteria in the check list. Number of subjects who were inserted TCu 380A IUD previously are 465 women, but there were 13 women over 44. Only data of 452 women who used IUD in age of 19-44 were analyzed.

# 2.5. DATA COLLECTION AND PROCESSING

- Common questionnaire was applied to interview, monitor and periodically examine subject during researching time.
- Collect information were entered to computer and processed by Exell and Epi-info 6.04.
- Chi Square test was applied to compare proportions.

#### 2.6. IMPLEMENTATION STEPS

#### 2.6.1. Training for health staff

- Training on gynecological examination and using check list to choose subjects
- + Training gynecological examination: technique of gynecological examination, identification of normal gynecology via naked eyes, the way to get hydrocolpos and do the test to diagnose vaginitis, pep-smear.
  - + Training on using check list to choose subjects.

- + Training on inserting and removing TCu 380A IUD
- + Training on using questionnaire to monitor subjects periodically.

# 2.6.2. TCu IUD inserting and provision of essential medicine

In present, TCu 380A IUD is inserted in accordance with technical indication. Time of inserting is after bleeding of menstrual period stops.

Essential medicine were provided for subjects who use TCu 380A IUD including: Antibiotic such as Amoxixilin500mg x 2 tablets/day x 5 days, or Doxyxilin100mg x 2 tablets/day x 5 days, systaltic reducing medicine Spasmaverin 40mg x 4 tablets/day x 5 days, or analgesic Paraxethamol 500mg x 2 tablet/day x 3 days.

#### 2.6.3. Periodical examination

Periodically, subjects were interviewed and examined consisting of: overall examination and gynecological examination, pep-smear of virginal juice and gynecological ultrasound to determine location of IUD in uterus.

# 2.6.4. Subject monitoring and management

Collected information on subjects was recorded in a book and monitoring paper:

- Full name, age, occupation, address, gynecological and obstetrical anamnestic.
- Overall examination, obstetrical examination, test and ultrasound results.
- Menstruation: regular, not regular, menorrhagia, bleeding much, amenorrhea.
- Signs of gynecological-bacterial disease, varginitis: leucorrhoea, belly-ach in hypogastric.
- Location of IUD through examining wire of IUD in vagina and ultrasound.

- Extopic pregnancy, IUD removal.
- Using acceptance, number of women gave up, reasons of giving up.

# 2.6.5. Report writing until April 2007

# 2.7. Indicators which met in the research

Content	Research indicators	Method of data collection
Common information	- Characteristics of subjects: by age, address, occupation, number of children	Questionnaire and interview
Content 1: Determining efficiency of sterilization and proportion of failure when using TCu 380A- SMB IUD	pregnant while using IUD.	Interview, periodical examination, questionnaire, test and ultrasound
Content 2: Assessing safety while using TCu 380A-SMB IUD	<ul> <li>Proportion of users who had pelvic inflammation.</li> <li>Proportion of users who got virginities.</li> <li>Proportion of women who got belly-ach in hypogastric and had to remove IUD.</li> <li>Proportion of users who got menorrhagia.</li> </ul>	Interview, periodical examination, questionnaire, test and ultrasound.

	<ul> <li>Proportion of users who had regular menstruation.</li> <li>Proportion of users who got amenorrhea.</li> <li>Proportion of users who got extopic pregnancy.</li> </ul>	
Content 3:	- Proportion of IUD removal.	Interview,
Determining	- Proportion of users gave up.	periodical
acceptance and proportion of	- Proportion of acceptance.	examination,
proportion of TCu 380A-SMB	- Reasons why don't they continue to use	questionnaire
users gave up.		and ultrasound

#### 2.8. DEFINITIONS IN THIS RESEARCH

- Women who continue to use: women who are using IUD.
- Women who give up: women do not continue to use IUD because of any reason.
- Contraception efficiency: is percentage between IUD users who did not get pregnancy per total of women who have been used IUD.

Total of women who have been used IUD

• Proportion of failure: is percentages between women who are using IUD and get pregnant per total of women who have been used IUD.

Total of women who have been used IUD

- Proportion of women gave up: is percentages between numbers of women who quit using IUD per total of women who have been used IUD.

Numbers of women who quit using IUD

Proportion of women gave up = ----- X 100

Total of women who have been used IUD

- Vaginitis: are the cases that find out the signs of inflammation via clinical examination or when doing pep-smear of vaginal juice, it find out bacteria having over ++ or fungus, trichomonas vaginalis, Gonorhoea, e.g.
- Regular menstruation: is a period of 28-30 days, number of bleeding days are 5-7 days, amount of bleeding is about 60-80ml/day.
- Amenorrhea: are the cases that have not had regular period in 3 months over.
- Menorrhagia: are the cases that have bleeding in vagina during 7 days over.
- Menstruous bleeding: is amount of blood in during period that excess 20ml/day.
- Right IUD location: is that IUD is located in uterus and has wire in vagina.

## 2.9. ETHICAL ISSUES

The implementation of this research was approved by Scientific Council-Ministry of Health, Department of Science – Education – MOH, leaders of MOH, Leaders of Central Gynecological and Obstetrical hospital,

Leaders of Maternal and child health and Family Planning Center (now is Center of Reproductive Health Care), Branch of Gynecological and Obstetrical and Family Planning association in Ha Nam, Nam Dinh and Thai Binh provinces, District Health centers where is researching sites., commune health staff; especially this research was accepted by researching subjects.

This research also aims to population and family planning programs in order to bring benefit to clients and let clients have more choices on the best contraceptive with the lowest prices.

Research findings contribute to: diversify contraceptives and antiexclusiveness in contraceptive provision; create comfortable and qualitative contraceptive provision services for clients; increase proportion of using contraceptive as well as reduce proportion of population development.

All research information are ensured secrecy and protected.

#### Chapter 3

#### RESEARCH FINDINGS

# 3.1. CHARACTERISTICS OF SUBJECTS

## 3.1.1. Number of subjects

Table 3.1.Number of subjects according to the time

NO	Time of using	Subjects
1	Number of women inserted Tcu 380A-SMB IUD	452
2	Monitoring till 6 months	446
3	Monitoring till 12 moths	436
4	Monitoring till 24 months (4/2007)	423
5	Number of women continuing IUD after 4/2007	392

Number of initial subjects inserting TCu 380A-SMB IUD are 452. After 6 months, this number dropped by 6 because of giving up to 446 users. After 12 months, this number fell by 10, there were 436 women who continued to use IUD. After 24 months (4/2007), there were 13 women could not be monitored, this number fell to only 423 and there were more 31 women who gave up. After 4/2007, there were 392 subjects who has been used TCu 380A-SMB IUD.

Table 3.2. Number of subjects in provinces

NO	Name of provinces	TCu 380A-SMB IUD			
		n	%		
1	Ha Nam	151	33,41		
2	Nam Dinh	155	34,29		
3	Thai Binh	146	32,30		
	Total	452	100		

Numbers of subjects in each research site are nearly the same. Each province has 32.3% - 34.29% of subjects.

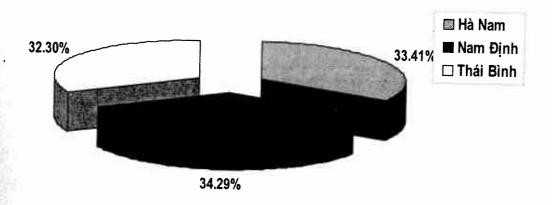


Chart 3.1. Number of subjects by research sites

# 3.1.2. Age of subjects

Table 3.3. Age of subjects by groups and research sites

Age groups	Ha N	Nam	Nam Dinh		Thai Binh		Total		р
<del></del>	n	%	n	%	n	%	n	%	
Age of 19	0	0	1	0.65	0	0	1	0,22	
20-24	34	22,52	29	18,71	17	11,64	80	17,70	The state of the s
25-29	47	31,12	39	25,16	39	26,71	125	27,65	
30-34	39	25,83	37	23,87	36	24,66	112	24,78	>0,05
35-39	17	11,26	34	21,93	28	19,18	79	17,48	
40-44	14	9,27	15	9,68	26	17,81	55	12,17	
Total	151	100	155	100	146	100	452	100	

27.65% of women using TCu 380A IUD are in age of 25-29. Proportion of women using TCu 380A in age of 30-34 is 24.78%. This proportion in age of 20-24 is 17.70%, respectively in age of 35-39 is 17.48% and in age of 40-44 is 12.17%. This proportion in other age-groups is lower. The difference in proportions of using TCu 380A-SMB IUD among age-groups is no significant with p>0.05.

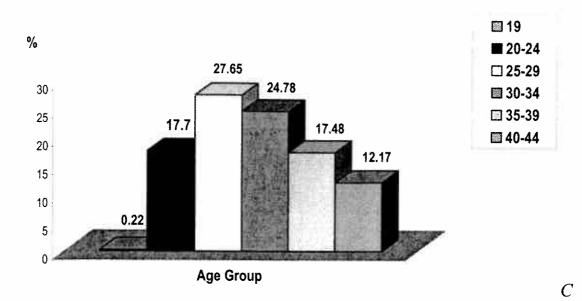


Chart 3.2. Age of subjects

# 3.1.3. Occupation

Table 3.4. Occupation of subjects by research location

Occupation	Ha	Nam	Nam Dinh		Thai Binh		Total		P
	n	%	n	%	n	%	n	%	
Farmer	148	98,01	147	94,84	138	94,52	433	95,80	
Worker – Officer	2	1,33	3	1,94	6	4,11	11	2,43	> 0,05
Freelance labors (stay at home, do the small business, tailor, e.g.)	1	0,66	5	3,22	2	1,37	8	1,77	
Total	151	100	155	100	146	100	452	100	

Proportion of female farmers using TCu 380A-SMB IUD is 95.80%. This proportion in worker-officer group is 2.43% and in freelance labor group is 1.77%. The difference in proportions of using TCu 380A-SMB IUD among by occupation is no significant with p>0.05.

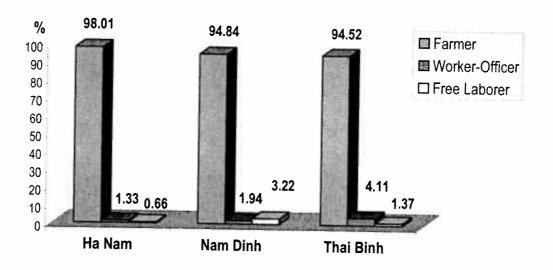


Chart 3.3: Occupations of subjects by research locations.

## 3.1.4. Number of children

Table 3.5. Number of children of subjects by research locations

Number of	На	Ha Nam		Nam Dinh		Thai Binh		Total	
children	n	%	n	%	n	%	n	%	
1 child	36	23,84	27	17,42	28	19,18	91	20,13	
Over 1 child	115	76,16	128	82,58	118	80,82	361	79,87	
Total	151	100	155	100	146	100	452	100	

Proportion of using TCu 380A-SMB IUD in women having 1 child is 20.13% and this proportion in women having 2 children over is 79.87%.

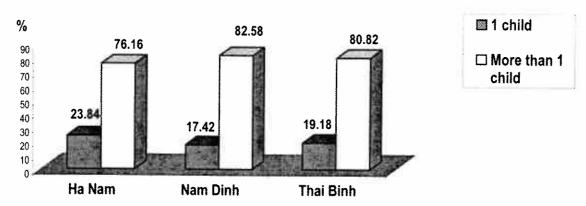


Chart 3.4. Number of children of subjects using IUD.

# 3.1.5. Results of gynecological examination of subjects before inserting IUD

Table 3.6. Results of gynecological examination by research locations

Clinical signs		<b>Ha Nam</b> (n=151)		<b>Nam Dinh</b> (n=155)		i <b>Binh</b> =146)	Total (n=452)	
	n	%	n	% <b>o</b>	n	%	n	%
Anamnestic of vaginitis, having leucorrhoea	3	1,99	15	9,68	6	4,11	24	5,31
Anamnestic of regular period	151	100	155	100	146	100	452	100
Normal cervix, uterus, appendage.	151	100	155	100	146	100	452	100

100% of women have regular period, normal cervix, uterus and appendage. Proportion of women having anamnestic of vaginitis and leucorrhoea is 5.31%. Number of women at the time of examination for choosing research subjects did not have clinical signs on vaginitis, therefore they were still inserted IUD.

# 3.2. CONTRACEPTION EFFICIENCY AND PROPORTION OF IUD FAILURE

Table 3.7.Efficency of sterilization when using IUD by research time

Situation of pregnancy	After 12 months of inserting	After 24 months of inserting
Get pregnant	0	0
Did not get pregnant	452	423
Total	452	423

Number of subjects who were examined at the time of 12 months using IUD are 452; there was no pregnant women when using TCu 380A-SMB

Number of subjects who were monitored till 4/2007 is 452, there was no pregnant women when using TCu 380A-SMB.

## 3.3. DETERMINATION OF SIDE-EFFECT AND SAFETY OF IUD

#### 3.3.1. Menstruation of users

Table 3.8: .Changes of menstruation by time of using

Menstruation	After 12 months			ter 24 onths	Cum afte mo	р	
	N	%	n	%	n	%	
Regular menstruation	441	97,57	414	97,87	432	95,58	> 0,05
Menorrhagia	11	2,43	9	2,13	20	4,42	
Total	452	100	423	100	452	100	

Proportion of women who had menorrhagia after 12 months of using TCu 380A-SMB is 2.43%; this proportion till 24<sup>th</sup> month is 2.13% and cumulative proportion after 24 months is 4.42%. The difference in proportions of women who had menorrhagia when using TCu 380A-SMB IUD after 12 months and 24 months is no significant with p>0.05.

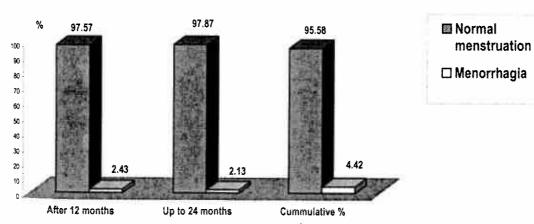


Chart 3.5. Changes of menstruation by time of using IUD.

# 3.3.2. Gynecological infection of users

Table 3.9.Situation of gynecological infection when using IUD by time

Gynecological	After inserting 12 months		Till 24 months		Cumulation after 24 months		P
infection	n=446**	%	n=408*	%	n=446	%	
Appendage imflammation	0		0		0		
Vaginitis and cervicitis	18	4,04	18	4,41	36	8,07	> 0,05
Pelvic inflamation	0		0		0		
Total	18	4,04	18	4,41	36	8,07	

Note: \* Number of subjects who were done pep-smear of vaginal juice are 408, there were 15 women who were not examined (13 women a way from home and 2 women quit using IUD, thus they did not examine). \*\* There were 6 women that were not examined.

After 12 months of using TCu 380A-SMB, proportion of women having vaginitis is 4.04%. This proportion till 24<sup>th</sup> month is 4.41% and after cumulative proportion after 24 months is 8.07%. The difference in proportions of women who had vaginitis after 12 months and 24 months of inserting IUD is no significant with p>0.05.

# 3.3.3. Reasons resulting in gynecological infection

Table 3.10. Resasons resulting in gynecological infection by time

Reasons	After 12	2 months	Till 24 ı	nonths	Cumu after 24	P	
	n=446	%	n=408	%	n=446	%	
Bacteria	15	3,36	15	3,67	30	6,73	
Fungus	######################################	0,23	2	0,49	3	0,67	> 0,05
Chichomonas Vaginalis	2	0,45	1	0,25	3	0,67	
Total	18	4,04	18	4,41	36	8,07	

After 12 months, proportion of women had vaginitis by bacteria is 3.36%, this proportion by fungus is 0.23% and by Chichomonas Vaginalis is 0.45%.

Till 24 months, Proportion of women had vaginitis and cervinitis by bacteria is 3.67%, by fungus is 0.49% and by Chichomonas Vaginalis is 0.25%.

After cumulative 24 months, Proportion of women had vaginitis and cervinitis by bacteria is 6.73%, by fungus is 0.67% and by Chichomonas Vaginalis is 0.67%.

The difference in proportions of women who had vaginitis and cervinitis after 12 months and 24 months is no significant with p>0.05.

# 3.3.4. Other side-effects and catastrophes

Table 3.11. Other side-effects and catastrophes when using IUD by time

Side-effect and catastrophe	After 12 months of inserting		Till 24 r	nonths	Cumulation till 24 months		
	n=446	0/0	n=423	%	n=446	%	
Low abdominal pain, backache during mestruation and resulting in IUD replacing	6	1,35	0		6	1,35	
Other catastrophes (exopic pregnancy, IUD get inside abdomen, e.g.)	0		0		0		

After 12 months of TCu 380A-SMB IUD using, proportion of women had low abdominal pain, backache during menstruation resulting in IUD replacing is 1.35%. Till 24<sup>th</sup> month, there was no case recorded that should be replaced IUD due to low abdominal pain and backache during menstruation.

After 24 months of TCu 380A-SMB IUD using, cumulative proportion of women had low abdominal pain, backache during menstruation resulting in IUD replacing is 1.35%.

## 3.3.5. Determination of IUD location in uterus

Table 3.12. Location of IUD in uterus by time

IUD location	insei	months of rting	After 24 months of Inserting (n=392**)		
	N	0/0	n	%	
IUD was still located in uterus	436	100	392	100	
IUD was not in uterus	0		0		
Total	436	100	392	100	

Note: \* Till 12<sup>th</sup> month, 16 women quitted, thus number of subjects dropped to 436, \*\* till 24<sup>th</sup> month, there were more 31 women quitted and 13 women a way from home thus they could not be monitored, the number of subject fell to 392.

By gynecological examination, after 12 months, there were 436 women continuing to use TCu 380A-SMB IUD. All subjects have wires still located in vagina. Researchers organized gynecological ultrasound for 47 women using TCu 380A-SMB IUD and found out that IUDs were located in uterus.

After 24 months, gynecological examination and ultrasound in 392 women using TCu 380A-SMB IUD showed that there were still IUD loacted in uterus and IUD's wires were in vagina.

# 3.3.6. Safety of IUD

Table 3.13. Safe level when using IUD by time

IUD location	After 12 months of inserting (n=452)		Till mo	nth	Cumulation after 24 months (n=452)		P
	n	%	n	%	n	%	
Regular menstruation	441	97,57	414	97,87	432	95,58	>0,0 5
Appendage inflammation	0		0		0		
Vaginitis and cervicitis	18 (n=446)	4,04	18 (n=408)	4,41	36 (n=446)	8,07	>0,0
Pelvic inflammation	0		0		0		
IUDs were still located in uterus.	436 (n=436)	100	392 (n=392)	100	392 (n=392)	100	
Exopic pregnancy, IUDs located in abdomen.	0			and the second s	O		

The rate of women having vaginitis inflammatory after 12 months is 4.04% and the rate of women having vaginitis inflammatory and cervicitis

inflammatory after 24 months is 4.14%; and the accumulative rate after 24 months is 8.07%.

The difference on the rates of women having vaginitis inflammatory after 12 months and 24 months is not significant with p>0.05.

Basing on the gynaecological check – up to examine the wire of IUD in the vagina and taking gynaecological ultra- sound, it showed that: all the women continue to use IUD and IUDs still located in their uteruses.

After 24 months of monitoring target groups, in this study, no women, who are now using IUD, suffer from appendage inflammatory, pelvic inflammatory and extopic pregnancy.

# 3.4. Identifying the rate of IUD using acceptance and the rate of giving - up

# 3.4.1. The rate of giving up, not using IUD

Table 3.14. The situation of using IUD by times

The situation of using IUD	After mont (n=45	hs	s months		The accumrate after 24	p	
	n	%	N	%	n	%	
Continue for using IUD	436	96.46	392	89.91	392	86.73	> 0.05
Giving - up	16	3.54	44*	10.09	60*	13.27	AAAAA V v promonoma aa tavvusteerin
Total	452	100	436	100	452	100	

Note: \* Including 13 persons who are far from home and are not being monitored up to 24 months

After 12 months of using IUD, the rate of women who gave up TCu 380A-SMB IUD using is 3.54%. This rate after 24 months is 10.09%. The accumulative rate of giving up after 24 months (Including 13 persons who are far from home and are not being monitored up to 24 months) is 13.27%. The difference on the rates of women giving up using IUD TCu 380A-SMB after 12 months and 24 months is not significant with p>0.05.

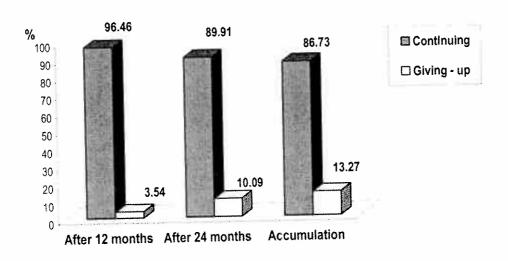


Chart 3.6. The rate of IUD using IUD by the time

# 3.4.2. The causes of giving – up

Table 3.15. The causes of not continueing to use IUD

Causes	Afte mor (n=4	nths	Afte mor (n=4	iths	The accumulative rate after 24 months (n=452)		P
	n	%	n	0/0	n	%	
Want to have children	5	1.11	20	4.59	25	5.53	>0.05
Vaginitis inflammatory and cervicitis inflammatory	0		4	0.92	4	0.88	
Being menorrhagia and hemorrhage that required to remove IUD	11	2.43	4	0.92	15	3.32	>0.05
IUD slipping	0		3	0.68	3	0.67	
The persons who are far from home and are not being monitored	0		13	2.98	13	2.87	
Total	16	3.54	44	10.09	60	13.27	

After 12 months of inserting IUD, the rate of women who gave – up, not using IUD TCu 380A-SMB due to menorrhagia and hemorrhage that required removing IUD was 2.43% and the rate of giving up because of their want to have children was 1.11%.

After 24 months of monitoring period, the rate of women who giving up using IUD due to their want to have children was 4.59%; and the rate of women who giving using IUD due to vaginitis inflammatory and cervicitis inflammatory was 0.92%; for being menorrhagia and hemorrhage that required to remove IUD was 0.92%; there was 0.68% women who giving up because of IUD slipping; and 2.98% of women who were far from home and were not being monitored.

The accumulative rate after 24 months of using IUD TCu 380A-SM showed that: the rate of women gaving up using IUD due to their desires to have children was 5.53%; and the rate of women gave up using IUD due to vaginitis inflammatory and cervicitis inflammatory was 0.88%; for being menorrhagia and hemorrhage that required to remove IUD was 3.32%; there was 0.67% women gave up because of IUD slipping; and 2.87% of women who were far from home and were not being monitored.

The difference in the rates of women gave up using IUD is not significant with p>0.05.

# 3.4.3. The continuity of using IUD of target groups

Table 3.16. The continuity of using IUD

By time	IUD TCu 3	P	
	N=452	%	
After 12 months	436	96.46	> 0.05
After 24 months	392	86.73	

After 12 months, the rate of acceptance to continue using IUD TCu 380A-SMB was 96.46%. This rate after 24 months was 86.73%. The difference in the rate of women who accept to continue using IUD after 12 months and 24 months is not significant with p>0.05.

# 3.5. Gynaecological check – up for target groups before and after IUD insertion

Table 3.17. The result of gynaecological check – up before and after 24 months of IUD insertion

The initial phenomenon	Befo insert IUI	ing	After month insertin	is of	mon	er 24 oths of ing IUD	e nu	nulativ mber er 24 nths	p
	n=452	%	n=452	%	n=423	%	n=452	%	
Regular menstruation period	452	100	441	97.57	414	97.87	432	95.58	> 0.05
Being menorrhagia and hemorrhage	0		11	2.43	9	2.13	20	4.42	
Vaginitis inflammatory and cervicitis inflammatory	0		18 (n=446)	4.04	18 n=408	4.41	36 n=446	8.07	
Low abdominant pain and backache in menstruation period	O		6 (n=446)	1.35	0		0		

Due to the strict criteria of selecting the target groups and basing on the checklist and gynaecological check – up before inserting IUD, all the

women, who were selected for inserting IUD TCu 380A-SMB, must have regular menstruation period and not having vaginitis inflammatory and cervicitis inflammatory.

After 12 months of using IUD TCu 380A-SMB, the rate of women who had regular menstrual period was 97.57%. The rate of women who suffered from menorrhagia and hemorrhage was 2.43%. The rate of women who had vaginitis inflammatory was 4.04% and the rate of women who had low abdominant pain and backache in menstruation period was 1.35%. Up to 24 months of using IUD TCu 380A-SMB, the rate of women who had regular menstruation period was 97.87%. The rate of women who suffered from menorrhagia and hemorrhage was 2.13%. The rate of women who had vaginitis inflammatory and cervicitis inflammatory was 4.41% and there were no women who had low abdominant pain and backache in menstruation period that leading to removal of IUD. The accumulative rate after 24 months of using IUD TCu 380A-SM showed that: the rate of women who had regular period was 95.58%. The rate of women who suffered from menorrhagia and hemorrhage was 4.42%. The rate of women who had vaginitis inflammatory and cervicitis inflammatory was 8.07% and there were no women who had low abdominant pain and backache in menstruation period that leading to removal of IUD. The difference in the mentioned rate is not significant with p>0.05.

#### CHAPTER 4

#### **DISCUSSION**

### 4.1. The common characteristics of target groups

Most of women who using IUD TCu 380A-SMB were in the age of 25 – 29, occupied 27.65%; and then the age of 30 – 34 occupied 24.78%. The rate of women using IUD TCu 380A-SMB at the age of 25 – 34 was 52.43%. In Vietnam, at the age of 25 – 34, women usually have 1 or 2 children, so the need for widening fertility gap and not giving birth is higher than other groups, therefore, the rate of women at the age of 25 – 34 who using IUD TCu 380A-SMB is higher. The rate of women at the age of 25 – 34 who using IUD TCu 380A-SMB is equivalent to the groups using IUD TCu India in the Nguyen Van Tuong's study (48.52%) [18] and Ninh Van Minh (51.3%) [15].

Most of women in this study (95.80%) using IUD TCu 380A-SMB are farmers. This rate is higher than the rate of Nguyen Van Tuong's study on groups using IUD TCu India in the (60.67%) [18] and equivalent to Ninh Van Minh (96%) [15]. It may be the locations conducted in this survey are rural and women in these areas mostly producing agricultural, hence, the number of peasant women using IUD TCu 380A-SMB is higher than other occupational groups. The rate of worker and officer using IUD TCu 380A-SMB is not high (2.43%), this rate is equivalent to Ninh Van Minh's study (2%) [15].

In this study, women, who are not having children, are not the target group and will not having IUD inserted, therefore, the women who using IUD TCu 380A-SMB have at least one live child. The rate of women has 1 child using

IUD TCu 380A-SMB is 20.13%. This rate is lower than the Duong Thi Cuong's study on IUD TCu 380A- Netherland (45.06%) [9] and Ninh Van Minh (38%) [15].

# 4.2. THE CONTRACEPTIVE EFFECTIVENESS AND FAILURE PROPORTION OF IUD USAGE

Table 4.1. Comparison on contraceptive effectiveness of TCu 380A between the authors from 18 months to 5 years

Authors	Not pregn		Being pregnant		
	n	%	n	%	
Rayoon.D, Farr.G and Amatya.R, 1998 [30], (n=681), after 48 months	679	99.71	2	0.29	
Le Quang Bach and colleagues 2000, [16] (n=4203), after 5 years	1	96.67	140	3.33	
Nguyen Van Tuong, [18]	The state of the s				
-2001: after 18 months -2004: after 48 months	351 350	98.60 99.63	5	0.37	

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Nguyen Van Tuong, [18]	an rysma AA sepayy —			
IUD FEI (n=350)				over an enchandative of the
-2001: after 18 months	346	98.86	4	1.14
-2004: after 48 months	345	99.61	1	0.39
Nguyen Van Tuong, [18]		Account of the contract of the	TOTAL THE TOTAL	
IUD Canada (n=357)				
-2001: after 18 months	352	98.60	5	1.40
-2004: after 48 months	352	100	0	
Ninh Van Minh, 2000 [15], (n=150), after 18 – 26 months	147	98.0	3	2.0%
The Central Gynaecological and Obstetrical Hospital, 2007, IUD		100	0	
TCu 380A-SMB (n=452), after 24 months				

After 24 months of monitoring the target groups on using IUD TCu 380A-SMB, it is shown that: there are no cases being pregnant when using this kind of IUD. This result is equivalent to the studies from other authors from 18 months to 5 years: Nguyen Van Tuong (after 48 months) on IUD TCu 380A-FaI (India) was 99.63%, IUD TCu 380A-FEI (America) was 99.61%, IUD TCu 380A (Canada) was 100%; the author Rayoon.D, Farr.G and Amatya.R (after 48 months) was 99.71%, the author Le Quang Bach

(after 5 years) was 96.67% and Ninh Van Minh (after 18-26 months) was 98%.

The contraceptive effectiveness of IUD TCu 380A-SMB is equivalent to other type of IUD TCu 380A which are now being studied and used in Vietnam as well as in the world. For this reason, IUD TCu 380A-SMB could be used in family planning programs in Vietnam.

# 4.3. SIDE EFFECTS AND THE SAFETY LEVEL OF IUD

Table 4.2. Comparison on side effects of TCu 380A SBM after 18-48 months to other type of IUD TCu 380A

Side effects and catastrophe	TCu 380A  SMB India (n=452)  n %		TCu 380A Netherland** (n=119) n %		TCu 380A FaI* India (n=272) n %	
Being menorrhagia and hemorrhage	20	4.42	10	8.40	9	3.31
Vaginitis inflammatory and cervicitis inflammatory	36 n=446	8.07	n=114	12.6	23 n=158	14.0
IUD slipping	3	0.67	8 n=150	5.33	13	4.78

Note: \* The data from Nguyen Van Tuong's study (2004) after 48 months [18]

\*\* The data from Ninh Van Minh's study (2000) after 18 – 26 months [15]

After 24 months, the accumulative rate of women using IUD TCu 380A-SMB suffered from being menorrhagia and hemorrhage is 4.42%; among which, there are 3.32% women who being menorrhagia and hemorrhage that required to removed IUD; the left only being menorrhagia and hemorrhage for 7 – 8 days in 1 – 2 periods and are treated by tranzamine hemostatic; at the present, their menstrual period are normal and they continue for using IUD. The rate of women who being menorrhagia and hemorrhage are equivalent in study of Nguyen Van Tuong on IUD - FaI (3.31%) and lower than Ninh Van Minh's study (8.40%). The rate of women who being menorrhagia and hemorrhage when using IUD TCu 380A-SMB is low, the reason for this difference may be on the sample; the women selected for inserting IUD in this study did not have prehistory of being menorrhagia and hemorrhage, therefore, the cases being menorrhagia and hemorrhage when using IUD is lower.

The low rate of women suffering menorrhagia and hemorrhage when using TCu 380A – SMB and the level of suffering menorrhagia and hemorrhage did not effect the user's health and their daily activities, so Vietnamese women could use IUD TCu 380A-SMB for contraception.

The accumulative rate of women having vaginitis inflammatory and cervicitis inflammatory in 24 months using IUD is 8.07%. Among which, there are 0.88% women giving up using IUD because of vaginitis inflammatory and cervicitis inflammatory and then stop using it. The

numbers of other women having vaginitis inflammatory are treated with Polygynax or Neo – Tergynan one month per time, each time from 5 – 7 days; treatment is conducted in 1 – 2 months to get over from vaginitis inflammatory and then continue to use IUD. The rate of women having vaginitis inflammatory use IUD TCu 380A-SMB is lower than in Ninh Van Minh's study (12.6%) and Nguyen Van Truong's on IUD TCu 380A-FaI India (14.0%). The rate of women who having vaginitis inflammatory when using IUD TCu 380A-SMB is lower than other study may be because of the reason that when we selected the target groups for inserting IUD, only women who did not have prehistory of vaginitis inflammatory or being vaginitis inflammatory at current time, so the cases having vaginitis inflammatory when using IUD TCu 380A-SMB is lower. Moreover, in Vietnam nowadays, women are informed with much knowledge on gynaecological hygiene and safe sex, therefore, they could avoid the sexual transmitted diseases.

The causes of vaginitis inflammatory in most cases are by bacterium, fungus and trichomonas vaginalis. The accumulative rate of vaginitis inflammatory after 24 months by bacterium is 6.73%; by fungus is 0.67% and by trichomonas vaginalis is 0.67%. The causes of vaginitis inflammatory when using IUD TCu 380A-SMB is lower than in Le Bach Quang's study (by fungus 14% and by trichomonas vaginalis 5.5%) and in Nguyen Van Tuong's study on women using IUD TCu 380A FaI India (by fungus 30.1%; by trichomonas vaginalis 0.6% and by bacterium 26.9%) [16] [18].

After 24 months using IUD TCu 380A-SMB, there are 03 cases (0.67%) who were IUD slipped; this rate is lower than Nguyen Van Tuong's

study on IUD TCu 380A-FaI India (4.78%) and Ninh Van Minh's study on IUD TCu 380A Neitherland (5.33%).

The safety level of women when using IUD TCu 380A-SMB after 24 months showed on the results from supervising process and in this study is: there are no cases of pregnancy or extopic pregnancy or IUD moved to abdomen. The rate of women when using IUD TCu 380A-SMB have regular menstrual period is high (95.58%); the rate of women having vaginitis inflammatory is low (8.07%). The result from gynaecological check - ups and ultra – sounds showed that: the women, who currently using IUD TCu 380A-SMB, still have the string in their vagina and the IUD are located in their cervic.

Due to the high contraceptive effectiveness that meet the contraceptive requirement of the users and family planning programs, the status of menorrhagia and hemorrhage is at the allowed safety level; therefore, we recommend for wide distribution of IUD TCu 380A-SMB in our country.

# 4.4. ASSESSMENT ON THE ACCEPTANCE FOR USING AND THE PROPORTION OF GIVING - UP

# 4.4.1. The proportion of giving – up, not continue to use IUD TCu 380A

Table 4.3. Comparison on the rate of giving – up and the reasons of giving - up of TCu 380A SBM after 18 – 48 months to other type of IUD TCu 380A

	TCu380A-SMB	TCu 380A**	TCu 380A-
The reasons for airi-	India	Neitherland	FaI*India
The reasons for giving – up	N=423	n=150	n=272
	0/0	%	%
Being pregnant	0	2.00	0.37
Being menorrhagia and hemorrhage	3.32	2.00	3.31
Low abdominant pain and backache in menstruation period that require to IUD removal	411.00	-	2.94
Vaginitis inflammatory and cervicitis inflammatory	0.88	-	0.37
Plan to have children and want to have children	5.53	0.67	21.32
IUD slipping	0.67	5.33	4.78
Other reasons (far from home, ect)	2.87	-	8.82
The rate of giving – up	13.27	10.00	41.91

Note: \* The data from Nguyen Van Tuong's study [18]

<sup>\*\*</sup> The data from Ninh Van Minh's study [15]

After 24 month using the IUD TCu 380A-SMB, the accumulative rate of women, who gave – up, not continue to using the device, is 13.27%; this rate is lower than Ninh Van Minh's study (10%) and lower than Nguyen Van Tuong's study on IUD TCu 380A-FaI (41.91%). The low rate of women who giving up and not continue to use the device may be the result from the strict procedures that only the women who have the need for family planning and being voluntary, will be selected for IUD inserting; so the number of women who giving up is small. Moreover, in the implementing period and monitoring the target groups, the staff participated in this study have provided counseling for clients to frequent use of contraceptive method, so the number of women who give up is not high.

The reasons for giving up, not continue to use IUD TCu 380A-SMB after 24 months in most cases that they want to have children; the following are due to menorrhagia and hemorrhage, vaginitis inflammatory and IUD slipping. Meanwhile, the reason for giving up in first 12 months is mostly of menorrhagia and hemorrhage. In order to lessen the rate of giving up, the health center should organized the counseling activities on contraceptive method and family planning; especially, counseling on usage of IUD for target groups.

#### 4.4.2. Continuity to use TCu 380A-SMB

Table 4.4. .Comparison on the rate of continuity of using TCu 380A SBM to other type of IUD TCu 380A

IUD using time	DCTC TCu 380A-SMB India	DCTC* TCu 380A-FaI India	DCTC** TCu 380A Netherland	
	%	%	%	
After 12 months	96.46	71.56	-	
After 18-48 months	86.73	59.09	90.0	

Note: \* The data from Nguyen Van Tuong's study [18]

The rate of continuity using IUD TCu 380A SBM after 12 months is 96.46% and after 24 months is 86.73%. The rate of continuity using TCu 380A SBM is equivalent to the Ninh Van Minh's study at 18 months (90%) and higher than the rate of continuity. Using in Nguyen Van Tuong's study at 48 months on IUD TCu 380A FaI (59.09%).

The rate of continuity using IUD TCu 380A SBM is high, may be nowadays, women are awared of the benefit of decreasing fertility rate and using family planning methods; among which, IUD is one of modern and effective contraceptive method. On the other hand, the thoughtful care for clients could limit the giving up cases without the proper reasons; and because the time conducting this study is shorter than Nguyen Van Tuong's one.

<sup>\*\*</sup> The data from Ninh Van Minh's study [15]

## CONCLUSION

- 1- After 24 months of using, the contraceptive effectiveness of IUD TCu 380A-SMB is high, there are no cases being pregnant when using this type of device.
- 2- To 24 months of using, IUD TCu 380A-SMB from India is safe for the users. The rate of women who suffer from side effects is low; not influence the user's health status and their daily activities (the rate of being menorrhagia and hemorrhage is 4.42%; vaginitis inflammatory is 8.07% and IUD slipping is 0.67%); there are no cases reported having extopic pregnant or IUD was moved to stomach area when using this device.
- 3- The rate of women continue to use IUD TCu 380A-SMB is high (86.73%). The rate of women who gave up is low (13.27%) and this device is accepted by Vietnamese women to avoid unwanted pregnancy.

#### RECOMMENDATIONS

- 1- After 24 months of using, the contraceptive effectiveness of IUD TCu 380A-SMB from India is high, there are no cases reported being pregnant when using this type of device; and it is safe for the users, with little side effects, not influence the user's health status and their daily activities, so it is accepted by Vietnamese women. Therefore, we should widely distribute this device for Vietnamese women to answer their need on family planning and multiply the provision of contraceptive methods.
- 2- We suggest that the India SMB Company should continue their financial support in order to continue monitoring the target women in Vietnam who currently use IUD TCu 380A-SMB provided by SBM company.

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# ANNEXES CHECKLIST FOR RESEARCHERS

NO	STANDARD	YES	NO		
	General questions				
1	Are you at the age of <18 or >49 and not getting married, or got married but not having children?				
2	Being pregnant or doubt to get pregnant?				
3	Having menstruation period last for more than 7 days, or much bleeding or stomachache during menstruation period or having IUD slipping?				
4	Having liver, kidney, heart or lung diseases, hypertension, blood disorder, cancer at genital/sexual organs?				
5	Have you ever been extopic pregnant?				
6	Have you ever diagnoses as having sexual organ inflammatory?				
***************************************	Gynaecological check - up				
7	When client lay down and contract uterus, can vulva be seen or having excrescence/ tumour vagina?				
8	Is vaginitis be inflammated or have much				

	leucorrhoea?			
9	Are there cervicitis inflammted more than 0.5cm?			
10	Is Sniff/lugol test positive?			
11	Is uterus bigger than usual (<8cm)?			
12	Is uterus smaller than usual (<6cm)?			
13	Does client feel pain in uterus?			
14	Does the appendage being swollen and feeling pain?			
	Testing			
15	Pap-smear (are there fungus, trichomonas or dense of bacterium?)			
16	Is vaginitis cell testing with III, IV level?	And the state of t		

Note: if the clients have one of the mentioned contents "Yes", the IUD will not be inserted.

## STANDARDS TO DIAGNOSE GYNAECOLOGICAL INFLAMMATION WHEN USING IUD TCU 380A

NO	STANDARD	YES	NO		
	The body signs				
1	Currently using IUD TCu 380A				
2	Fever				
3	Have much leucorrhoea				
4	Pain at abdominant and pelvic area				
	Gynaecological check – up				
5	Having the inflammatory syndrome (fever,				
	rapid pulse, not clean tongue)				
6	Vaginitis have much leucorrhoea				
7	Feeling pain when being pressed on uterus or				
	appendage	AMPAIN			
8	Not found the pathological on other organs				

Note: if the clients have one of the mentioned contents "Yes", the IUD must be removed.

## STANDARDS TO DIAGNOSE ABNORMAL BLEEDING WHEN USING IUD TCU 380A

NO	STANDARD	YES	NO
	The body signs		
1	Currently using IUD TCu 380A		
2	Abnormal bleeding out of the period		
	Gynaecological check – up		
3	Bleeding from the uterus		
4	Not found the pathological on vaginitis, uterus		
	and appendage		

Note: if the clients have one of the mentioned contents "Yes", the IUD must be removed.

### STANDARDS TO DIAGNOSE CLIENTS GIVING UP WHEN USING IUD TCU 380A

NO	STANDARD	YES	NO
	The signs		
1	The clients not using IUD and had removed it		
2	Or clients have reported that IUD was slipped		
	out		
	Gynaecological check – up		
3	Not having the string in the uterus and have not		
	seen IUD in uterus by ultra - sound		

Note: if the clients have one of the mentioned contents "Yes", it is considered as giving - up.

# STANDARDS TO DIAGNOSE FAILURE WHEN USING IUD TCU 380A

NO	STANDARD	YES	NO
	The signs		
1	The clients are using IUD		
2	2 Absent of menstruation period		
	Gynaecological check – up		
3	Having the IUD in uterus or in stomach area		
4	There are signs of being pregnant and there is fetus in the uterus or out of uterus.		

Note: if the clients have one of the mentioned contents "Yes", it is considered as failure.

CENTER FOR PROTECTION	OF MOTHERS	AND CHILDREN/ FAMILY
PLANNING PROVINCE		
DISTRICT:		
		Γ USING INTRA UTERUS
DEVICE TCu380	A-SMB AFTER	R 12 – 24 MONTHS
I/ Administration:		
Full name:	Aş	ge:
Address:		
Occupation: 1- Farmer 2- W	orker - Officer	3- Freelance
Literacy level: 1- University/ (	College 2- Secon	dary school and downward
Date/ months/ year having IUI	) TCu380A-SMI	3 inserted/
II/ Prehistorically gynecology	y:	
Age of getting married:		
Number of delivery:		
The live children: 1.1 c	hild 2.	More than 1 child
III/ Result of gynecological c	heck – up after	24 months of using IUD
A/ Factual status:		
Vaginitis:	1-Normal	2-Inflammation
Cervicitis:	1-Normal	2-Inflammation
Uterus:	1-Normal	2-Inflammation
Appendage:	1-Normal	2-Inflammation
IUD string in vagina	1- Yes	2- No

And the second s

#### B/ Pap - smear:

Fungus

1-Yes

2- No

Trichomonas

1-Yes

2- No

Gonorhoea

1-Yes

2- No

Bacterium

1- Under ++

2- More than and equivalent ++

Other bacterium (names of bacterium).....

#### C/ Result of gynecological ultra - sound

1- IUD in uterus

2-IUD not in uterus

#### V/ Monitoring process after 12 – 24 months

Content	After 12 – 24	Note
	months	(Write down the
	(yes or no)	time of abnormal
		signs (from to)
1 – Menstruation		
1- Regular, normal		
2- Not regular		
3- Menorrhagia		
4- Not having menstruation for more than		
3 months		

2- Being pregnant	
1- Yes	
2- No	
3 - Gynaecological inflammation	
- Vaginitis	
- Uterus inflammation	
- Appendage inflammation	
- Pelvic inflammation	
4- Stomachache	
1- Abdominant pain that require to	
remove IUD	
2- Not having abdominant pain	

5 – IUD expulsion	over the second	ALACATI PARTIES AND THE PARTIE	*
1- Yes	ALONG MALLON COMPANY AND	2004-0	A CONTRACTOR OF THE CONTRACTOR
2- No			
6- Acceptance for continuity			
1- Yes			
2- No			
7- The reasons of not using IUD:			
1- Being pregnant			
2- Gynaecological inflammation (vagina	•		
cervicitis, uterus,)		and the second s	
3- Menorrhagia (more than 7 days)		4	
4- Bleeding (more than 200ml/day)			
5- IUD expulsion		24 man - 1	
6- Abdominant pain that require to			
remove IUD			
7- Not accept to continue			
8- Others (want to get pregnant)			
8- Other catastrophe:			
1- Extopic pregnancy			
2- IUD in abdominant area			
3- IUD thrust uterus			
9- Other signs (if any)		na Avyana a mara a	

Note: If being pregnant and having abortion within 12 weeks, it is needed to carefully check-up or ultra – sound.

year 2007 month Day Researcher

## LIST OF IUD USER IN HA NAM PROVINCE

User	Age	Address
Nguyen Thi L	37	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Đo Thi Đ	42	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi M	35	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Pham Thi X	22	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Le Thi H	29	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Le Thi L	27	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi N	32	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Đo Thi L	29	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi T	37	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Đo Thi Ng	35	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Chu Thi V	28	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Nh	33	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Ta Thi Ng	26	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Pham Thi Ng	25	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Le Thi D	29	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi H	40	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Le Thi Ng	43	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Ng	30	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi H	26	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Le Thi Ng	27	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Ta Thi H	29	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi M	20	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi Ng	27	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi V	28	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi Q	44	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Pham Thi Th	33	Cong Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi A	35	Bac Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Th	33	Bac Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi Th	32	Bac Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi Th	38	Bac Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Ph	24	Bac Ly Commune-Ly Nhan District-Ha Nam Pro.
Vo Thi L	24	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi Đ	29	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi T	32	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
Nguyen Thi H	24	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
Hoang Thi B	23	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.

.7	Ðo Thi Th	20	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
18	Nguyen Thi Th	23	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
19	Nguyen Thi T	33	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
10	Tran Thi Y	33	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
	Tran Thi L	27	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
12	Đo Thi Th	23	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
13	Hoang Thi H	33	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
1-1	Le Thi T	28	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
15	Tran Thi T	32	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
16	Tran Thi H	23	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
<b>1</b> 7	Nguyen Thi T	25	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
18	Nguyen Thi T	25	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
19	Nguyen Thi Q	29	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
5()	Nguyen Thi Th	24	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
51	Pham Thi H	28	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
52	La Thi H	35	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
53	Nguyen Thi X	30	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
54	Đo Thi Th	25	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
55	Đo Thi Ng	23	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
56	Hoang Thi D	31	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
57	Đo Thi L	32	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
58	Nguyen Tiị Th	32	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
59	Hoang Thi Y	28	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
50	Nguyen Thi Ng	29	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
51	Nguyen Thi Th	32	Hop Ly Commune-Ly Nhan District-Ha Nam Pro.
52	Cao Thi H	37	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
53	Nguyen Thi H	29	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
54	Nguyen Thi H	40	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
55	Tran Thi H	37	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
56	Nguyen Thi Ph	23	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
57	Nguyen Thi N	33	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
58	Le Thi L	21	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
59	Nguyen Thi L	29	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
7()	Vu Thi H	23	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
71	Nguyen Thi T	27	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
72	Nguyen Thi H	25	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
73	Nguyen Thi X	24	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
74	Nguyen Thi H	30	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
75	Đao Thi H	27	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
76	Đao Thi H	31	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
77	Nguyen Thi H	35	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.

Nguyen Thi H	22	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi L	32	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Le Thi L	23	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Ngo Thi Đ	30	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi M	34	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi L	43	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Tran Thi H	43	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi M	22	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi T	34	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Đo Thi H	26	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Tra Thi X	34	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi H	24	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi H	25	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Le Thi H	36	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Hoang Thi H	26	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Pham Thi Th	30	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi H	30	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Le Thi H	26	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi H	25	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Nguyen Thi Th	28	Nhan Khang Commune-Ly Nhan DistHa Nam Pro.
Tran Thi H	22	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi L	24	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Nh	40	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi H	30	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi M	34	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi H	30	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi H	35	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Ng	35	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi H	29	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi H	23	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi B	24	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Ng	29	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi H	38	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi X	28	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi H	25	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Ch	28	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi D	40	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi Ng	34	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Duong Thi H	34	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Le Thi D	33	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
Tran Thi U	34	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.

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	Nguyen Thi Th  Duong Thi Th	27	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
1	Mai Thi Th	42	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
1	Duong Thi C	31	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
i t	Tran Thi H	24	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
1	Tran Thi Ng	36	Dong Ly Commune-Ly Nhan District-Ha Nam Pro.
	Tran Thi Nh	36	Due Ly Commune-Ly Nhan DistrictHa Nam Pro.
	Nguyen Thi Ph	20	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
1	Le Thi Ch	28	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
1	Luong Thi H	23	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
	Luong Thi H	23	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
	Tran Thi H	22	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
	Nguyen Thi H	44	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
	Le Thi D	28	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
3	Tran Thi Th	29	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
4	Pham Thi D	34	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
	Luong Thi Th	24	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
5	Nguyen Thi Ng	30	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
7	Đang Thi T	23	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
8	Tran Thi T	22	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
9	Nguyen Thi N	28	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
С	Nguyen Thi L	33	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
1	Đang Thi T	44	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
2	Tran Thi Ng	26	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
3	Hoang Thi T	23	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
4	Nguyen Thi U	24	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
5	Nguyen Thi H	43	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
5	Le Thi T	25	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
7	Tran Thi H	41	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
3	Tran Thi Th	34	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
•	Nguyen Thi B	28	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
)	Nguyen Thi Nh	28	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.
1	Nguyen Thi Th	30	Duc Ly Commune-Ly Nhan DistrictHa Nam Pro.

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### LIST OF IUD USER IN NAM DINH PROVINCE

User	Age	Address	
Ngo Thi M	28	X. Dong hamlet, Lieu De commune, Nghia Hung Dist	
Dinh Thi Th	32	Tan Thanh hamlet	
Ngo Thi D	38	X. Dong hamlet	
Doan Thi Th	33	Tan Thanh, Lieu De	
Doan Thi D	29	Tan Thanh, Lieu De	
Nguyen Thi S	38	Tan Tho, Lieu De	
Ngo Thi Tr	32	X. Đong, Lieu De	
Ngo Thi V	29	Tan Tho, Lieu De	
Nguyen Thi T	23	X.Nam, Lieu De	
Ngo Thi Th	39	X.Đong, Lieu De	
Cao Thi Tr	43	Nam Son, Lieu De	
Luong Thi Th	34	Thong Nhat, Nghia Son	
Nguyen Thi Th	35	Thong Nhat, Nghia Son	
Dong Thi N	29	Thong Nhat, Nghia Son	
Vu Thi S	38	Quan Lieu, Nghia Son	
Vu Thi H	29	Thong Nhat, Nghia Son	
Nguyen Thi Th	29	Thong Nhat, Nghia Son	
Do Thi Th	28	Thong Nhat, Nghia Son	
Nguyen Thi Ng	35	Thong Nhat, Nghia Son	
Pham Thi Th	39	Thong Nhat, Nghia Son	
Tran Thi D	44	Quan Lieu, Nghia Son	
Le Thi Th	22	Thong Nhat, Nghia Son	
Khuong Thi T	37	Thong Nhat, Nghia Son	
Nguyen Thi Ng	33	Quan Lieu, Nghia Son	
Tran Thi X	26	Quan Lieu, Nghia Son	
Bui Thi Th	25	Quan Lieu, Nghia Son	
Hoang Thi X	25	Quan Lieu, Nghia Son	
Vu Thi Th	27	Quan Lieu, Nghia Son	
Nguyen Thi C	28	Quan Lieu, Nghia Son	
Nguyen Thi S	42	Quan Lieu, Nghia Son	

Nguyen Thi Th	24	Quan Lieu, Nghia Son
Tran Thi L	39	Quan Lieu, Nghia Son
Tran Thi Th	27	Quan Lieu, Nghia Son
Lam Thi T	36	Quan Lieu, Nghia Son
Tran Thi H	36	Quan Lieu, Nghia Son
Tran Thi Kh	28	Quan Lieu, Nghia Son
Vu Thi Y	31	Quan Lieu, Nghia Son
Tran Thi Th	34	Quan Lieu, Nghia Son
Tran Thi B	24	Quan Lieu, Nghia Son
Nguyen Thi H	27	Quan Lieu, Nghia Son
Tran Thi H	27	Quan Lieu, Nghia Son
Tran Thi L	24	Quan Lieu, Nghia Son
Nguyen Thi Ph	25	Quan Lieu, Nghia Son
Tran Thi L	24	Quan Lieu, Nghia Son
Vu Thi Ng	39	Quan Lieu, Nghia Son
Vu Thi L	33	Quan Lieu, Nghia Son
Nguyen Thi Nh	24	Quan Lieu, Nghia Son
Tran Thi G	27	Quan Lieu, Nghia Son
Tran Thi L	35	D15-Nghia Son
Tran Thi Ng	30	D4-Nghia Hong
Nguyen Thi M	38	Doi 13-Nghia Hong
Nguyen Thi Th	28	Doi 14-Nghia Hong
Ngo Thi H	32	Doi 14-Nghia Hong
Lai Thi M	42	Doi 6-Nghia Hong
Ngo Thi T	39	Doi 2-Nghia Hong
Vu Thi Th	30	Doi 7-Nghia Hong
Dang Thi D	22	Doi 7-Nghia Hong
Nguyen Thi S	40	Doi 14-Nghia Hong
Dang Thi L	23	Doi 6-Nghia Hong
Vuong Thi T	19	Doi 3-Nghia Hong
Lai Thi H	26	Doi 2-Nghia Hong
Tran Thi C	27	Doi 2-Nghia Hong
Tran Thi B	24	Doi 2-Nghia Hong
Nguyen Thi O	37	Doi 12-Nghia Hong
Nguyen Thi H	20	Doi 2-Nghia Hong
Tran Thi M	39	Doi 11-Nghia Hong
	Tran Thi L Tran Thi Th Lam Thi T Tran Thi H Tran Thi H Tran Thi Kh Vu Thi Y Tran Thi Th Tran Thi B Nguyen Thi H Tran Thi L Nguyen Thi Ph Tran Thi L Vu Thi Ng Vu Thi L Nguyen Thi Nh Tran Thi G Tran Thi G Tran Thi Ng Nguyen Thi M Nguyen Thi M Nguyen Thi Th Ngo Thi H Lai Thi M Ngo Thi T Vu Thi Th Dang Thi D Nguyen Thi S Dang Thi L Vuong Thi T Lai Thi H Tran Thi C Tran Thi B Nguyen Thi O Nguyen Thi O Nguyen Thi O Nguyen Thi O	Tran Thi L         39           Tran Thi Th         27           Lam Thi T         36           Tran Thi H         36           Tran Thi H         28           Vu Thi Y         31           Tran Thi Th         34           Tran Thi B         24           Nguyen Thi H         27           Tran Thi L         24           Nguyen Thi Ph         25           Tran Thi L         24           Vu Thi Ng         39           Vu Thi L         33           Nguyen Thi Nh         24           Tran Thi G         27           Tran Thi Ng         30           Nguyen Thi M         38           Nguyen Thi M         38           Nguyen Thi Th         28           Nguyen Thi Th         30           Nguyen Thi D         22           Nguyen Thi S         40           Dang Thi D         22           Nguyen Thi T         19           Lai Thi H         26           Tran Thi B         24           Nguyen Thi O         37           Nguyen Thi H         20

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Tran Thi L	22	Doi 13-Nghia Hong	
Tran Thi D	23	Doi 16-Nghia Hong	
Nguyen Thi Th	22	Doi 15-Nghia Hong	
To Thi Ph	30	Doi 13-Nghia Hong	
Vu Thi Th	30	Doi 7-Nghia Hong	
Pham Thi L	37	Doi 13-Nghia Hong	
Tran Thi Ng	20	Doi 2-Nghia Hong	
Tran Thi H	28	Doi 14-Nghia Hong	
Tran Thi D	26	Doi 9-Nghia Hong	
Pham Thi L	35	Doi 8-Nghia Hong	
Tran Thi H	43	Doi 16-Nghia Hong	
Ha Thi H	26	Doi 5-Nghia Hong	
Tran Thi T	24	Doi 16-Nghia Hong	
Pham Thi H	23	Doi 12-Nghia Hong	
Đoan Thi Kh	30	Doi 1-Nghia Hong	
Tran Thi L	42	Doi 6-Nghia Hong	
Pham Thi D	34	Doi 3-Nghia Hong	
Tran Thi Ng	26	Doi 4-Nghia Hong	
Tran Thi Th	24	Doi 4-Nghia Hong	
Pham Thi H	24	Doi 13-Nghia Hong	
Tran Thi T	30	Doi 13-Nghia Hong	
Nguyen Thi Nh	30	Doi 7-Nghia Hong	
Tran Thi H	24	Doi 7-Nghia Hong	
Dinh Thi T	30	Doi 4-Nghia Hong	
Tran Thi Đ	28	Thanh Khe-My Trung-ML	
Tran Thi B	39	Thanh Khe-My Trung-ML	
Nguyen Thi Ng	40	Phuong Đong-My Trung-ML	
Tran Thi Ng	32	Thanh Khe-My Trung-ML	
Tran Thi L	33	Thanh Khe-My Trung-ML	
Tran Thi Ph	32	Đe Nhi-My Trung-ML	
Tran Thi Th	35	Phuong Đong-My Trung-ML	
Tran Thi S	34	Thanh Khe-My Trung-ML	
Tran Thi Ph	34	Đong Thanh-My Trung-ML	
Tran Thi Th	28	Đe Nhat-My Trung-ML	
Tran Thi H	35	Dong Thanh-My Trung-ML	
Mai Thi V	41	Dong Thanh-My Trung-ML	

13 Tran Thi L	36	Thanh Khe-My Trung-ML		
14 Tran Thi Th	43	De Nhat-My Trung-ML		
5 Tran Thi Th	43	Nhat De-My Trung-ML		
6 Tran Thi Th	39	Nhat Đe-My Trung-ML		
7 Nguyen Thi H	22	De Nhat-My Trung-ML		
8 Tran Thi Th	32	Nhat Đe-My Trung-ML		
19 Tran Thi M	32	Nhat Đe-My Trung-ML		
0 Nguyen Thi L	32	Thanh Khe-My Trung-ML		
1 Tran Thi S	33	Đe Nhi-My Trung-ML		
2 Tran Thi T	30	Thanh Khe-My Trung-ML		
3 Tran Thi Nh	29	Phuong Đong-My Trung-ML		
4 Tran Thi M	35	Nhat Đe-My Trung-ML		
5 Cao Thi H	23	Lang Xa-My Tien-ML		
6 Le Thi H	31	Lang Xa-My Tien-ML		
7 Tran Kim T	23	La Đong-My Tien-ML		
8 Tran Thi Th	23	Vi Viet-My Tien-ML		
9 Tran Thi L	43	La Cho-My Tien-ML		
0 Tran Thi Ch	43	Vi Viet-My Tien-ML		
1 Tran Thi L	31	Nguyen Hue-My Tien-ML		
2 Tran Thi H	26	La Cho-My Tien-ML		
3 Tran Thi Ch	41	Lang Xa-My Tien-ML		
4 Tran Thi M	30	La Đong-My Tien-ML		
5 Tran Thi Q	26	Lang Xa-My Tien-ML		
6 Tran Thi H	35	La Cho-My Tien-ML		
7 Tran Thi T	29	Lang Xa-My Tien-ML		
∃ Tran Thi H	24	Lang Xa-My Tien-ML		
Fran Thi A	24	Bai Ngoai-My Tien-ML		
Tran Thi H	38	Nguyen Hue-My Tien-ML		
Truong Thi Th	33	La Cho-My Tien-ML		
? Tran Thi H	26	Lang Xa-My Tien-ML		
Tran Thi Th	28	La Cho-My Tien-ML		
- Tran Thi Nh	35	Bai Ngoai-My Tien-ML		
Dang Thi Th	34	Nguyen Hue-My Tien-ML		
Tran Thi H	38	Lang Xa-My Tien-ML		
Tran Thi Ch	36	Vi Viet-My Tien-ML		
Tran Thi D	26	Nguyen Hue-My Tien-ML		
(	;			

ŀ	Tran Thi M	43	Lang Xa-My Tien-ML
)	Tran Thi S	36	Vi Viet-My Tien-ML
	Tran Thi Q	35	La Cho-My Tien-ML
	Tran Thi H	26	Vi Viet-My Tien-ML
ı	Đinh Thi L	30	La Đong-My Tien-ML
	Tran Thi Ng	24	Vi Viet-My Tien-ML
,	Tran Thi Th	35	Nguyen Hue-My Tien-ML
ı	Tran Thi H	25	Lang Xa-My Tien-ML
r	Tran Thi Ph	22	Lang Xa-My Tien-ML
, )	Le Thi S	24	Nguyen Hue-My Tien-ML
)	Hoang Thi Đ	28	Nguyen Hue-My Tien-ML
}	Tran Thi Đ	33	Nguyen Hue-My Tien-ML
	Tran Thi L	32	Vi Viet-My Tien-ML
!	Tran Thi M	33	Nguyen Hue-My Tien-ML
į	Tran Thi M	26	Lang Xa-My Tien-ML
	Tran Thi Th	38	Lang Xa-My Tien-ML
j	Tran Thi H	38	La Cho-My Tien-ML

#### LIST OF IUD USER IN THAI BINH PROVINCE

No.	User	Age	Address
1	Bui Thi Th	22	7 Hamlet, Nam Hai
2	Pham Thi Th	38	4 Hamlet, Nam Hai
2 3	Tran Thi D	30	4 Hamlet, Nam Hai
4	Tran Thi Ng	32	11 Hamlet, Nam Hai
5	Pham Thi D	25	8 Hamlet, Nam Hai
6	Bui Thi Đ	25	9 Hamlet, Nam Hai
7	Dao Thi Y	20	14 Hamlet, Nam Hai
8	Do Thi T	33	15 Hamlet, Nam Hai
9	Nguyen Thi Th	34	1 Hamlet, Nam Hai
10	Pham Thi S	30	10 Hamlet, Nam Hai
11	Tran Thi D	36	6 Hamlet, Nam Hai
12	Le Thi S	33	12 Hamlet, Nam Hai
13	Pham Thi A	37	8 Hamlet, Nam Hai
14	Tran Thi Nh	30	4 Hamlet, Nam Hai
15	Tran Thi H	32	4 Hamlet, Nam Hai
16	Pham Thi M	38	10 Hamlet, Nam Hai
17	Tran Thi L	34	6 Hamlet, Nam Hai
18	Pham Thi D	34	6 Hamlet, Nam Hai
19	Pham Thi Th	20	8 Hamlet, Nam Hai
20	Pham Thi H	25	15 Hamlet, Nam Hai
21	Tran Thi Th	44	12 Hamlet, Nam Hai
22	Truong Thi L	36	12 Hamlet, Nam Thang
23	Tran Thi C	33	13 Hamlet, Nam Thang
24	Nguyen Thi D	24	6 Hamlet, Nam Thang
25	Le Thi H	23	5 Hamlet, Nam Thang
26	Ta Thi Th	31	6 Hamlet, Nam Thang
27	Vu Thi H	22	I Hamlet, Nam Thang
28	Tran Thi M	35	11 Hamlet, Nam Thang
29	Pham Thi Th	35	11 Hamlet, Nam Thang
3()	Nguyen Thi L	22	10 Hamlet, Nam Thang
31	Nguyen Thi Th	37	5 Hamlet, Nam Thang
32	Vu Thi H	37	13 Hamlet, Nam Thang
33	Vu Thi V	42	2 Hamlet, Nam Thang
34	Pham Thi Ph	27	2 Hamlet, Van Truong

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35	Nguyen Thi Th	38	8 Hamlet, An Ninh
36	Le Thi M	38	4 Hamlet, An Ninh
37	Nguyen Thi H	25	6 Hamlet, An Ninh
38	Ly Thi Tr	32	4 Hamlet, An Ninh
39	Đang Thi Th	30	8 Hamlet, An Ninh
4()	Chu Thi Nh	26	6 Hamlet, An Ninh
41	Nguyen Thi Th	22	8 Hamlet, Van Truong
42	Nguyen Thi H	27	3 Hamlet, Van Truong
43	Nguyen Thi H	29	8 Hamlet, Van Truong
44	Le Thi Ch	38	4 Hamlet, Van Truong
45	Tran Thi Ngh	25	4 Hamlet, Tay Tien
46	Pham Thi V	30	5 Hamlet, Tay Tien
47	Pham Thi M	37	5 Hamlet, Tay Tien
48	Tran Thi L	25	5 Hamlet, Tay Tien
49	Nguyen Thi H	35	1 Hamlet, Vu Lang
50	Pham Thi N	22	5 Hamlet, Vu Lang
51	Đang Thi H	31	1 Hamlet, Vu Lang
52	Đang Thi M	26	1 Hamlet, Vu Lang
53	Le Thi T	30	4 Hamlet, Vu Lang
54	Le Thi H	28	4 Hamlet, Vu Lang
55	Ta Thi Th	40	7 Hamlet, Tay Giang
56	Nguyen Thi D	40	6 Hamlet, Tay Giang
57	Tran Thi Ng	25	6 Hamlet, Tay Giang
58	Nguyen Thi H	29	6 Hamlet, Tay Giang
59	Đo Thi H	25	5 Hamlet, Dong Co
60	Tran Thi T	33	1 Hamlet, Dong Co
61	Pham Thi Ng	33	4 Hamlet, Dong Co
62	Truong Thi Ng	27	12 Hamlet, Dong Co
63	Hoang Thi N	36	4 Hamlet, Dong Co
64	Đo Thi U	25	10 Hamlet, Dong Co
65	Bui Thi L	31	13 Hamlet, Dong Co
66	Pham Thi Nh	27	10 Hamlet, Dong Co
67	Pham Thi X	43	6 Hamlet, Dong Co
68	Mai Thi M	38	7 Hamlet, Dong Co
69	Pham Thi Nh	31	3 Hamlet, Dong Lam
70	Nguyen Thi Ng	24	7 Hamlet, Dong Lam
71	Pham Thi L	29	8 Hamlet, Dong Lam
72	Tran Thi V	32	Dong Lam Pottery Enterprise
	Luong Thi D	40	2 Hamlet, Dong Lam
73	Lucing in D	1	

74 75	Luong Thi Ng Pham Thi Nh	$\begin{array}{ c c }\hline & 31\\ 27\\ \end{array}$	Long Hau Dong Lam
76	Luong Thi H	$\frac{27}{30}$	4 Hamlet, Dong Lam
77	Le Thi S	25	2 Hamlet, Dong Lam
78	Pham Thi D	42	6 Hamlet, Dong Lam
79	Tran Thi Ng	27	7 Hamlet, Dong Lam
80	Vu Thi M	36	7 Hamlet, Tay Son
81	Vu Thi H	33	6 Hamlet, Tay Son
82	Dang Thi M	42	7 Hamlet, Tay Son
83	Truong Thi H	43	Thuy Chinh Nam Chinh
84	Dao Thi L	1	Nang Tinh Nam Chinh
85	Ta Thi H	38 31	4 Hamlet, Dong Quy
86	Pham Thi H	ı	4 Hamlet, Dong Quy
87	Duong Thi Ph	41	2 Hamlet, Dong Quy
88	Lan Thi Nh	34	4 Hamlet, Dong Quy
89	Pham Thi H	35	Nam Hung
90	Nguyen Thi M	30	4 Hamlet, Nam Hung
91	Tran Thi M	35	8 Hamlet, Nam Hung
92	Nguyen Thi S	27	8 Hamlet, Nam Hung
93	Lan Thi G	44	7 Hamlet, Nam Hung
94	Nguyen Thi Th	40	4 Hamlet, Nam Hung
95	Tran Thi Th	27	Nam Hung
96	Tran Thi Th	35	Nam Hung
97	Bui Thi Th	28	Nam Hung
98	Nguyen Thi Kh	27	4 Hamlet, Nam Hung
99	Tran Thi Th	43	Hung Thang Town
00	Pham Thi Th	44	Hung Thang Town
01	Nguyen Thi H	44	Hung Thang Town
02	Nguyen Thi Th	28	7 Hamlet, Nam Trung
03	Bui Thi Ph	25 25	4 Hamlet, Nam Trung
04	Pham Thi C	25	13 Hamlet, Nam Trung
	Nguyen Thi T	44	1 Hamlet, Nam Trung
Ì	Pham Thi H	28	13 Hamlet, Nam Trung
	1	38	12 Hamlet, Nam Trung
	Dang Thi M	32	15 Hamlet, Nam Trung
1	Tran Thi D	28	15 Hamlet, Nam Trung
f	Dao Thi C	4()	16 Hamlet, Nam Trung
1	Dao Thi V	28	14 Hamlet, Nam Trung
	Nguyen Thị Ng	42	4 Hamlet, Nam Trung
4	Dao Thi Th	24	9 Hamlet, Nam Trung
			-

113	Tran Thi L	25	16 Hamlet, Nam Trung
114	Pham Thi Ph	24	14 Hamlet, Nam Trung
115	Nguyen Thi X	23	4 Hamlet, Nam Trung
П6	Do Thi L	37	16 Hamlet, Nam Trung
117	Tran Thi H	23	8 Hamlet, Nam Trung
118	Nguyen Thi H	30	4 Hamlet, Nam Trung
119	Đinh Thi L	28	12 Hamlet, Nam Trung
120	Vu Thi Nh	35	14 Hamlet, Nam Trung
121	Dao Thi M	40	7 Hamlet, Nam Trung
122	Dinh Thi L	37	12 Hamlet, Nam Trung
123	Bui Thi L	30	16 Hamlet, Nam Trung
124	Vu Thi R	34	14 Hamlet, Nam Trung
125	Nguyen Thi Th	37	1 Hamlet, Nam Trung
126	Dao Thi Ng	35	8 Hamlet, Nam Trung
127	Tran Thi H	43	4 Hamlet, Nam Trung
128	Nguyen Thi T	40	4 Hamlet, Dong Minh
129	Tran Thi B	29	8 Hamlet, Dong Minh
130	Do Thi T	23	4 Hamlet, Dong Minh
131	Bui Thi Th	24	6 Hamlet, Dong Minh
132	Nguyen Thi Th	29	3 Hamlet, Dong Minh
133	Nguyen Thi H	28	2 Hamlet, Dong Minh
134	Le Thi L	35	Dong Chau Hotel
135	Hoang Thi T	40	7 Hamlet, Dong Minh
136	Dao Thi Ng	23	6 Hamlet, Dong Minh
137	Vu Thi H	27	4 Hamlet, Dong Minh
138	Nguyen Thi Ng	30	8 Hamlet, Dong Minh
139	Phan Thi Nh	41	8 Hamlet, Dong Minh
14()	Hoang Thi H	40	5 Hamlet, Dong Minh
141	Nguyen Thi L	33	10 Hamlet, Dong Minh
142	Le Thi D	28	8 Hamlet, Dong Minh
143	Tran Thi Th	33	5 Hamlet, Dong Minh
144	Luong Thi H	42	7 Hamlet, Dong Minh
145	Phan Thi T	-31	3 Hamlet, Dong Minh
146	Tran Thi Th	42	8 Hamlet, Dong Minh