

**STUDY ON ACCEPTABILITY AND FOLLOW UP OF
POSTPARTUM INTRAUTERINE CONTRACEPTIVE
DEVICE IN A TERTIARY CARE HOSPITAL**

**A Dissertation Submitted to
THE TAMILNADU DR. M.G.R MEDICAL UNIVERSITY
CHENNAI**

In Partial Fulfilment of the Regulations
for the Award of the Degree of
M.S. (OBSTETRICS & GYNAECOLOGY) - BRANCH – II



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CERTIFICATE

This is to certify that dissertation entitled **“STUDY ON ACCEPTABILITY AND FOLLOW UP OF POSTPARTUM INTRAUTERINE CONTRACEPTIVE DEVICE IN A TERTIARY CARE HOSPITAL”** is a bonafide work done by **Dr. R.PRIYA** at R.S.R.M Lying in Hospital, Stanley Medical College, Chennai. This dissertation is submitted to Tamil Nadu Dr. M.G.R. Medical University in partial fulfilment of university rules and regulations for the award of M.S. Degree in Obstetrics and Gynaecology.

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DECLARATION

I Dr. R. PRIYA, solemnly declare that the dissertation titled, **“STUDY ON ACCEPTABILITY AND FOLLOW UP OF POSTPARTUM INTRAUTERINE CONTRACEPTIVE DEVICE IN A TERTIARY CARE HOSPITAL”** is a bonafide work done by me at R.S.R.M. Lying in Hospital, Stanley Medical College, Chennai during January – 2014 to September 2014 under the guidance and supervision of **Prof. Dr. T.S.MEENA, M.D., D.G.O.**, Professor and Chief of the department of Obstetrics and Gynaecology.

This dissertation is submitted to the Tamil Nadu Dr. M.G.R. Medical University in partial fulfilment of University rules and regulations for the award of M.S. Degree(Branch-II) in obstetrics and Gynaecology.

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STUDY ON ACCEPTABILITY AND FOLLOW UP OF POSTPARTUM INTRAUTERINE CONTRACEPTIVE DEVICE IN A TERTIARY CARE HOSPITAL INTRODUCTION World population is a major problem which is more than 6.3 billion people and with 26 children being born every second. The population of India has been growing quite rapidly. By 2050, the Indian population may reach 1.5 billion¹. For healthy spacing of pregnancy the birth-birth interval should be at least 36 months/ 3 years between children. Closely spaced pregnancies are associated with the following outcomes²: · BABY · Preterm births · Low birth weight · Neonatal death · WOMEN · Anaemia · Abortion · PROM · Maternal mortality Births occurring within 1 year of last child birth in India is 27%. 34% occur between 1st & 3rd year. Nearly 61% of births² occur before the recommended period of 3 years. 1% 10% 24% UNMET NEED 65% 65% USING METHOD 24% DESIRE BIRTH 10% INFECUND 1% Returning for postpartum contraception after delivery poses multiple challenges to women. Hence postpartum IUCD insertion gives opportunities for women to obtain a very effective & long term reversible contraception method. Increase in institutional deliveries under JSY (Janani Suraksha Yojana) scheme favours this service. Reproductive health & medical grounds are now the other considerations for birth control. It is reckoned that a

woman below 20 years is not physically grown to produce the child. If she does reproduce, she becomes a high risk case during pregnancy and labour and is likely to deliver a low birth weight

new born. Spacing birth 3 years apart is considered beneficial for both mother and child. Birth control is thus seen as a woman's health measure.

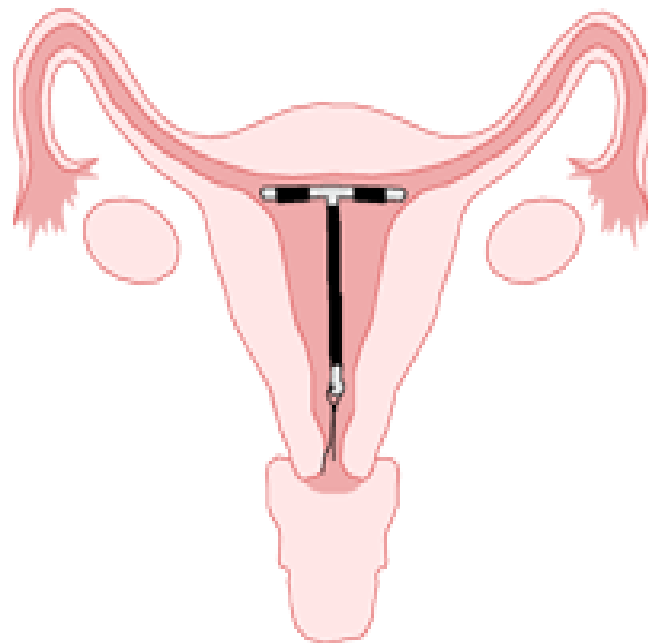
A multiparous woman from a low income group generally suffers from malnutrition and is also pre disposed to prolapse, stress incontinence, chronic cervicitis and cancer cervix¹. The spacing of

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**STUDY ON ACCEPTABILITY AND FOLLOW UP
OF POSTPARTUM INTRAUTERINE
CONTRACEPTIVE DEVICE IN A TERTIARY CARE
HOSPITAL**



INTRODUCTION

INTRODUCTION

World population is a major problem which is more than 6.3 billion people and with 26 children being born every second. The population of India has been growing quite rapidly. By 2050, the Indian population may reach 1.5 billion¹.

For healthy spacing of pregnancy the birth-birth interval should be at least 36 months/ 3 years between children.

Closely spaced pregnancies are associated with the following outcomes²:

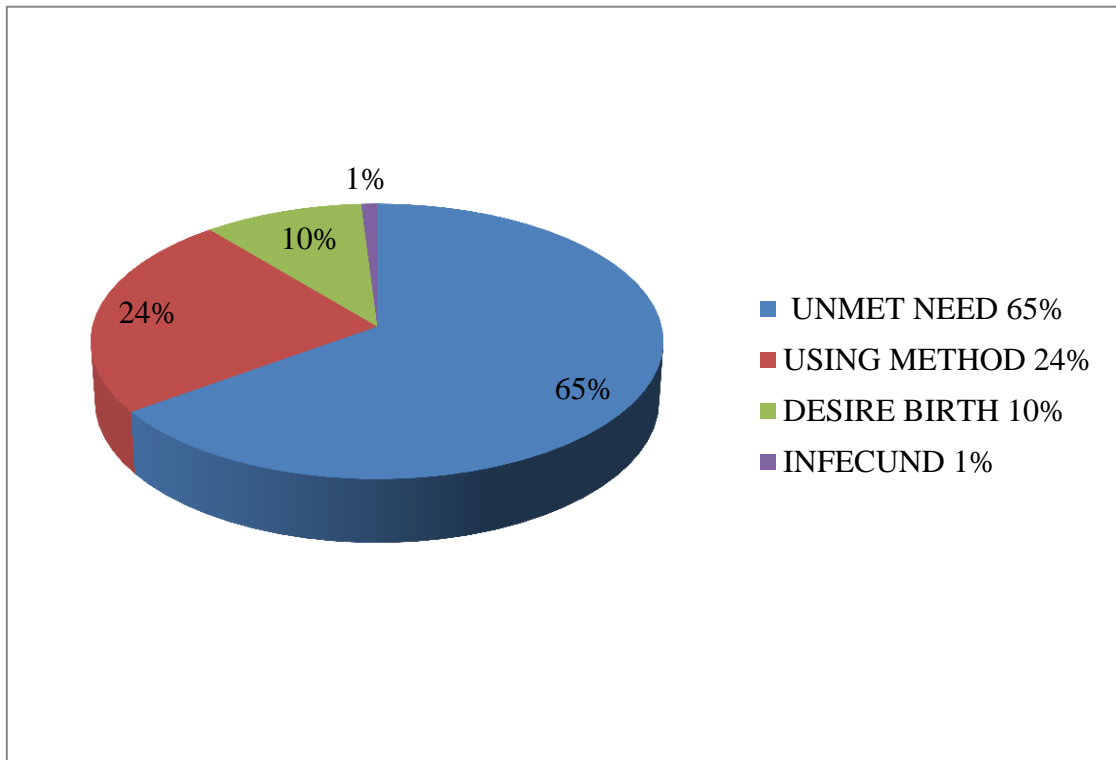
➤ **BABY**

- Preterm births
- Low birth weight
- Neonatal death

➤ **WOMEN**

- Anaemia
- Abortion
- PROM
- Maternal mortality

Births occurring within 1 year of last child birth in India is 27%. 34% occur between 1st & 3rd year. Nearly 61% of births² occur before the recommended period of 3 years.



Returning for postpartum contraception after delivery poses multiple challenges to women. Hence postpartum IUCD insertion gives opportunities for women to obtain a very effective & long term reversible contraception method. Increase in institutional deliveries under JSY (Janani Suraksha Yojana) scheme favours this service.

Reproductive health & medical grounds are now the other considerations for birth control. It is reckoned that a woman below 20 years is not physically grown to produce the child. If she does reproduce, she becomes a high risk case during pregnancy and labour and is likely to deliver a low birth weight new born. Spacing birth 3 years apart is considered beneficial for both mother and child. Birth control is thus seen as a woman's health measure.

A multiparous woman from a low income group generally suffers from malnutrition and is also pre dispose to prolapse, stress incontinence, chronic cervicitis and cancer cervix¹. The spacing of child birth and limiting the number of pregnancies are strongly desirable for this reason.

AIM OF THE STUDY

AIM OF STUDY

- To assess the acceptability of postpartum intrauterine copper-T insertion.
- Follow up of 300 cases (150 in post placental group and 150 in intra caesarean group) at 6 weeks,3 months,6 months to evaluate PPIUCD in terms of
 - expulsion rate
 - rate of removal
 - continuation rate
 - complications

***REVIEW OF
LITERATURE***

REVIEW OF LITERATURE

CONTRACEPTION

A method or a system which allows intercourse and yet prevents conception is called a contraceptive method¹. This contraception may be temporary when the effect of preventing pregnancy lasts while the couple uses the method but the fertility returns immediately or within a few months of its discontinuation. The permanent contraceptive methods are surgical: tubectomy in a woman and vasectomy in a man.

The choice of contraception depends upon the following:

- Availability, cost.
- Age and parity of the couple.
- Reliability (failure rate).
- Side effects, contraindications to a particular method
- Advantages and disadvantages
- Requirement of follow-up
- Counselling and allowing the couple to make a choice.

Methods of contraception:

1. Natural methods:

- Abstinence during the fertile phase
- Withdrawal (coitus interruptus)
- Breastfeeding

2. Barrier contraceptives:

- Use of condoms by male
- Use of spermicidal agents
- Use of diaphragm, or the cervical cap in the vagina, use of female condom.
- Use of hormones which alter the cervical mucus and prevent entry of sperms into the cervical canal.

3. Intrauterine contraceptive devices (**IUCDs**)

4. Suppression of spermatogenesis

5. Suppression of ovulation with hormones-hormonal contraceptives

6. Interceptive agents (postcoital contraception)
7. Immunological methods
8. Surgical sterilization

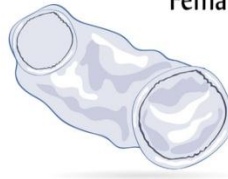
Failure rate of any contraceptive method is described in terms of pregnancy rate per 100 woman years (Pearl index).

Contraceptive methods should be effective, long-acting, safe, coital-independent and reversible. Besides, they should be available and affordable with minimal side effects. (IUCD fits into this criteria)

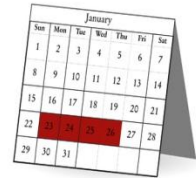
Vaginal ring



Female condoms



Natural family planning



Male condoms



Contraceptive patch



Injectables



Oral contraceptives



Intrauterine devices

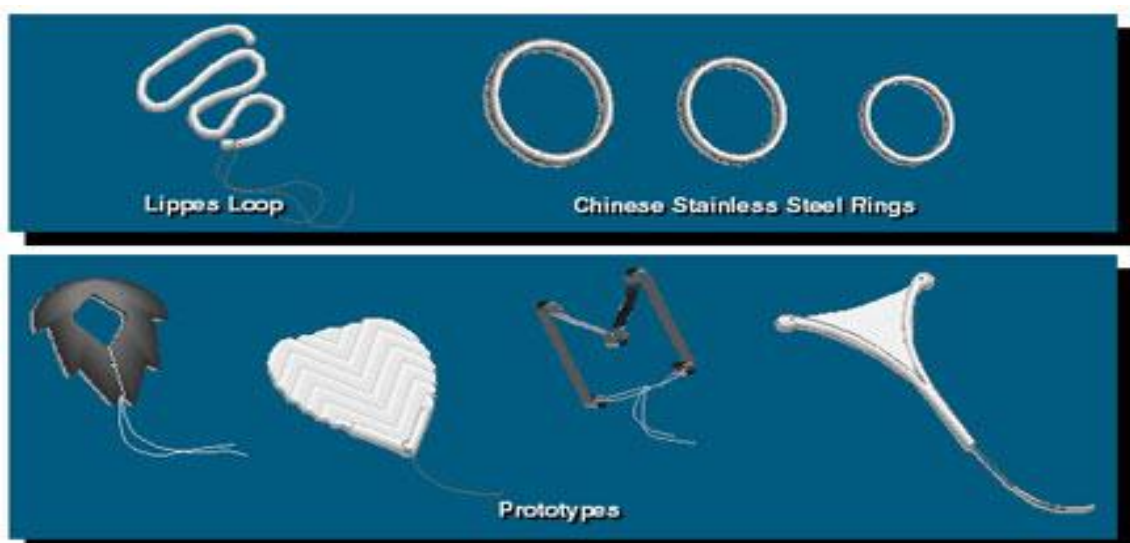


Contraceptive methods

HISTORICAL REVIEW

2500 years ago Hippocrates is credited with using a hollow lead tube to insert pessaries or other objects into human uterus.

Cervicouterine stem pessaries were used from late nineteenth century. They were made from ivory, glass, diamond studded platinum. They were shaped like collar, stud or had V shaped flexible wings inserted into the lower uterine cavity. Dr.Ritcher of Braslaw described the first complete intrauterine device made specifically for contraception, which was a ring made of silkworm gut. Later, silver wire wound around silkworm was introduced by Grafenburg and later version were made of German silver, an alloy which contains copper.



Now, made of coiled stainless steel, this design is still one of most widely used in China.

- ❖ Many of early devices were used as abortifacients and contraceptives. The acceptance of IUCDs was achieved only in 1962 at International Conference of IUDs in New York city. Jack Lippes developed Lippes Loop and presented it to this conference and became the standard and now copper IUCD became popular.
- ❖ Worldwide intrauterine devices are the most commonly used form of reversible contraception with more than 160 million currently using this method³.
- ❖ Acceptability is higher in women who receive IUCD insertion in the postpartum period. Mohamed et al⁴. showed that women who received PPIUCDs after delivery were 10 times more likely to have IUCDs inserted than women willing for copper T insertion after involution of uterus.
- ❖ In a study in Egypt⁵ out of 3,541 clients, 1,024 (28.9%) accepted PPIUCD .Acceptance rate was approximately 26.4% and 31.8%, respectively, when counselled in antenatal and post partum period.

- ❖ PPIUCD was recommended more than 4 decades ago (ROSENFELD A,VARAKAMIN S)⁶ in 1967 but uptake is slow except in China and Mexico where it is widely used. The MOH in conjunction with non government organizations e.g. USAID, JHPEIGO, FHI are involved in training of PPIUCD to enhance uptake of this method.
- ❖ Post partum IUCD has been proven to be both safe and feasible⁷.
- ❖ Outcomes of immediate post placental insertion like increase in post partum blood loss which was thought to be significant earlier has been disputed by studies showing minimal or no increase in blood loss⁸.
- ❖ IUCD is the safe method that does not increase the incidence of STD acquisition.(MORRISON CS)⁹
- ❖ Cochrane database 2004 study on early post placental insertion of IUCD showed it to be safe, effective and there was no bleeding, infection nor perforation¹⁰ .The main disadvantage was increased expulsion, and it was 12.3% at 1 year with the copper T.

- ❖ Taskin et al¹¹ compared post placental with interval copper –T insertion showed that no statistically significant difference was found between the groups for uterine perforation and infection. Pregnancy rates at 1 year for all groups were 3.1%.
- ❖ A prospective cohort study¹² on Immediate post placental IUD insertion at caesarean delivery conducted on 90 patients showed that 48% women returned for 6-week follow-up visits, and no expulsions were recorded. 47% women were reached for phone follow-up at 6 months postpartum. Study showed that immediate post placental IUD insertion at the time of caesarean delivery is safe and acceptable.
- ❖ A recent pilot study¹³ conducted on intra caesarean placement of the copper T-380A, in women undergoing elective caesarean delivery.

Study was done to analyse the status of the tail strings and the original tail strings were visible at 6 weeks. It was concluded that successful intra caesarean placement of Copper T-380A IUDs through incision at the time of caesarean birth is possible.

- ❖ Post-placental insertion appears to be a convenient approach with no increase in the incidence of endometritis or excessive bleeding¹⁴.
- ❖ A women's Health study¹⁵ – showed the only pelvic infection that has been unequivocally related to IUCD use is actinomycosis and that too occurred in women who had multiple sexual partner.
- ❖ Comparative study¹⁶ of two techniques used (manual insertion by hand and forceps respectively) in immediate post placental insertion of the Copper T-380A IUD showed no differences ($p > 0.05$). No uterine perforation, infection or pregnancy occurred.
- ❖ Study on Acceptability, Uptake and Safety of Intra-Operative IUCD Placement at Kenyatta National Hospital and Pumwani Maternity Hospital¹⁷ showed the acceptance rate of IUCD insertion stood at 36.3% .Uptake of IUCD was 91% with 9% of the mothers accepting the method but IUCD was not inserted. Out of the 71 parturients 66(93%) had their strings visualized and 5 (7%) had no string protruding at the external os. Imaging done showed fundal placement of the IUCD in 3 patients who had sub involution of uterus, 1 was displaced IUCD and 1 had expelled (1.4%).

- ❖ Some researchers have tried suspension of IUCD with chromic sutures to reduce expulsion rates. This however was seen to have no impact on clinical outcomes^{18,19,20}.
- ❖ The type of IUCD models studied earlier is out dated. Copper bearing IUCDs generally have low expulsion rates²¹ suggesting the popularity of Copper-T 380 A for postpartum insertion.
- ❖ Studies have shown that uterine perforation following post placental IUCD is almost unheard with most studies showing no complication of perforation^{22,23,24}.
- ❖ Multiple studies have shown no increased risk of uterine or cervix malignancy in IUCD users^{25,26}.
- ❖ Copper T 380A and hormone releasing IUCDs provides contraceptive protection similar to that achieved by tubal sterilisation²⁷ with a pregnancy rate of 2%. Pregnancy rates of post placental insertion has shown a rate varying from 0-2%.
- ❖ Women attempting pregnancy after IUCD removal conceive at similar rate as those discontinuing other contraceptives with approximately 80% achieving in 1st year²⁸.

- ❖ Ory HW, for Women's Health study¹⁵ , showed there is 80%-90% reduction in the risk of ectopic pregnancy due to higher dose of copper T380A.
- ❖ The Oxford study Vessey M, Doll R, Peto R, et al , Found that women gave birth just as promptly after IUCD removal as they did after discontinuing use of the diaphragm.
- ❖ A Cochrane data base²³ – Grimes DA, Lopez LM et al 2006, The discontinuation for pain and bleeding is higher with copper IUCD. The worsened periods often occur with the first few menses and they are treated with NSAID'S.
- ❖ Rosenberg MJ, Waugh MS, A prospective evaluation of discontinuation between oral contraception and IUCD 1998²⁹, The continuation rate at the end of 1 year for Copper T 380A- 78%,OCP- 50%.
- ❖ French R, Van Vliet H, Cowan F et al 2004- A Cochrane Database³⁰ of pregnancy rates. The pregnancy rates at end of 1 year, Copper T 380 - 0.6-0.8 and LNG IUS- 0.1.per 100 woman years.

- ❖ In a longitudinal international study which was conducted by the WHO³¹, where the average annual pregnancy rate was 0.4%, and the average cumulative pregnancy rate was 2.2% at the end of 12 years of use of CuT 380A, which is very similar to that of tubal sterilization. (United Nations Development Programme et al. 1997).

IUCD

This was first introduced by Grafenberg in 1909. It is an effective, reversible and long term method of contraception, which does not require replacement for long periods and does not interfere with sexual activity. Medicated devices which contain copper, progesterone hormone and other pharmacologic agents have been introduced. Each device has a nylon thread attached to its lower end and this thread protrudes through the cervical canal into the vagina, where it can be felt by the patient herself and by the doctor, and can be removed by pulling it with the forceps.

Classification:

➤ Biologically inert devices:

Lippes loop

Saf-T-Coil

Inert IUDs, mostly Lippes loops are still commonly used in China, Indonesia, Pakistan and Turkey (WHO, 1997)³². The Lippes loop made of polyethylene, impregnated with barium sulphate for making it radiopaque, is the most widely used inert IUD outside China. The other widely used IUDs are the inert single-coil ring and double-coil ring (Mahua ring), both made of stainless steel, they are used only in China; of the two, the single-coil ring is more popular. The Grafenberg ring, first introduced in Germany, and the Ota ring, first introduced in Japan and widely used over there, have become outmoded now.

They can be left in situ for several years because they cause no side effects. Because of litigations following complications, these have been withdrawn and stopped being marketed.



LIPPES LOOP

➤ Copper carrying devices :

1. Copper 7 (Gravigard). This type of IUD is made of polypropylene impregnated with barium sulphate for radiopacity. It has horizontal bar of 26mm and a vertical bar of 35.9mm on which a copper wire with 200mm^2 exposed surface area is wrapped. It has got polypropylene transcervical thread tails. Its USFDA-approved effective life is 3 years. It was used mostly in Australia, Canada,

Europe, Mexico and UK. In most countries, it has been replaced by other medicated devices.

2. Copper T 200 (Gynae T). This device is made of polypropylene impregnated with barium sulphate and carries 120mg of 0.25mm diameter copper wire wound round the vertical limb. The device was the first medicated IUD tested for use, and has been widely tried and used throughout the world. The copper portion has an exposed surface area of 200 mm². Its USFDA-approved effective life is 4 years.
3. Multiload Copper 250 (ML Cu 250) and Multiload copper 375 (ML Cu 375). These are copper-releasing devices made of polypropylene with 250 or 375 mm² of exposed copper in the form of wire, wrapped around the vertical shaft. The arms are flexible plastic-serrated fins that hold the device in place without stretching the uterine cavity. The copper wire around the shaft makes this portion radiopaque but the arms are radiotranslucent. The Multiload Cu 250 has a recommended life span of 3 years and the Multiload Cu 375, of 5 years.



4. Copper T 380 Copper T 380A (Paraguard) is being used under the government program. It is a T-shaped polyethylene device containing copper wire of surface area 380mm^2 wrapped on its arm & stem. It remains radio opaque as it contains Barium Sulphate on polyethylene frame. Its length is 3.6 cm & 3.2 cm.



A 3mm ball is present at the base of the stem. It acts to reduce the risk of cervical perforation with expulsion. A clear white polyethylene monofilament string is knotted through this ball for easy removal.

It is approved by FDA up to 10 years but is effective at least for 12 years. It is more than 99% effective and there are 0.6 – 0.8 pregnancies/100 women in first year.

5. Copper T 220 (CuT 220C). This device is an experimental modified version of the Cu T200. It was developed by the Population Council and has seven copper sleeves, two on the

transverse arm and five on the stem with a total exposed surface of 220 mm². It has an estimated effective life of 3 years.

6. Nova Cu T200 (Nova T). This device has been introduced commercially since 1979. It is modified Cu T200 with a silver core added in the copper wire around the stem; 200 mm² of copper is exposed to the surface. The silver core increases its effective life to 5 years.

The copper devices are more expensive than inert devices but are reported to exert a better contraceptive effect; with fewer side effects. They have effective life of about 3 – 5 years. It is estimated that about 50 mcg of copper is eluted daily in the uterus. Copper T 380A known as Paraguard has a life span of 10 years. Nova T has silver added to copper wire thereby increasing its lifespan to 5 years.

➤ Progestasert and levonova:

Progestasert is a T shaped device carrying 38 mg of progesterone in silicon oil reservoir in the vertical stem. It releases 65mcg of hormone per day. The hormone released in the uterus forms a thick plug of mucus at the cervical os which prevents sperm penetration. It is expensive and requires yearly replacement.

A new device Levonova contains 60 mcg of levonorgesterol and releases the hormone in very low doses (20 mcg/day). It is longer acting (5 years) and has low pregnancy rate of 0- 3 per 100 woman years.

Mirena contains 52 mcg levonorgesterol, eluting 20 mcg daily. It can be retained for 5 years with a failure rate of 0.1 to 0.4 per 100 woman years.



Frameless IUCD contains several copper cylinders tied together on a string and is anchored 1 cm deep into fundus¹.

MODE OF ACTION

The copper stimulates a cytotoxic reaction which is spermicidal. Several mechanisms are responsible for contraceptive effect of an IUCD.

- The presence of a foreign body in uterine cavity renders migration of spermatozoa difficult.
- A foreign body within uterus provokes uterine contractility through prostaglandin release and increases tubal peristalsis so that fertilised egg is propelled down the fallopian tube more rapidly than in normal and it reaches the uterine cavity before the development of chorionic villi and thus is unable to implant.
- The device in situ causes leucocytic infiltration in the endometrium. The macrophages engulf the fertilised egg if it enters the endometrial tissue.
- Copper T elutes copper which brings about certain enzymatic and metabolic changes in the endometrial tissue.

Effectiveness:

The copper T 380A is > 99% effective. This effectiveness increases when expulsion rates are increased. During the 1st year of use there are about 0.6 – 0.8 pregnancies / 100 women¹.

USES OF IUCD IN GENERAL

- As a contraceptive
- Postcoital contraception.
- Following excision of uterine septum, Asherman's syndrome.
- Hormone IUCD –Mirena in menorrhagia and dysmenorrhea

ADVANTAGES OF PPIUCD

- Assurance for a reliable birth spacing method before leaving hospital.
- Decreased awareness of initial side effects (bleeding and cramping).

- Effective long term contraception.
- Does not interfere with sexual functions.
- Saves time.
- Resumes fertility immediately on removal.
- Perforation has not been reported because of thickness of uterine wall postpartum.
- Coital independent.
- One time insertion gives a continuous protection for a longer period.
- There is no user failure
- There is no evidence of reduced fertility. About 75% of women conceive within 6 months of its removal and almost 90% conceive within a year.
- There is no systemic ill effects unlike oral contraceptive pills.
- No adverse effect on lactation is observed.

Copper T is inserted free of cost in government hospitals in India. .

LIMITATIONS

- Spontaneous expulsion rates vary in range of 10-14%.It is also viewed as retention rate of 90%.

Proper placement of IUCD reduces the expulsion rate. This can reduce expulsion rates to 2-5%.

- Bleeding or spotting between periods or cramps occur in first 3 months, there after lessens.
- Insertion as well as removal is provider dependent.

SIDE EFFECTS

- Bleeding and cramping pain occurs but usually subsides²; they are often obscured in the postpartum period.
- There appears no significant risk on genital tract infection in postpartum insertion.

Early complications:

- ✓ Expulsion
- ✓ Spotting,menorrhagia
- ✓ Dysmenorrhea
- ✓ Vaginal infection
- ✓ Perforation.

Late complications:

- ✓ Pelvic inflammatory disease
- ✓ Pregnancy
- ✓ Perforation
- ✓ Menorrhagia
- ✓ Dysmenorrhea

There is no evidence that the device predisposes to cervical or endometrial cancer.

CONTRA INDICATIONS

- Lower genital tract infection
- Severe anaemia
- Pelvic inflammatory disease
- Menorrhagia, Dysmenorrhoea if copper T is used
- Uncontrolled diabetes – because of slight increase in pelvic infection
- Heart Diseases - risk of infection

MANAGEMENT OF IUCD RELATED SIDE EFFECTS AND COMPLICATIONS

➤ Spotting /bleeding in the first three months

Rule out uterine pregnancy or ectopic pregnancy, infection and IUCD expulsion. Spotting or slight bleeding is common during the first 3 to 6 months of using a copper bearing IUCD. It is not harmful and usually decreases over time.

Changes in menstrual bleeding patterns like increase in amount ,duration and cramping are the most common side effects of copper IUCDs .The symptoms usually resolves spontaneously.

If the client desires treatment, a short course of non steroidal anti-inflammatory drugs e.g. ibuprofen may be given during the days of bleeding. Remind the client that menstrual changes will resolve after first few months.

If the women presents with persistent spotting and bleeding exclude gynaecologic problems as indicated by history and physical assessment. If gynaecological problem is identified ,treat the condition. If no gynaecological problem is found and she finds the bleeding unacceptable ,remove the IUCD and help her choose another method.

➤ **Cramping pain**

Rule out pregnancy ,ectopic ,infection and IUCD expulsion .If none of the above ,offer non steroidal anti-inflammatory drugs immediately before and during menstruation to help relieve the discomfort.

If the cramping is stronger than usual it might be due to impending expulsion .Expulsion of an IUCD is most common in the first 3 months

after insertion. Other symptoms associated with expulsion include irregular bleeding, pain during intercourse, unusual vaginal discharge, post coital bleeding and delayed menses.

➤ **If strings not seen**

At the first post insertion visit, the strings may not have descended yet.

If the client is otherwise well ,has experienced no cramping or bleeding and has not felt the IUCD or observed it to have been expelled, do a speculum examination to locate the strings.

If the strings are not located in cervical canal, an ultrasound is done to confirm that the IUCD is intrauterine .If found to be in position, reassure and explain that IUCD is protecting her from pregnancy and to review if there are any complaints and ask her to come for follow up. If the IUCD is located inside uterus, but patient wants removal due to her concern of missing strings, counsel about contraceptive benefits. If still insists on removal it is removed by a trained provider.

If the IUCD is not seen inside or outside the uterus, complete expulsion must have occurred and offer the client to replace the IUCD. If

the client is willing, then reinsertion done. If not willing, then ask her to choose any other contraceptive method.

If IUCD is found outside the uterus, manage as per uterine perforation.

➤ **Expulsion**

If complete expulsion is confirmed, IUCD is replaced if desired or patient is counselled on other contraceptive methods .If in case of partial expulsion, remove the IUCD and decide according to the patient's desire.

➤ **Pregnancy**

Rule out ectopic pregnancy. The overall risk of ectopic pregnancy is very low.1 in 1000 over 5 years.

Explain to the client that she is at increased risk of first and second trimester miscarriage and of preterm delivery if the IUCD is left in place. Counsel the client that removal slightly reduces these risks, although the procedure itself can itself cause a small risk of miscarriage.

If the client does not want to continue the pregnancy, counsel her accordingly.

If the client wishes to continue pregnancy, inform her about the increased risk of first and second trimester abortion and preterm delivery. Advise her to return immediately if she has heavy bleeding, cramping pain , abnormal vaginal discharge or fever.

If the IUCD strings are visible and can be retrieved safely from the cervical canal, then advise the client that it is best to remove the IUCD.

If the IUCD is to be removed, remove it by pulling on the strings gently. Explain to the client that she should return in case of bleeding ,pain or fever .If she chooses to keep the IUCD, advise her accordingly.

If the IUCD strings are not visible ,and cannot be retrieved safely from the cervical canal, perform an ultrasound and if it is found inside the uterus ,explain the risks to the client and monitor closely.

➤ **Infection**

It is generally related to concurrent Gonorrhoea or Chlamydia infection.

Symptoms include:

- Vaginal discharge
- Pain with intercourse
- Abdominal pain
- Fever

Treat in the presence of uterine or adnexal tenderness or oral temperature more than 38.3C, abnormal cervical or vaginal discharge, elevated ESR, lab documentation of gonorrheal or chlamydial infection. Treat using appropriate antibiotics. If infection does not improve within 72 hours, remove the IUCD and continue antibiotics and monitor closely. Provide dual method use for sexually transmitted infection including counselling about condom use.

There is no need to remove the IUCD if the client wishes to continue it. Removing the IUCD provides no additional benefit once the infection is treated with appropriate antibiotics.

➤ **Perforation:**

This is very rare. If it occurs stop insertion immediately. If the IUCD has already been placed, remove it by pulling the string.

- The signs and symptoms of perforation are feeling of sudden give way, pain, tachycardia, receding of threads.
- Monitor BP, pulse, pain, guarding and rigidity. Start an iv line and monitor for any intra abdominal bleeding.
- Monitor vitals every 10 minutes for the first 1 hour, if stable continue every hour for the 1st 4 hours, then four hours once for 24 hours.
- If there is change in vitals, then decide on surgical intervention.

TIMING OF INSERTION

- Post placental²: within 10 minutes following expulsion of placenta in vaginal delivery.
- Intra caesarean: during caesarean delivery before closing uterine incision.
- Immediate postpartum: Within 48 hours of delivery after post placental period.
- Post abortion: following abortion.
- Interval: after 6 weeks postpartum.

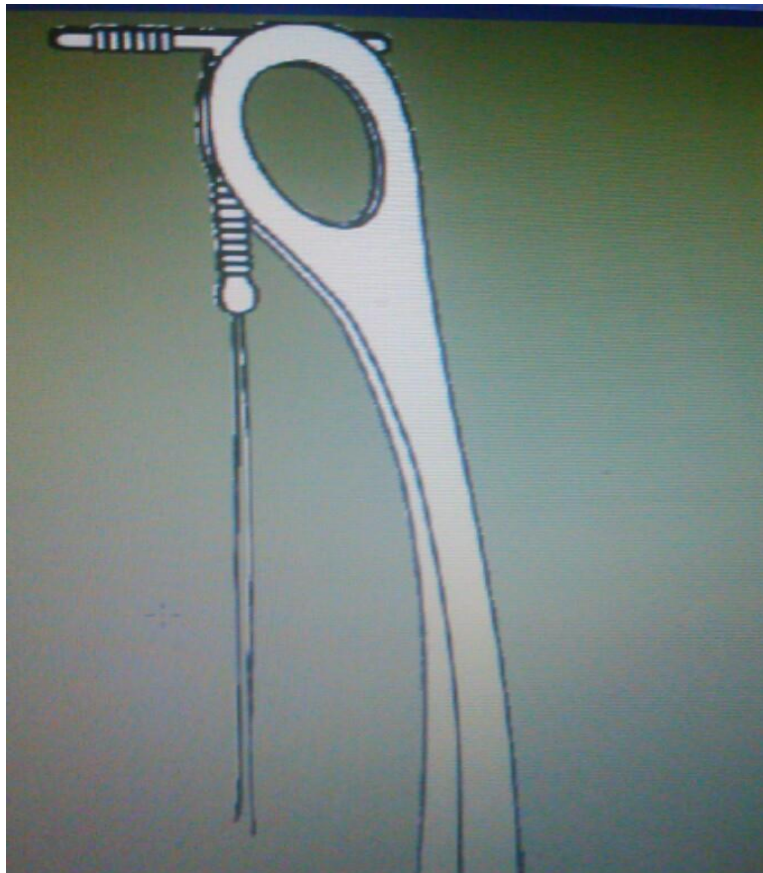
Insertion between 48 hours to 6 weeks is not recommended because of increase in the chance of infection and expulsion.

POSTPARTUM IUCD INSERTION

This was introduced in mid sixties in U.S.

Studies show that prevention of unplanned pregnancies could prevent 20-35% of maternal deaths. The Copper T 380 A has been approved for postpartum insertion.

Counselling for PPIUCD services should take place in antenatal period, or in early labour or immediate postpartum. Informed consent should be obtained prior to insertion. It should not be taken in active stage of labour.



***MATERIALS AND
METHODS***

MATERIALS AND METHOD

This study was conducted in R.S.R.M Lying in Hospital, Royapuram, Chennai from January to September 2014.

TYPE OF STUDY – Prospective study.

METHODOLOGY –

Contraceptive counselling was given to 932 eligible antenatal women admitted in labour ward from January to March . Women who accepted the PPIUCD after normal vaginal delivery and after caesarean section were inserted with the device after obtaining written informed consent. The acceptance rate of PPIUCD and the percentage of actual insertions were recorded . Among those inserted, 300 cases – 150 cases in post placental group and 150 cases in intra caesarean group were followed up at 6 weeks,3 months and 6 months to evaluate in terms of expulsion, removal and continuation.

The chi square test was used to evaluate the data.

INCLUSION CRITERIA

- Women admitted in labour room who were eligible for PPIUCD insertion.
- Women who were willing for PPIUCD insertion and willing to return for follow up.

EXCLUSION CRITERIA

- Those women who were not willing for PPIUCD insertion.
- Fever during labour.
- Premature rupture of membranes for more than 18 hours.
- Chorioamnionitis.
- Active lower genital tract infections.
- AIDS.
- Uterine anomalies.
- Uterine abnormalities like myoma uterus.
- Manual removal of placenta.

- Post partum haemorrhage-uterine atony,traumatic.
- Anaemic women.
- Heart disease complicating pregnancy.

MEDICAL ELIGIBILITY CRITERIA

It describes IUCD use for women under specific medical conditions .The reproductive rights of the individual must be considered. It is essential that the provider has to screen the women based on the MEC in order to provide the quality care in IUCD services.

It has 4 categories³³:

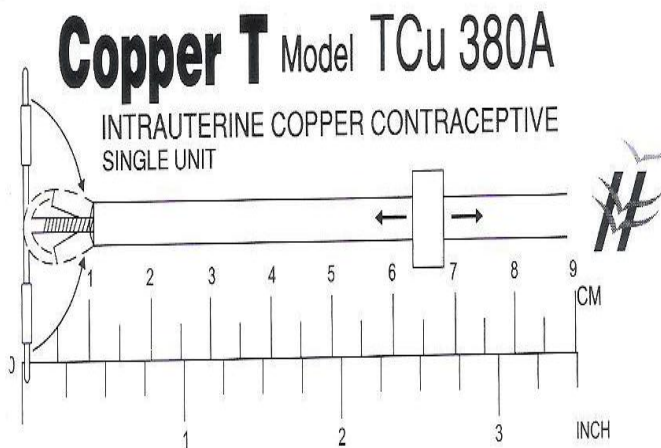
- CATEGORY 1 : no restriction for use
 - Immediate post placental
 - During caesarean section
 - Immediate postpartum < 48 hours
 - > 6 weeks postpartum

- Parity 1 or more
 - Metrorrhagia without heavy bleeding
 - Risk factors for cardiac disease
 - Hypertensive disorders, diabetes, thyroid.
- CATEGORY 2 : advantages of using this method outweighs theoretical or proven risk.
 - Bleeding more than usual
 - Nulliparous woman
 - Clinically well HIV infected women
 - Symptomatic AIDS women, on antiretroviral therapy
 - Immediately following a second-trimester abortion either spontaneous or induced with no evidence of infection.
 - Anaemic women, as copper-bearing IUCDs are associated with increased menstrual blood loss.
 - Women with 1st and 2nd degree uterine prolapse

- Rectovaginal fistula
- Complicated valvular heart disease e.g., artificial shunts, rheumatic heart disease.
- CATEGORY 3 : generally do not use
 - High risk for gonococcal and chlamydial infection
 - Ovarian cancer
 - Benign trophoblastic disease
 - HIV not on anti retroviral therapy
- CATEGORY 4 : do not use
 - Unexplained vaginal bleeding
 - Current gonorrhoea or chlamydial infection
 - Pelvic tuberculosis
 - Genital tract cancer
 - Distorted uterine cavity

MATERIALS REQUIRED

- Sims or vaginal retractor
- Ring forceps or sponge holding forceps
- Kellys placental forceps
- Cotton swabs
- Betadine
- Sterile gloves
- Copper T 380A,in sterile package



Central Govt. Supply. Not to be sold

केन्द्र सरकार द्वारा, बिना लिखित

Each unit is wound with approximately 176 mg of copper wire. In addition a single copper sleeve is swaged on each of the two transverse arms. Each sleeve contains approximately 66.5 mg of copper. The total surface area of copper on the device is $380 \pm 23\text{mm}^2$.

To be inserted in the uterus only by or under the supervision of physician. See detailed instructions for users.

Administration : It is recommended that the unit be replaced by 10 years from the date of insertion.

Storage : Store in Cool, Dry condition, Away from Sunlight.

Mfg. Lic. Number 27/28/92

Batch No. : **63210**

Sterilization by Gamma Radiation

Mfg. Date : JUL.2010

Do not insert after the expiry date

Exp. Date : JUN.2015

CAUTION : Do not dispense without medical prescription. Insertion Instrument should not be reused and should be destroyed after use.

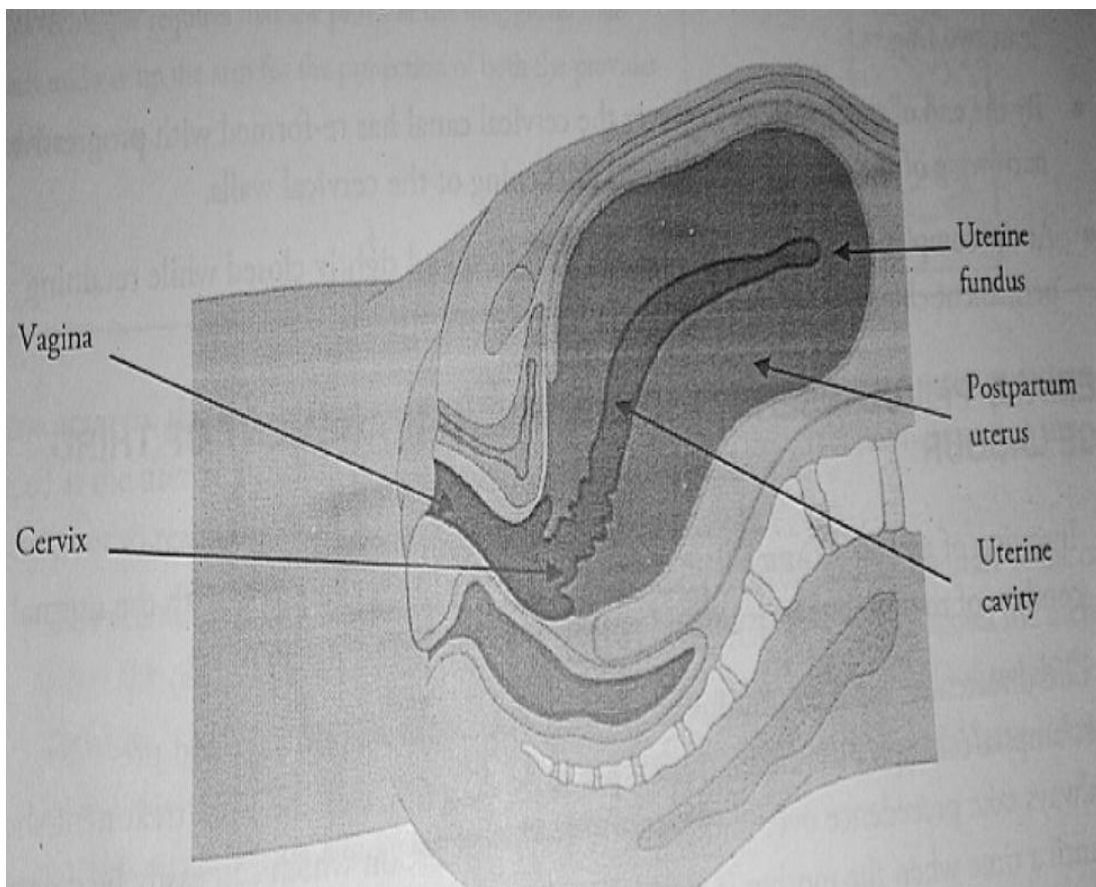
Manufactured by HLL Lifecare Limited

(A Government of India Enterprise)
(formerly Hindustan Latex Limited)

Akkulam, Sreekariyam P.O., Thiruvananthapuram - 695 017, India

ANATOMY OF POSTPARTUM UTERUS

Immediately after placental expulsion the fundus of uterus is approximately 20 wks size. It weighs about 1 kg. The anterior and posterior walls of uterine body lie close to each other. The walls are 4-5 cms thick and soft. The lower uterine segment is stretched and adds to mobility of uterus.



The difference between the heavy and thickened body of the uterus and the lower uterine segment contributes to the extreme curvature that can be noted on bimanual examination².

TYPES OF INSERTION

Post placental – insertion within 10 minutes of placental delivery

Insertion can be done either by forceps or manually.

- Forceps – Kelly's placental forceps is used.
- Manual insertion – this requires long gloves for protection of both provider and woman.

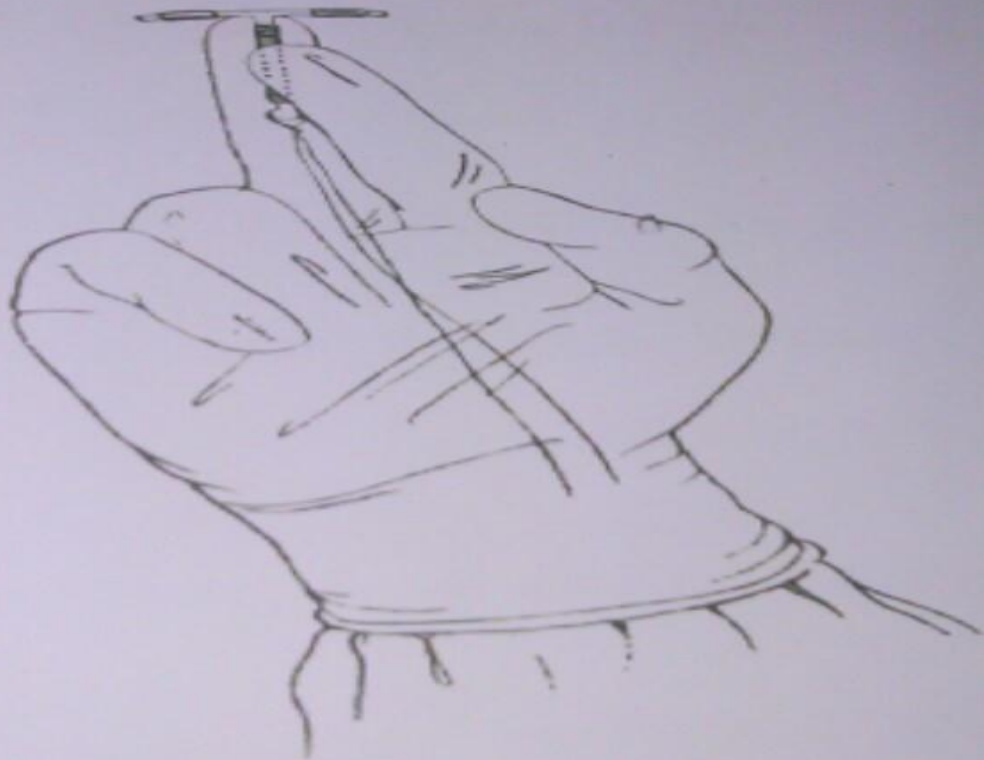
Intra casaerean – insertion is done manually before uterine closure.

The IUCD is held between middle and index finger and inserted in uterine fundus. Strings should not be pushed into cervical canal for 2 reasons.

- To prevent displacement of IUCD from uterine fundus
- To prevent uterine cavity contamination by vaginal flora.

MANUAL INSERTION

MANUAL INSERTION
The IUD Held Appropriately, between the
Index Finger and the Middle Finger

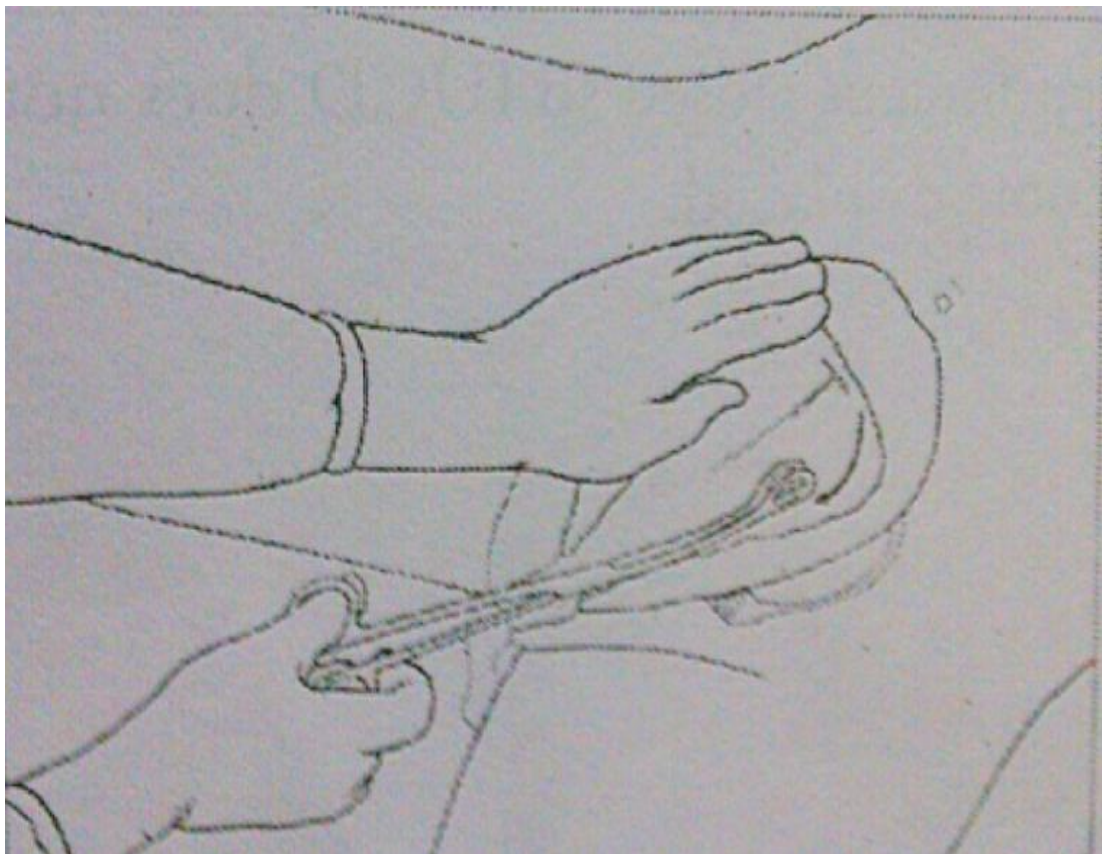


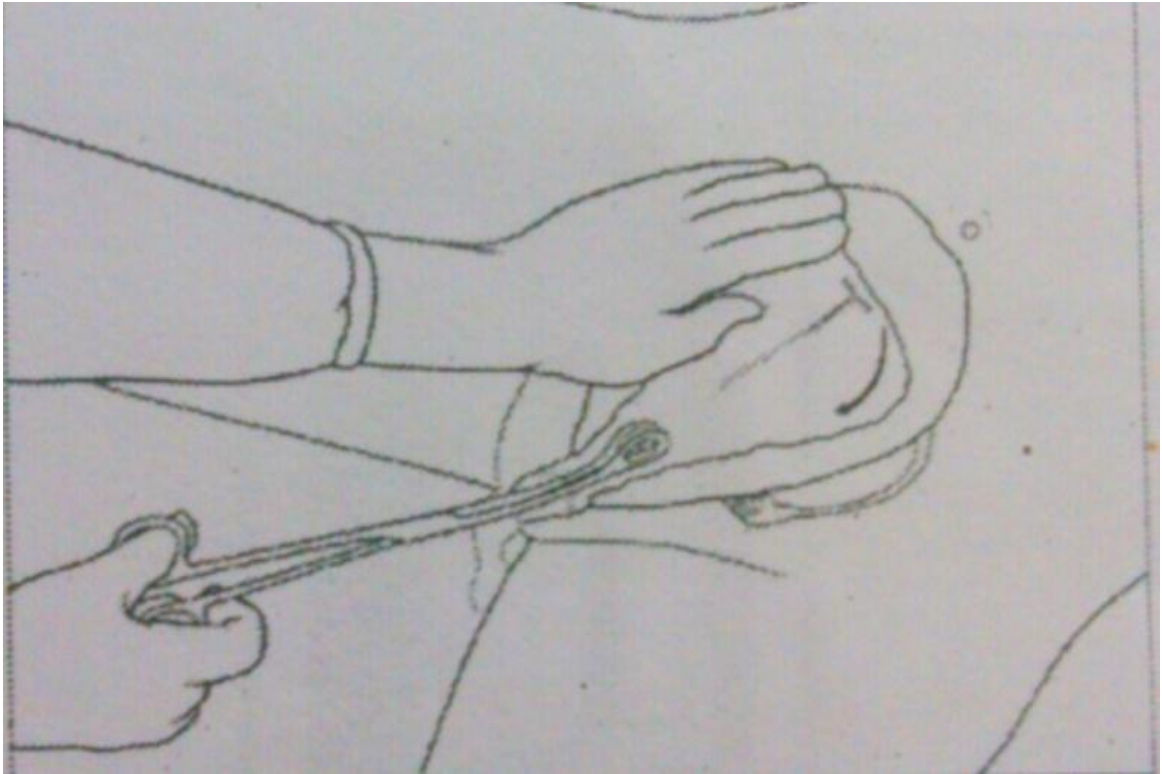
TECHIQUE OF INSERTION

After active management of third stage of labour and verifying that uterus has contracted, inspect the genital area for lacerations, repair can be done after insertion of PPIUCD.

- With sterile gloves on, cervix is visualised by depressing posterior vaginal wall with Sims speculum.
- Cervix and vagina is cleaned with antiseptic solution twice.
- The anterior lip of cervix is then grasped using ring forceps.
- IUCD is gently grasped with Kellys forceps with **no-touch** technique.
- The IUCD held in Kellys forceps is carefully passed into lower uterine cavity without touching vaginal side walls.
- Once the lower uterine cavity is entered, the left hand is placed over the abdomen and entire uterus is pushed upward. This is done to straighten the angle between uterus and vagina. This in turn facilitates the instrument to move upwards easily towards uterine fundus.

- On reaching the uterine fundus a resistance is felt . Kelleys forceps has a broad end distally which is less likely to perforate uterine fundus.
- At this point, open and release IUCD.
- By keeping it open ,the instrument is swept to the right and slowly withdrawn following lateral uterine walls.

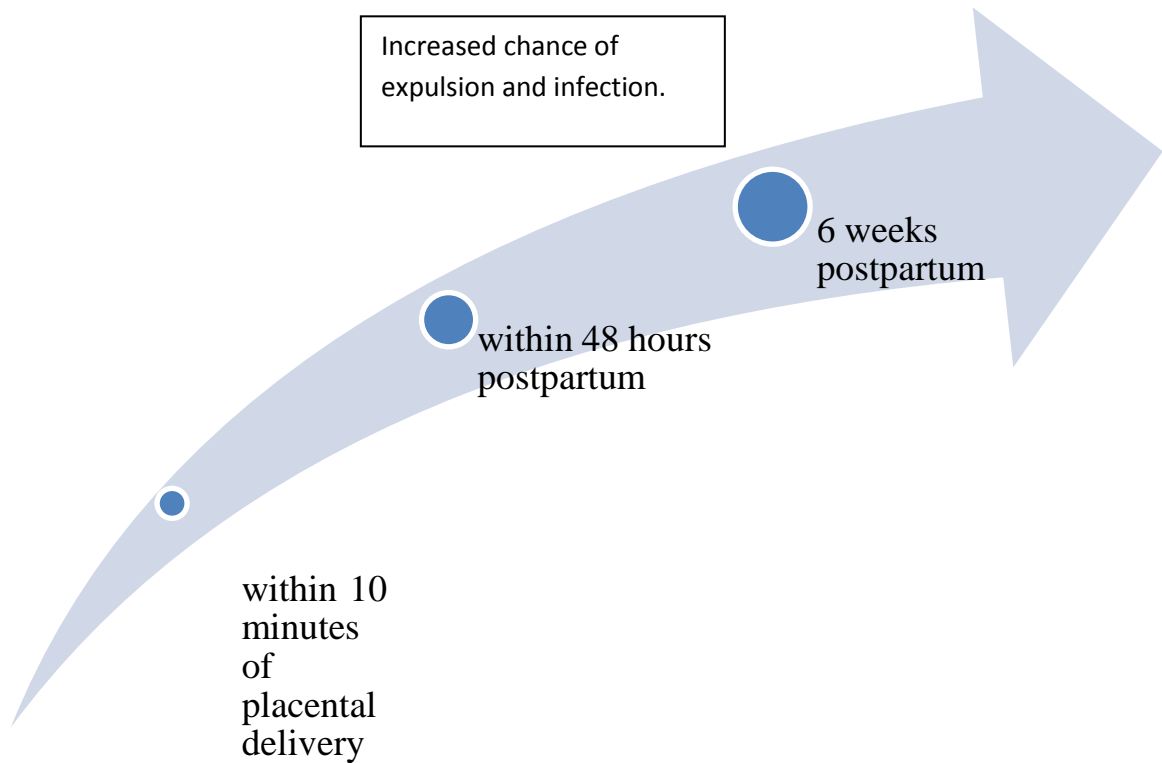




- The uterus is stabilised until the forceps is removed.



- Then episiotomy repair is proceeded



Insertion between 48 hours after delivery to 6 weeks postpartum is not recommended due to increased risks of complications.

POST INSERTION COUNSELLING

Following insertion woman must be instructed on

- Normal postpartum symptoms
- Side effects of IUCD
- Breast feeding importance and that it is not affected by PPIUCD.
- Follow up visits
- To return anytime if there are warning signs

This counselling is done the next day after post placental or intra caesarean insertion.

Warning signs include

- Foul smelling vaginal discharge
- Pain associated with fever or chills
- When in doubt that IUCD has fallen out.

PROPER DISPOSAL

Dispose the waste materials like cotton balls and disposable gloves in a leak proof container .

FOLLOW UP VISITS

Follow up for both post placental and intra caesarean were scheduled at 6 weeks, 3 months and 6 months. During each visit any problems related to IUCD were asked. A speculum examination is done to visualise strings. If strings were not visualised USG was done to confirm IUCD in position or expelled.

According to WHO guidelines atleast 1 postpartum visit at 6 weeks is recommended². A routine pelvic examination is not required. If no problems encountered with PPIUCD no other follow up is required.

Removal should be done only at patients request or in cases of

- Partial expulsion
- Puerperal sepsis
- Severe uterine cramping
- Perforation

DEFINITIONS

- **ACCEPTANCE :**

Number of clients who after counselling agreed to have IUCD inserted .

- **ACTUAL INSERTION:**

Number of clients who actually had IUCD inserted . This excludes those who prior accepted and had medical contraindications after delivery.

- **EXPULSION:**

When the strings cannot be visualised in the cervical canal and confirmed by USG that IUCD is not within or outside uterus. This also includes women who report visual expulsion of IUCD.

- **MISSING STRINGS:**

When the strings of IUCD are not visualised despite confirming that IUCD is in situ by USG .

- **PERFORATION:**

When the strings are not visible and IUCD is diagnosed to be outside the uterine cavity by X ray or USG.

- **CONTINUATION:**

The number of women having IUCD in situ after excluding expulsion and removal .

***RESULTS AND
ANALYSIS***

RESULTS

Total number of deliveries from January 2014 – March 2014 = 2200.

TABLE 1

PARITY	NORMAL LABOUR	LSCS	LSCS WITH ST	PS
P1	655	420	-	-
P2	448	205	314	340
P3	104	11	38	53
P4	4	-	1	4

Excluding those willing for sterilisation, 1450 women were checked for eligibility. Among them 230 had h/o draining more than 18 hours, 173 had h/o fever, 15 had uterine abnormalities, 89 were anaemia complicating, 5 were HIV infected, 6 were heart disease complicating.

About 932 were eligible for insertion and hence counselling given to antenatal women admitted in labour room and in early labour. 368 women accepted copper t insertion and among them 362 were actually inserted. (2 had distorted uterine cavity due to fibroid and 4 had PPH after normal delivery).

Acceptance rate – 39.4%

Actual insertion rate – 38.8%

ACCEPTABILITY OF PPIUCD

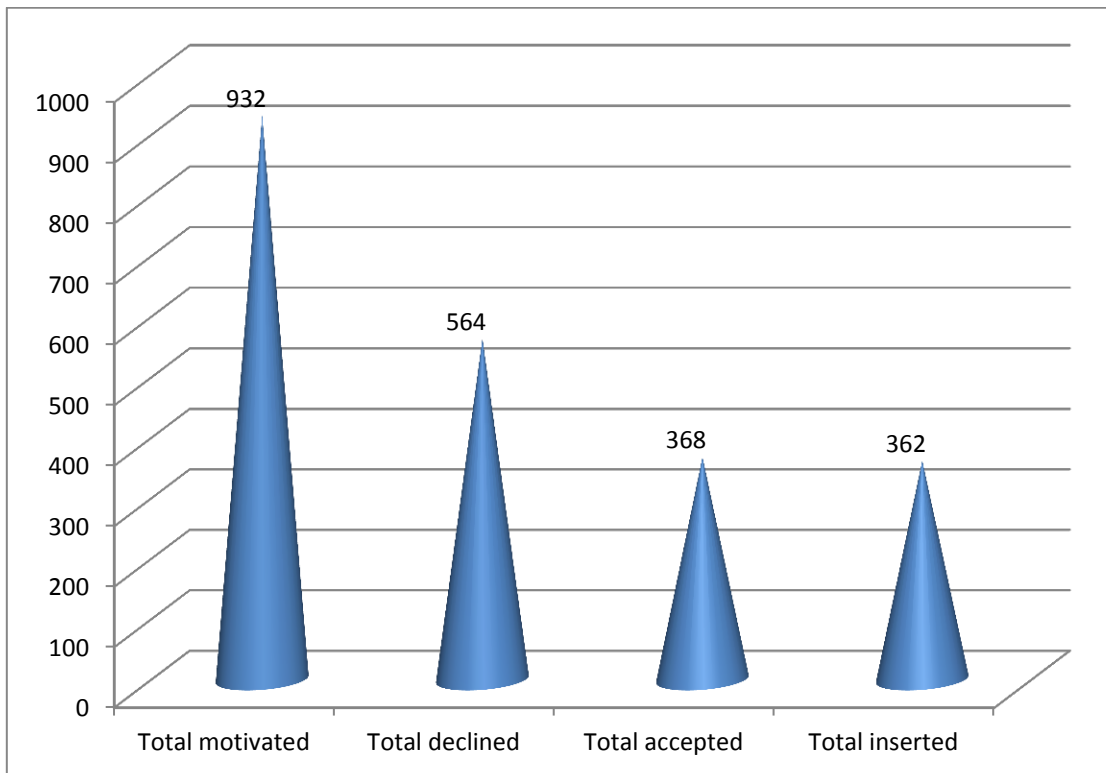


TABLE 2

	Post placental	Intra caesarean	Total
Number motivated	550	382	932
Number accepted	200 (36.3%)	168 (43.9%)	368
Number inserted	196 (98%)	166 (98.8%)	362

Among those counselled 36.3% in post placental group and 43.9% in intra caesarean group accepted for PPIUCD insertion.

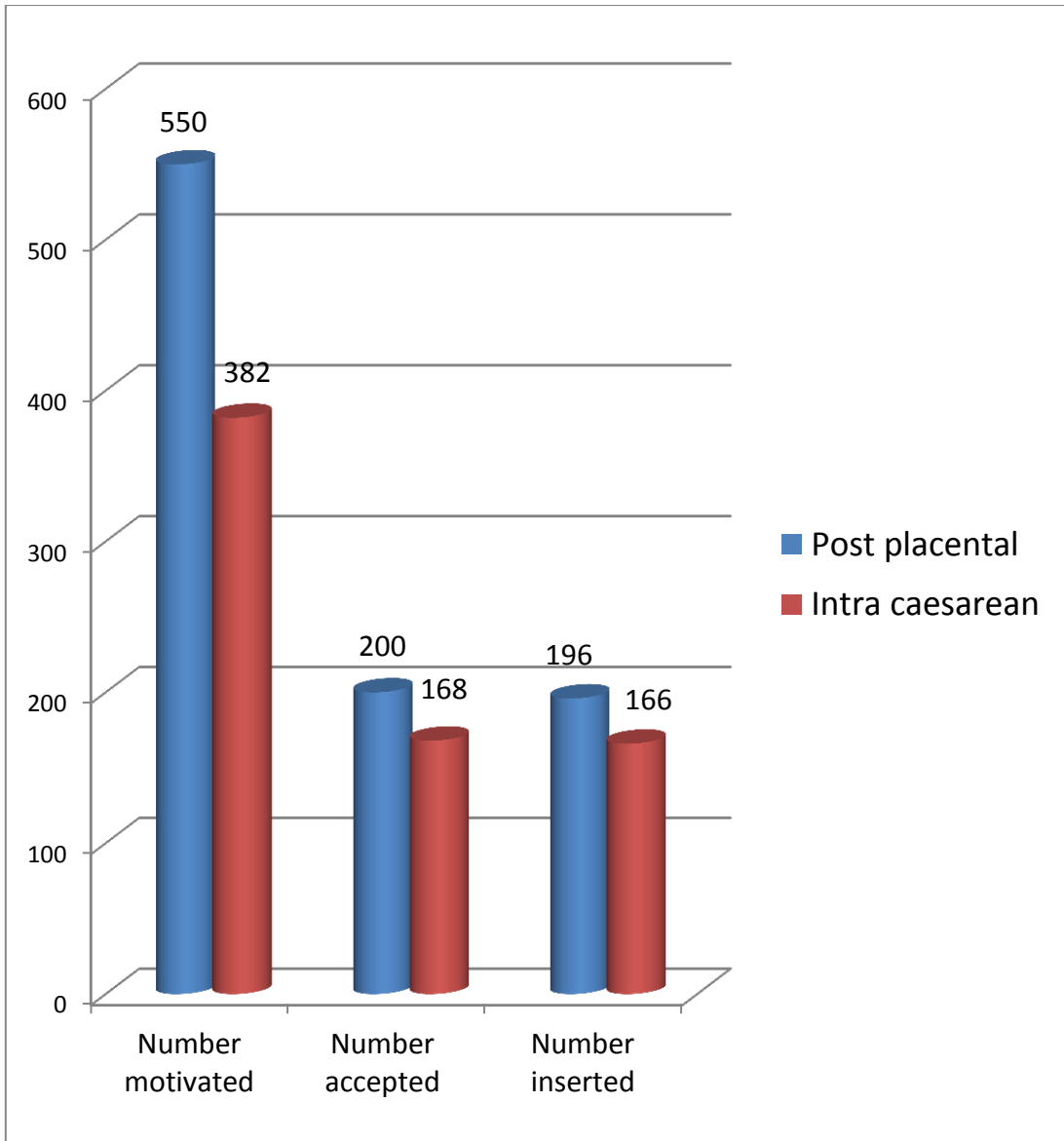
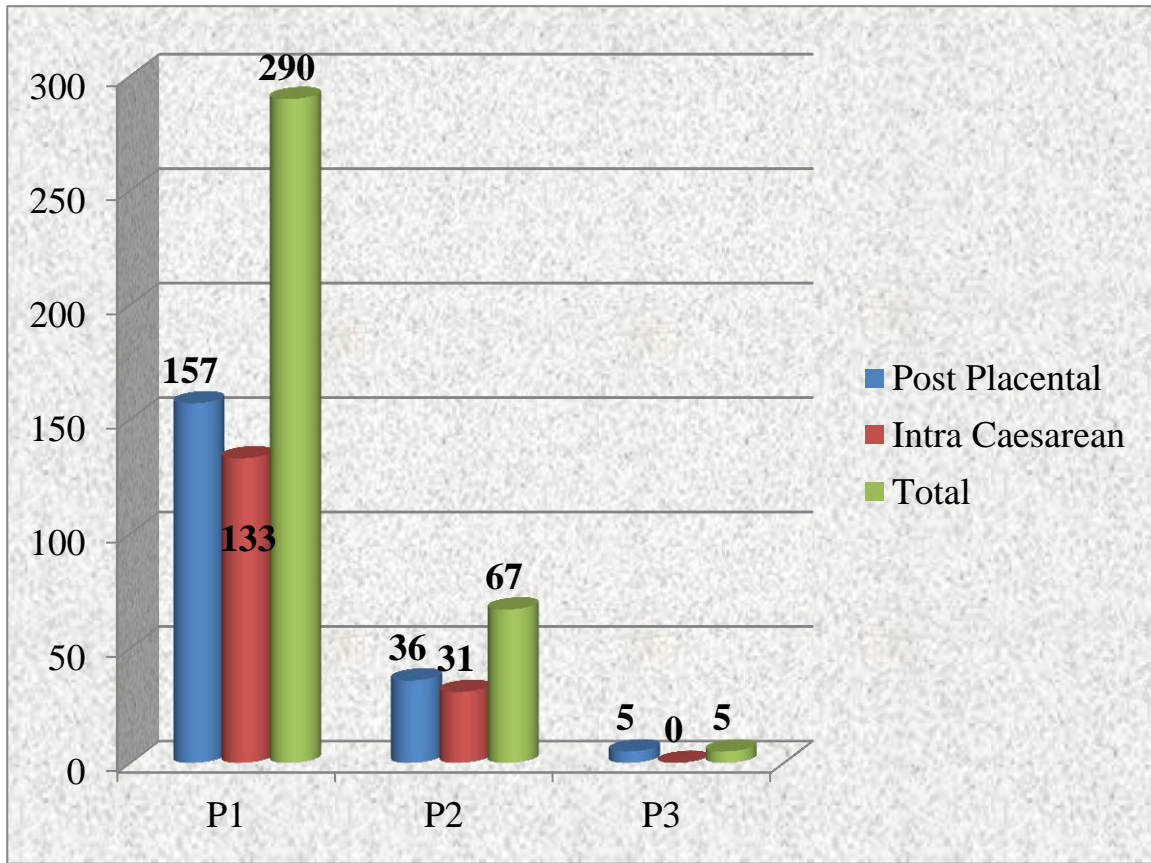


TABLE 3

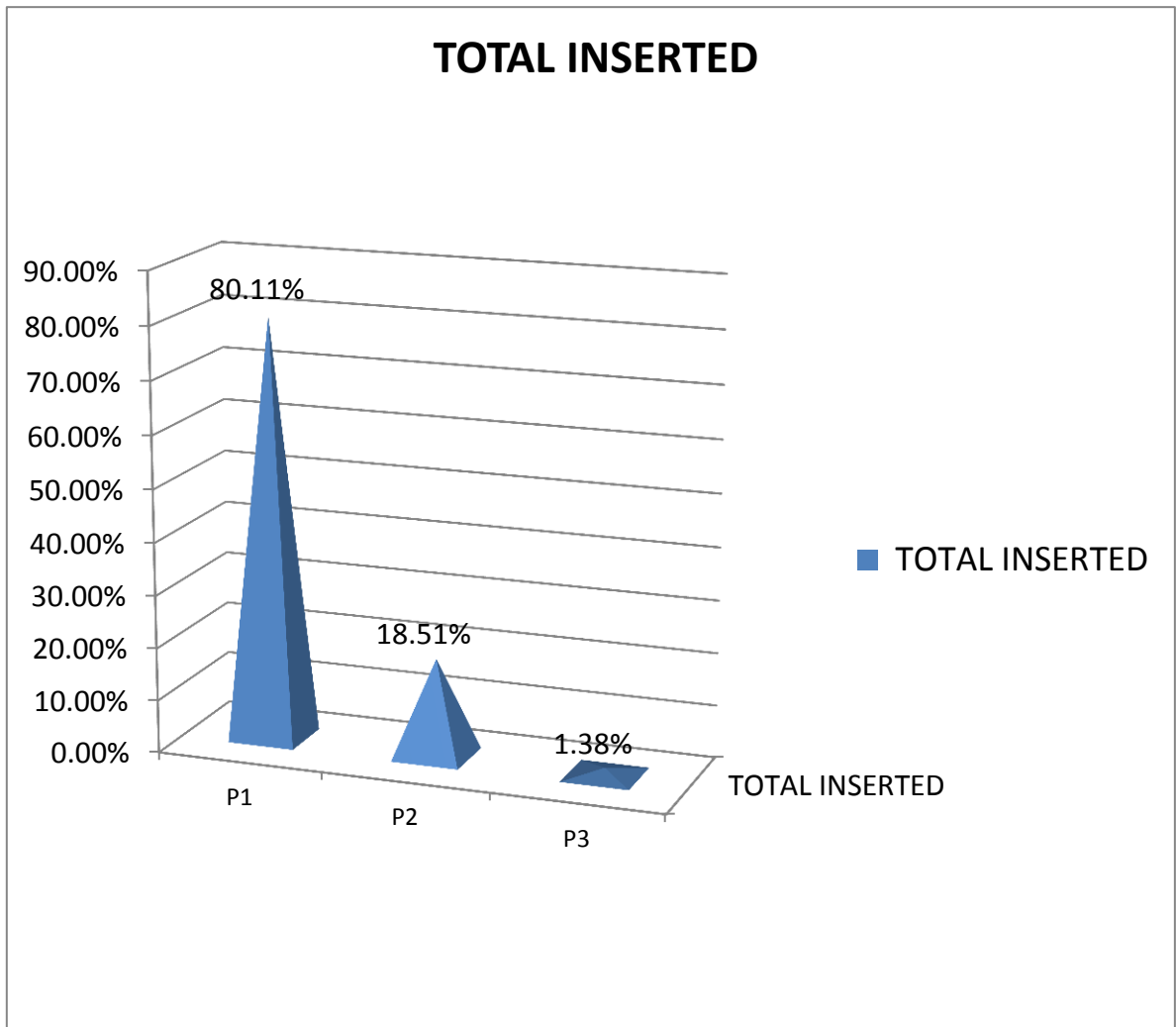
PARITY WISE

Parity	Post placental	Intra caesarean	Total
P1	157	133	290 (80.11%)
P2	36	31	67 (18.51%)
P3	5	--	5 (1.38%)

Majority of them belong to primiparity (80.11%), multiparity were few as they preferred a permanent method of sterilisation.



PARITY WISE



80.11% belong to primi parity and 18.51% belong to parity 2 and 1.38% belong to parity 3.

TABLE 4

AGEWISE

Age group	Post placental	Intra caesarean
< = 20	64 (32.3%)	41 (25%)
21 – 25	106 (53.5%)	96 (58.5%)
26 – 30	28 (14.14%)	25 (15.2%)
>30	-	2 (1.21%)

Maximum insertion is in age group = 21-25 years. 53.5% in post placental group and 58.5% in intra caesarean group.

Least insertion in age > 30 years. Nil in post placental and 1.21% in intra caesarean group

AGE WISE

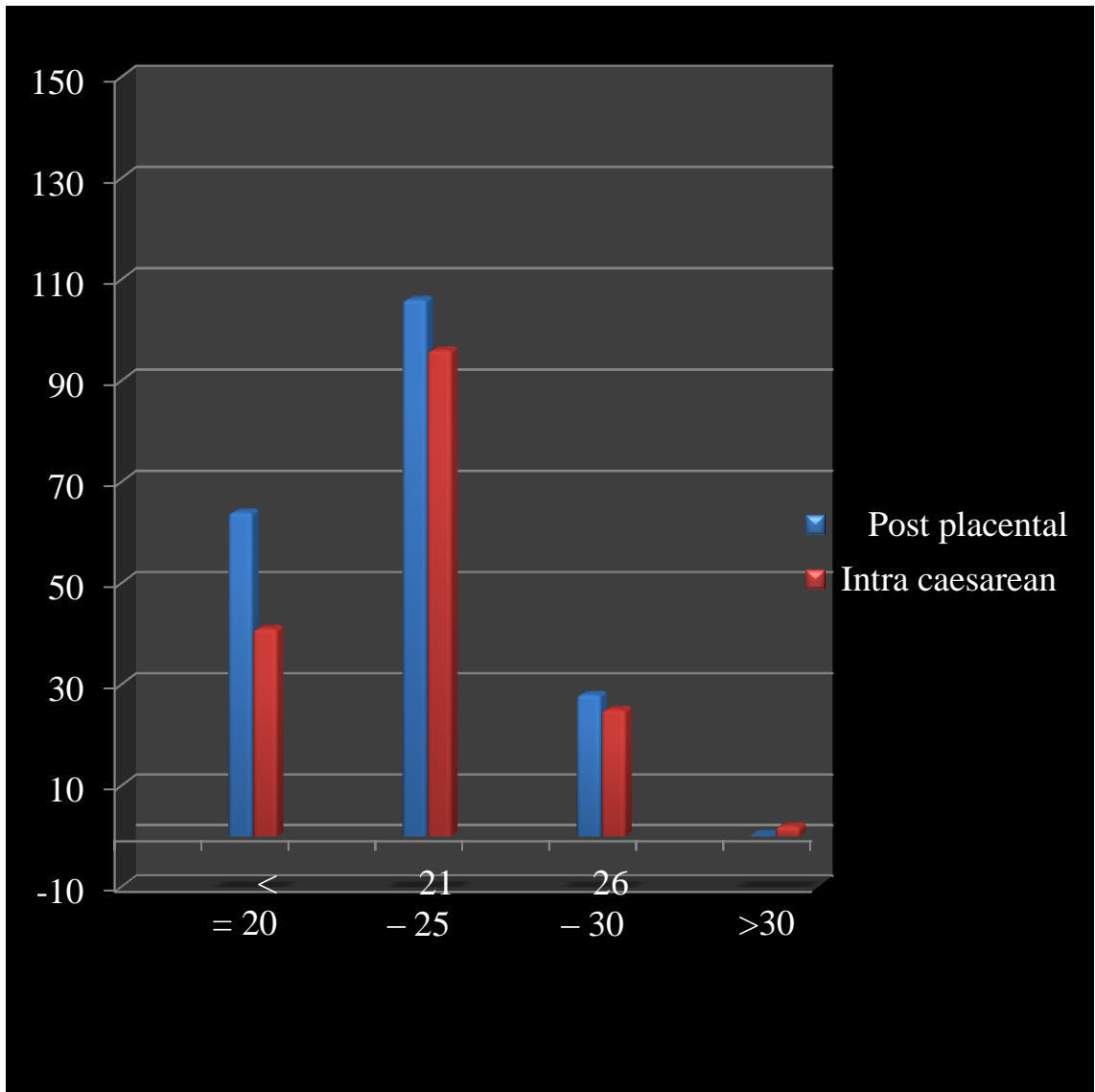


TABLE 5**EDUCATION STATUS**

Education	Post placental	Intra caesarean
Illiterate	15 (7.57%)	14 (8.53%)
Primary education	34 (17.17%)	18 (10.97%)
Secondary education	97 (48.9%)	94 (57.3%)
Higher secondary	39 (19.6%)	24 (14.6%)
Graduate	13 (6.56%)	14 (8.53%)

Majority of acceptors belong to secondary education 48.9% in post placental and 57.3% in intra caesarean group. There are few graduates because majority of antenatal women coming to our hospital belong to low socio economic status.

EDUCATION STATUS

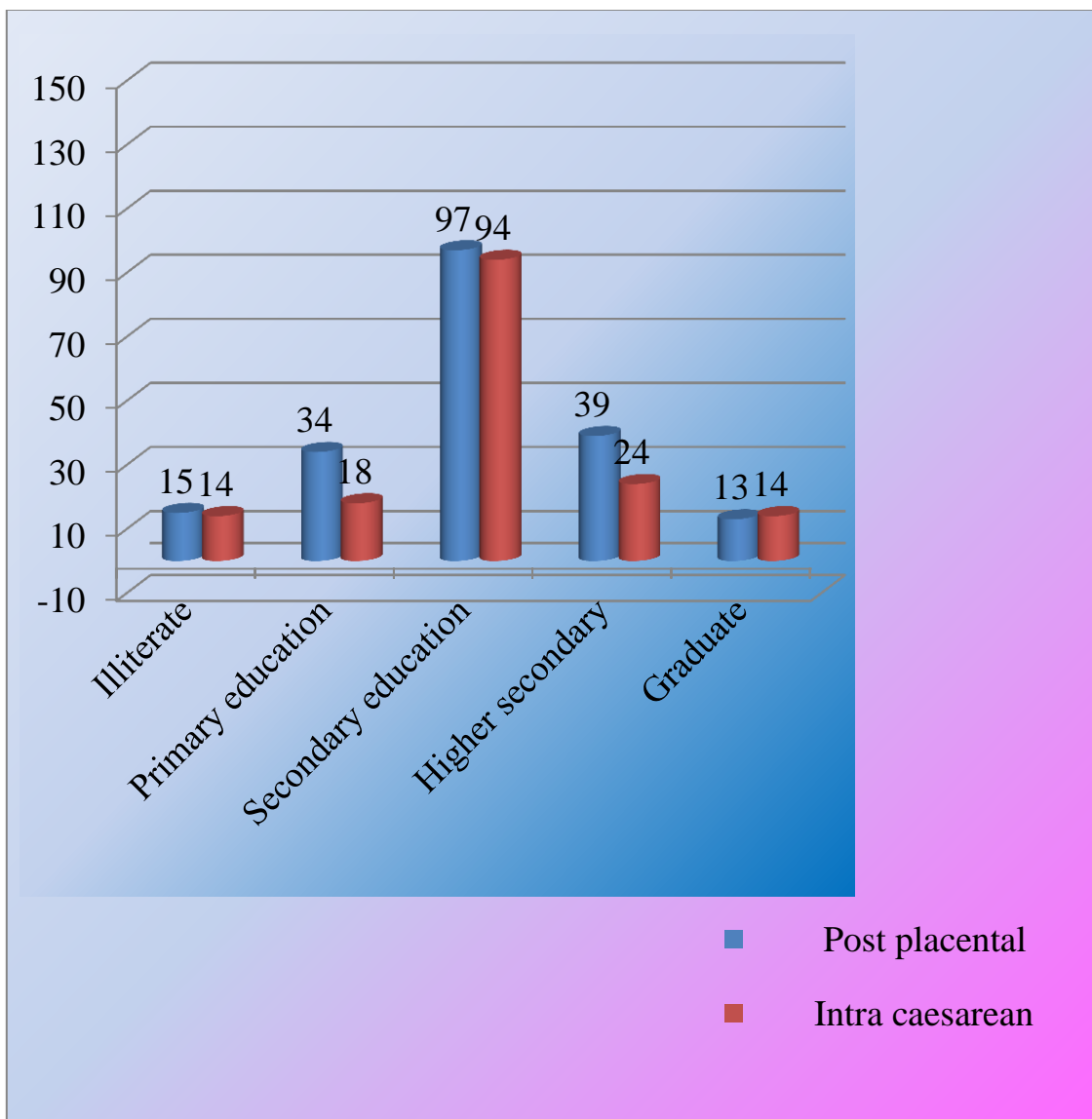


TABLE - 6**FOLLOW UP RESULTS**

Age wise distribution within group

Age Group		Group		Total
		Post Placental Cu-T	Intra Caesarean Cu-T	
<= 20	Count	64	41	105
	% within Group	42.7%	27.3%	35.0%
21-25	Count	76	86	162
	% within Group	50.7%	57.3%	54.0%
26-30	Count	10	21	31
	% within Group	6.7%	14%	10.3%
> 30	Count	0	2	2
	% within Group	.0%	1.3%	.7%
Total	Count	150	150	300

p value-0.009**

AGE WISE DISTRIBUTION

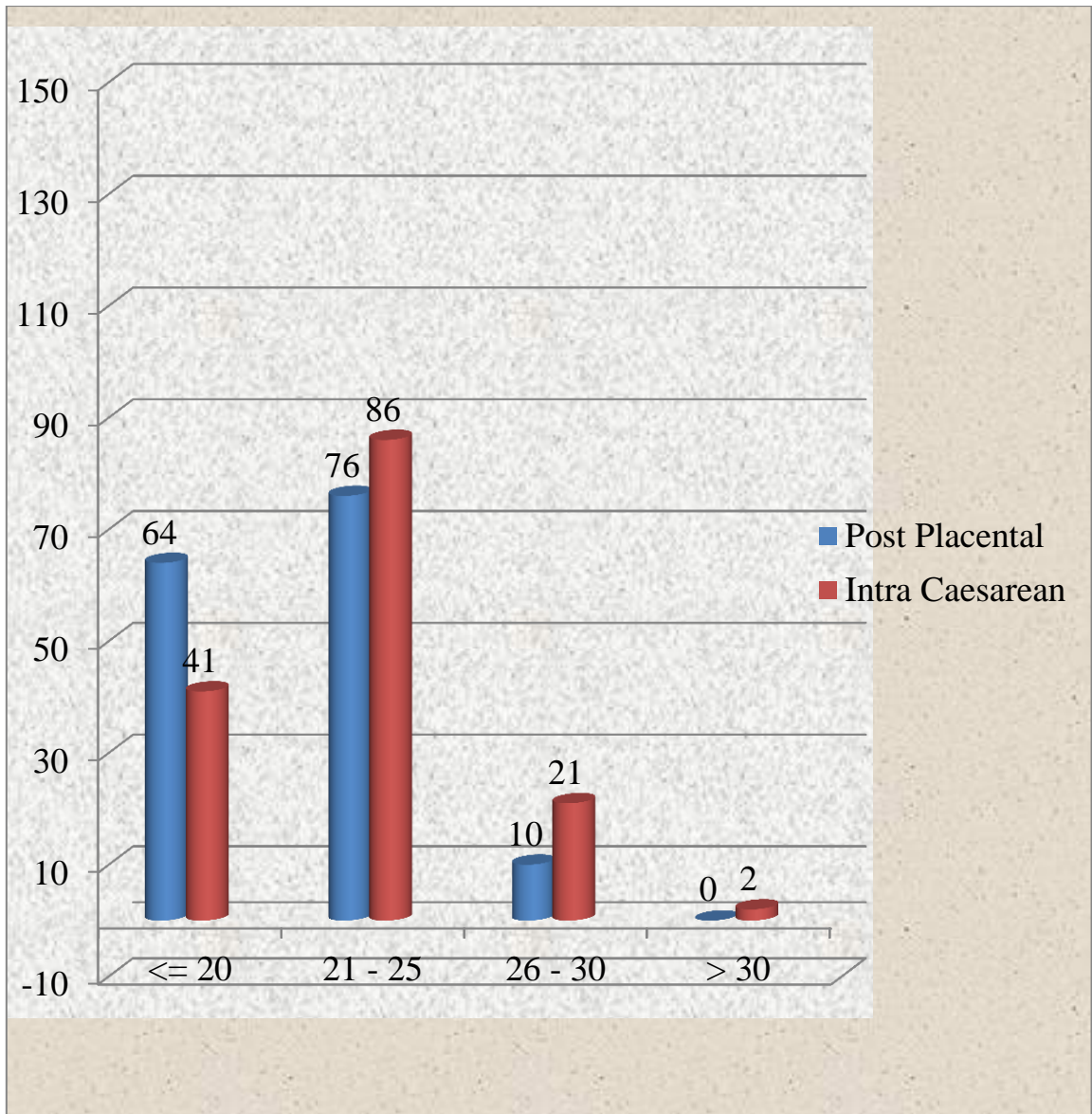
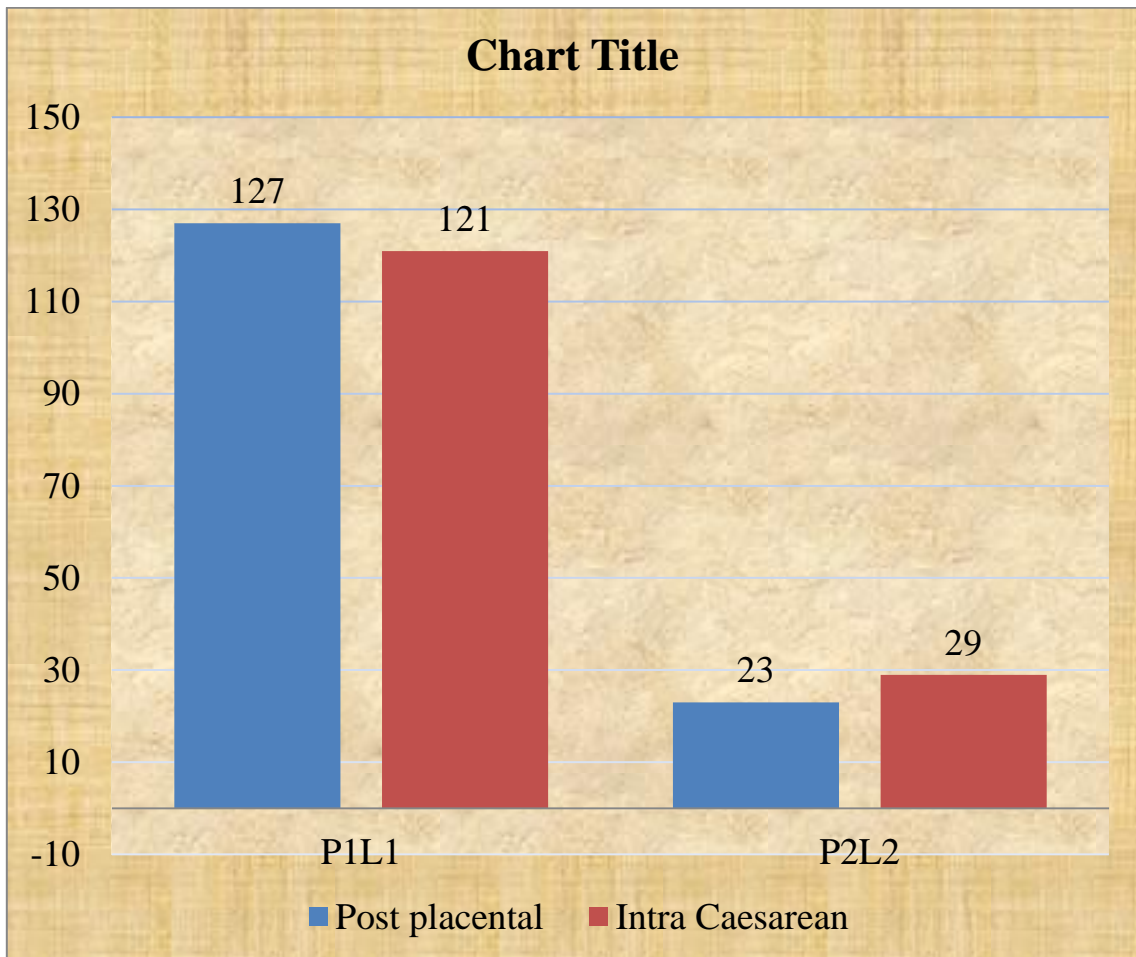


TABLE 7**PARITY GROUP CROSSTABULATION**

PARITY		Group		Total
		Post Placental	Intra Caesarean	
P1L1	Count	127	121	248
	% within Group	84.7%	80.7%	82.7%
P2L2	Count	23	29	52
	% within Group	15.3%	19.3%	17.3%
	Count	150	150	300
	% within Group	100.0%	100.0%	100.0%

PARITY GROUP

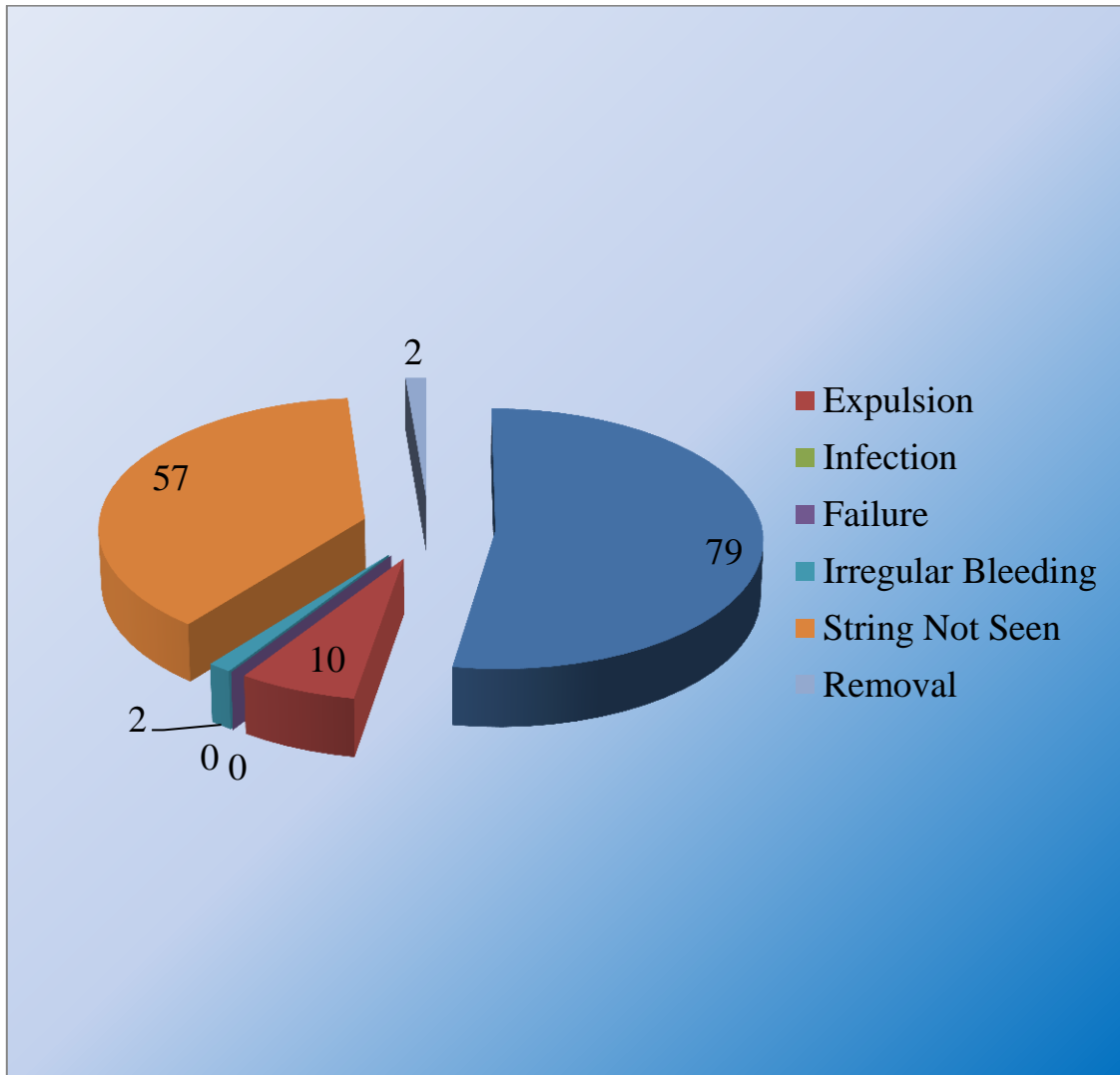


Among the 300 cases followed up 248 cases (82.7%) belonged to parity1 and 52 cases(17.3%) belonged to parity 2.

TABLE 8**6 WEEKS FOLLOW UP IN POST PLACENTAL GROUP**

		Post Placental		Total
		Yes	No	
Expulsion	COUNT	10	140	150
	%	6.67%	93.33%	100%
Infection	COUNT	-	150	150
	%	-	100%	100%
Failure	COUNT	-	150	150
	%	-	100%	100%
Irregular Bleeding	COUNT	2	148	150
	%	1.33%	98.67%	100%
Strings Seen	COUNT	93	57	150
	%	62%	38%	100%
Removal	COUNT	2	148	150
	%	1.33%	98.67%	100%

6 WEEKS FOLLOW UP IN POST PLACENTAL GROUP



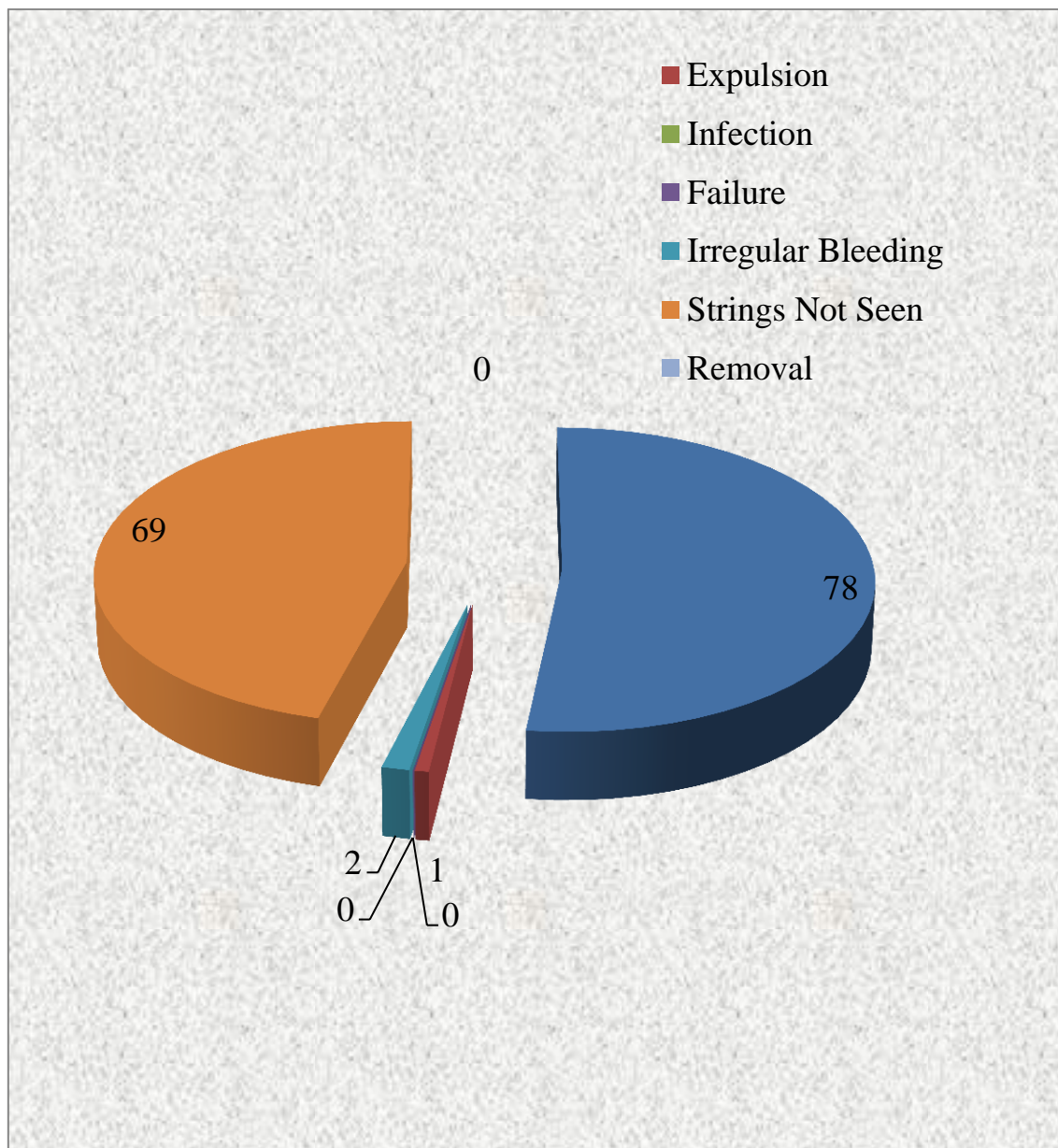
FOLLOW UP AT 6 WEEKS IN POSTPLACENTAL GROUP

- Total expulsions in study group was 6.67% (10 cases).Among them 7 cases were P2L2 and 3 cases were P1L1.
- Increase in bleeding than usual was major complaint in 2 cases (1.33%).
- Strings were seen in 93 cases (62%).
- Removal of copper T was done in 2 cases (1.33%).1 case removal was done at patient's request due to increase in bleeding, other in parity 2 willing for interval sterilisation.
- No cases of infection or failure were reported.

TABLE 9**6 WEEKS FOLLOW UP IN INTRACAESAREAN GROUP**

		Intracaesarean		Total
		Yes	No	
Expulsion	Count	1	149	150
	%	0.67%	99.33%	100%
Infection	Count	-	150	150
	%	-	100%	100%
Failure	Count	-	150	150
	%	-	100%	100%
Irregular Bleeding	Count	2	148	150
	%	1.33%	98.67%	100%
Strings Seen	Count	81	69	150
	%	54%	46%	100%
Removal	Count	-	150	150
	%	-	100%	100%

6 WEEKS FOLLOW UP IN INTRACAESAREAN GROUP



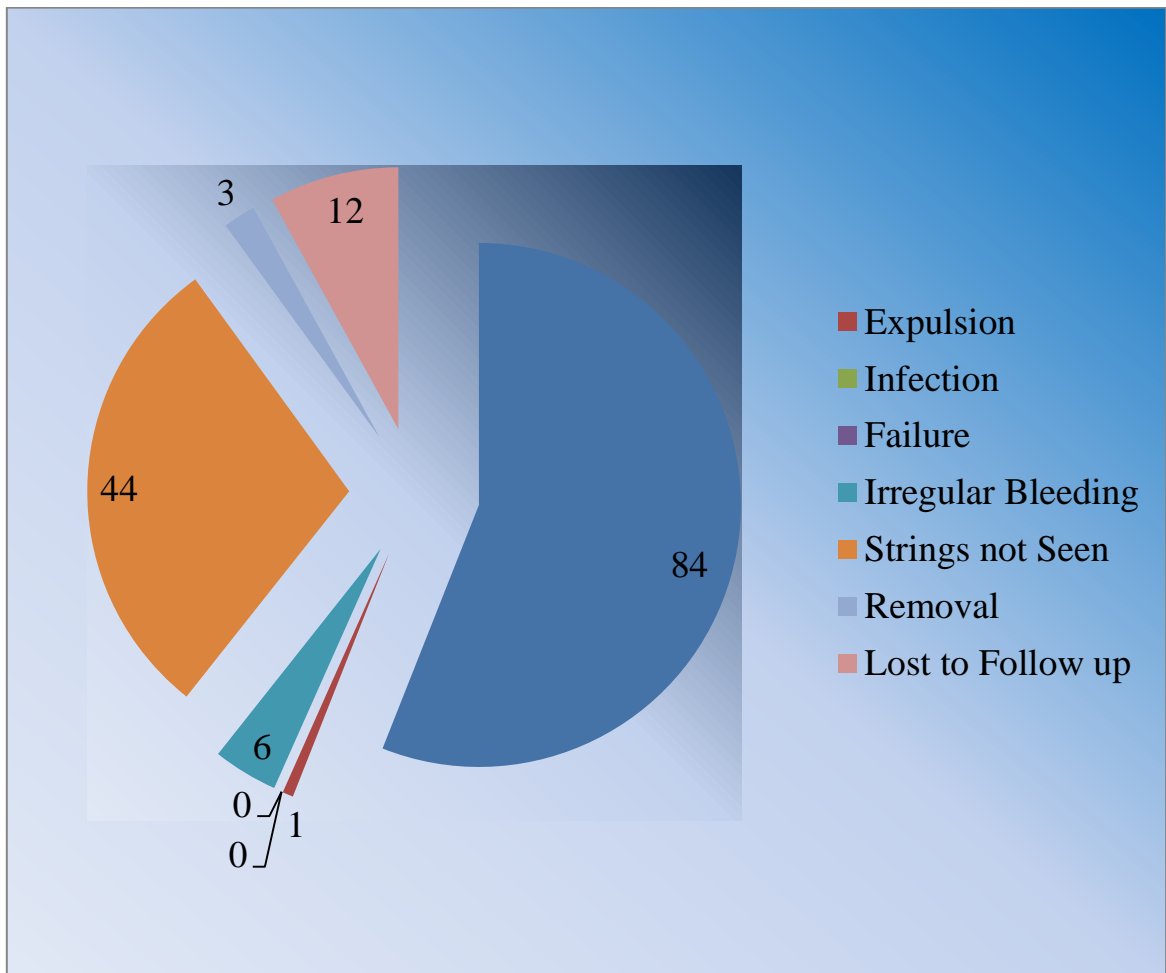
FOLLOW UP AT 6 WEEKS IN INTRACAESAREAN GROUP

- Total expulsions at 6 weeks was 1(0.67%) occurred in parity 2.
- Irregular bleeding was the complaint in 2 cases (1.33%).
- Strings were seen in 81 cases (54%).
- No cases of removal, failure, or infection were reported.

TABLE 10**3 MONTHS FOLLOW UP IN POST PLACENTAL
GROUP**

		Post Placental		Total
		Yes	No	
Expulsion	Count	1	137	138
	%	0.72%	99.28%	100%
Infection	Count	-	138	138
	%	-	100%	100%
Failure	Count	-	138	138
	%	-	100%	100%
Irregular Bleeding	Count	6	132	138
	%	4.35%	95.65%	100%
Strings Seen	Count	106	32	138
	%	76.81%	23.19%	100%
Removal	Count	3	135	138
	%	2.17%	97.83%	100%

3 MONTHS FOLLOW UP IN POST PLACENTAL GROUP



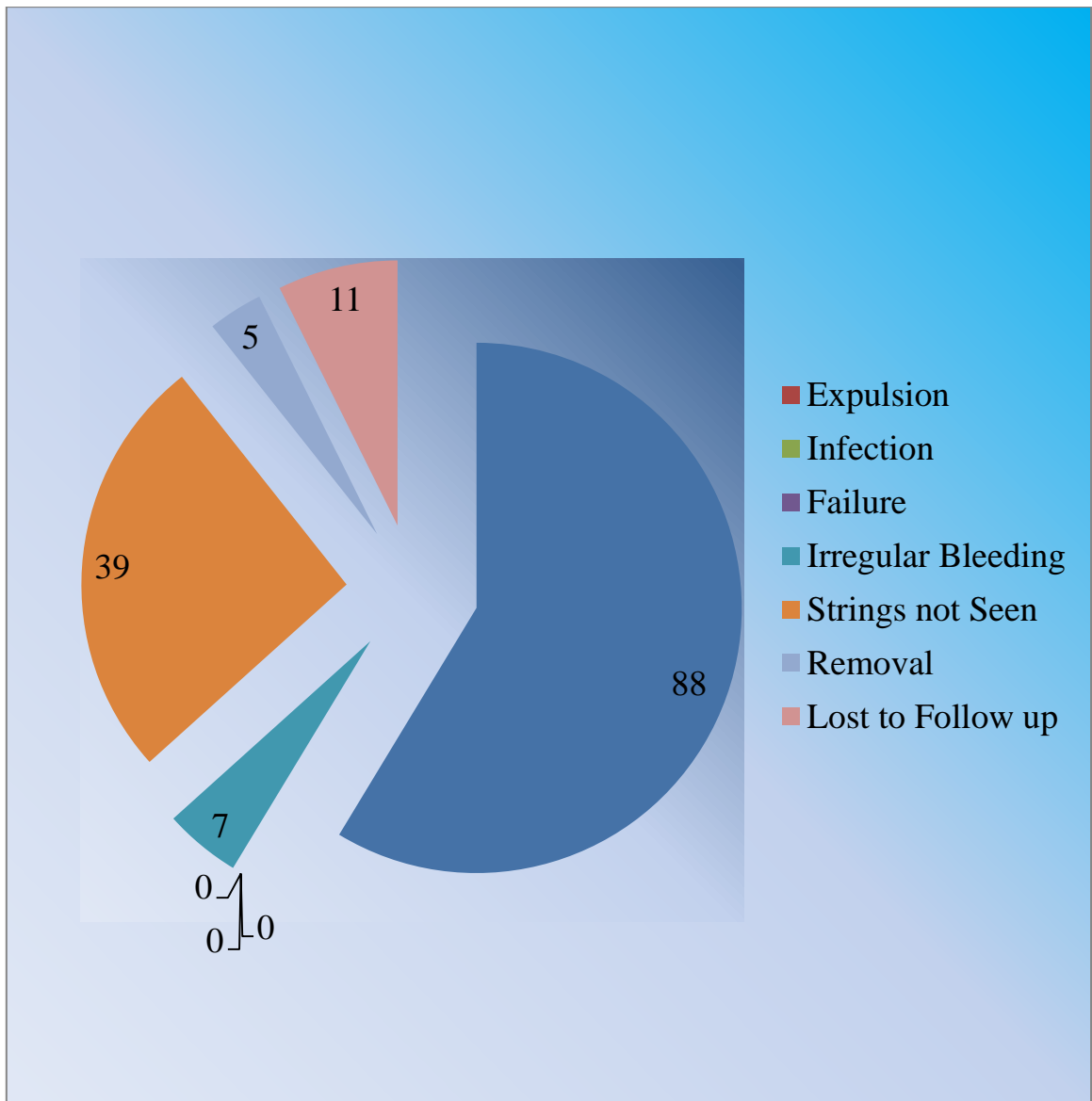
FOLLOW UP AT 3 MONTHS IN POSTPLACENTAL GROUP

- Totally 12 cases (8%) were lost to follow up.138 cases returned for follow up.
- Expulsions in this group were 0.72% (1 case).
- Irregular bleeding was major complaint in 6 cases (4.35%).
- Strings were seen in 106 cases (76.81%).
- Removal of copper T was done in 3 cases (2.17%).It was done at patient's request in case of parity 2 who were willing for interval sterilisation.
- No cases of infection or failure were reported.

TABLE 11**3 MONTHS FOLLOW UP IN INTRACAESAREAN
GROUP**

		Intra caesarean		Total
		Yes	No	
Expulsion	Count	-	139	139
	%	-	100%	100%
Infection	Count	-	139	139
	%	-	100%	100%
Failure	Count	-	139	139
	%	-	100%	100%
Irregular Bleeding	Count	7	132	139
	%	5.04%	94.96%	100%
Strings Seen	Count	100	39	139
	%	71.94%	28.05%	100%
Removal	Count	5	134	139
	%	3.6%	96.4%	100%

3 MONTHS FOLLOW UP IN INTRACAESAREAN GROUP



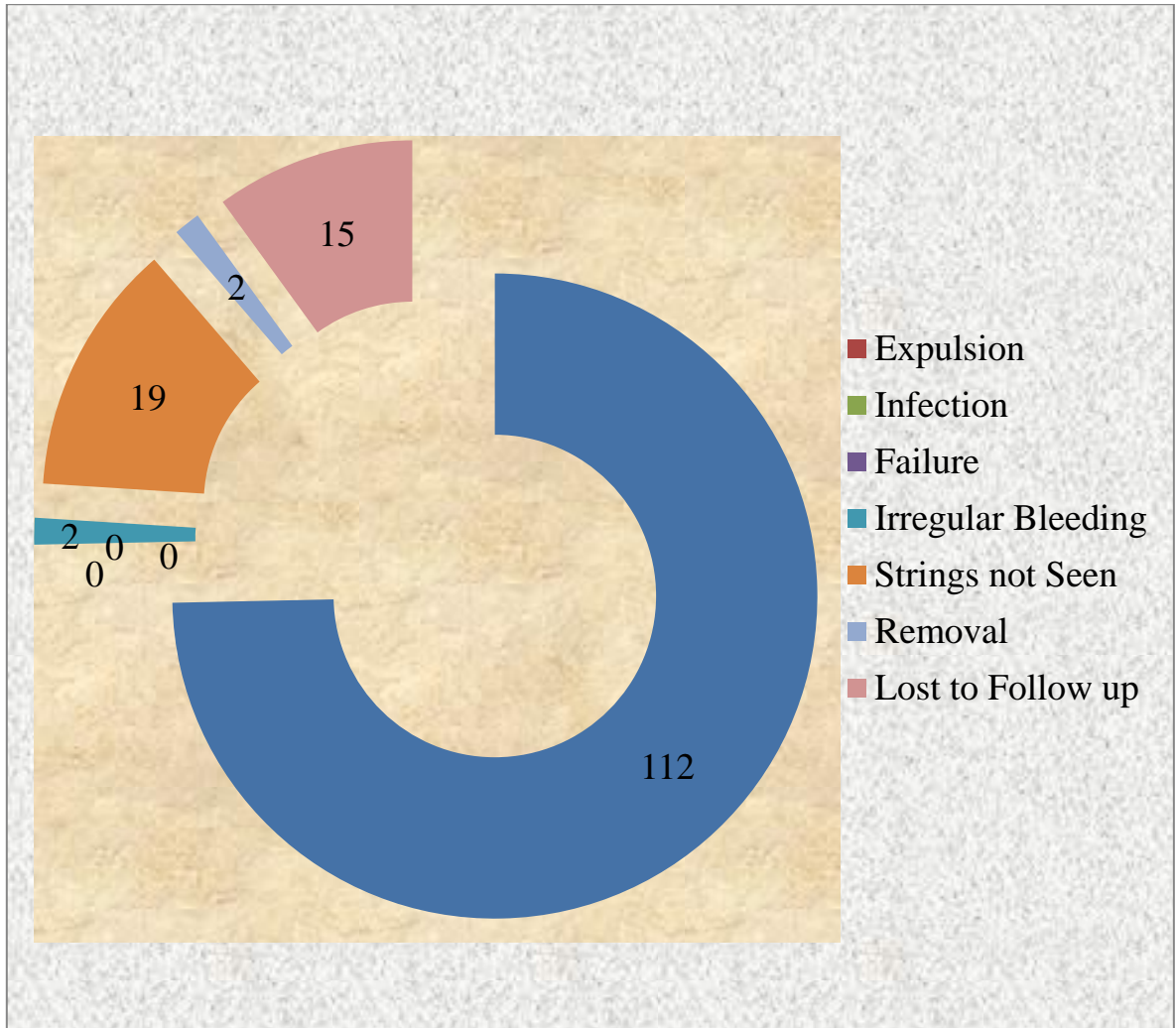
FOLLOW UP AT 3 MONTHS IN INTRACAESAREAN GROUP

- Totally 11 cases (7.33%) were lost to follow up. 139 cases returned for follow up.
- Irregular bleeding was major complaint in 7 cases (5.04%).
- Strings were seen in 100 cases (71.94%).
- Removal of copper T was done in 5 cases (3.6%). It was done at patient's request in 3 cases of parity 2 who were willing for interval sterilisation, 2 cases due to irregular bleeding complaint.
- No cases of infection or failure or expulsions were reported.

TABLE - 12**6 MONTHS FOLLOW UP IN POST PLACENTAL
GROUP**

		Post Placental		Total
		Yes	No	
Expulsion	Count	-	134	134
	%	-	100%	100%
Infection	Count	-	134	134
	%	-	100%	100%
Failure	Count	-	134	134
	%	-	100%	100%
Irregular Bleeding	Count	2	132	134
	%	1.49%	98.51%	100%
Strings Seen	Count	115	19	134
	%	85.82%	14.18%	100%
Removal	Count	2	132	134
	%	1.49%	98.55%	100%

6 MONTHS FOLLOW UP IN POST PLACENTAL GROUP



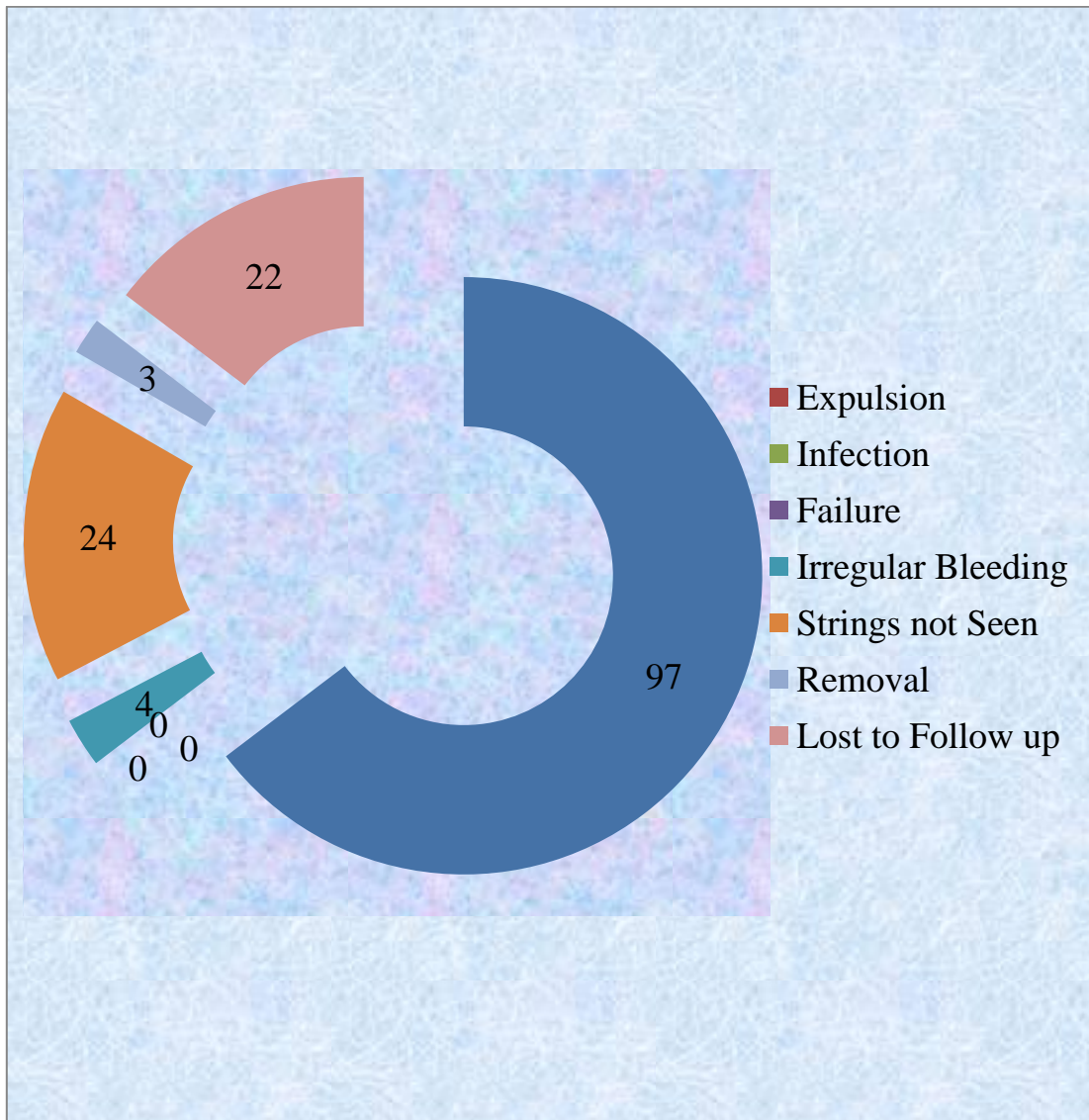
FOLLOW UP AT 6 MONTHS IN POSTPLACENTAL GROUP

- Totally 16 cases (10.6%) were lost to follow up. 134 cases returned for follow up.
- Irregular bleeding was major complaint in 2 cases (1.49%).
- Strings were seen in 115 cases (85.82%).
- Removal of copper T was done in 2 cases (1.49%). It was done in 2 cases who had similar complaint of bleeding at 3rd month.
- No cases of infection or failure or expulsions were reported.

TABLE 13**6 MONTHS FOLLOW UP IN INTRACAESAREAN
GROUP**

		Intracaesarean		Total
		Yes	No	
Expulsion	Count	-	128	128
	%	-	100%	100%
Infection	Count	-	128	128
	%	-	100%	100%
Failure	Count	-	128	128
	%	-	100%	100%
Irregular Bleeding	Count	4	124	128
	%	3.13%	96.88%	100%
Strings Seen	Count	104	24	128
	%	81.25%	18.75%	100%
Removal	Count	3	125	128
	%	2.34%	97.66%	100%

6 MONTHS FOLLOW UP IN INTRACAESAREAN GROUP



FOLLOW UP AT 6 MONTHS IN INTRACAESAREAN GROUP

- Totally 22 cases (14.6%) were lost to follow up. 128 cases returned for follow up.
- Irregular bleeding was major complaint in 4 cases (3.13%).
- Strings were seen in 104 cases (81.25%).
- Removal of copper T was done in 3 cases (2.34%). It was done in 2 cases who had similar complaint of bleeding at 3rd month and 1 case due to patient's concern of missing strings though USG showed IUCD location in uterus.
- No cases of infection or failure or expulsions were reported.

TABLE 14

OVERALL FOLLOW UP RESULTS

	Post Placental	Intra caesarean
Expulsion	11 (7.33%)	1 (0.66%)
Infection	-	-
Failure	-	-
Irregular Bleeding	8 (5.33%)	12 (8%)
Strings Seen	115 (76.6%)	104 (69.3%)
Removal	7 (4.66%)	8 (5.33%)

p value in expulsion group is 0.003** which is significant.

P value in removal group is 0.79 which is not significant.

OVERALL FOLLOW UP RESULTS

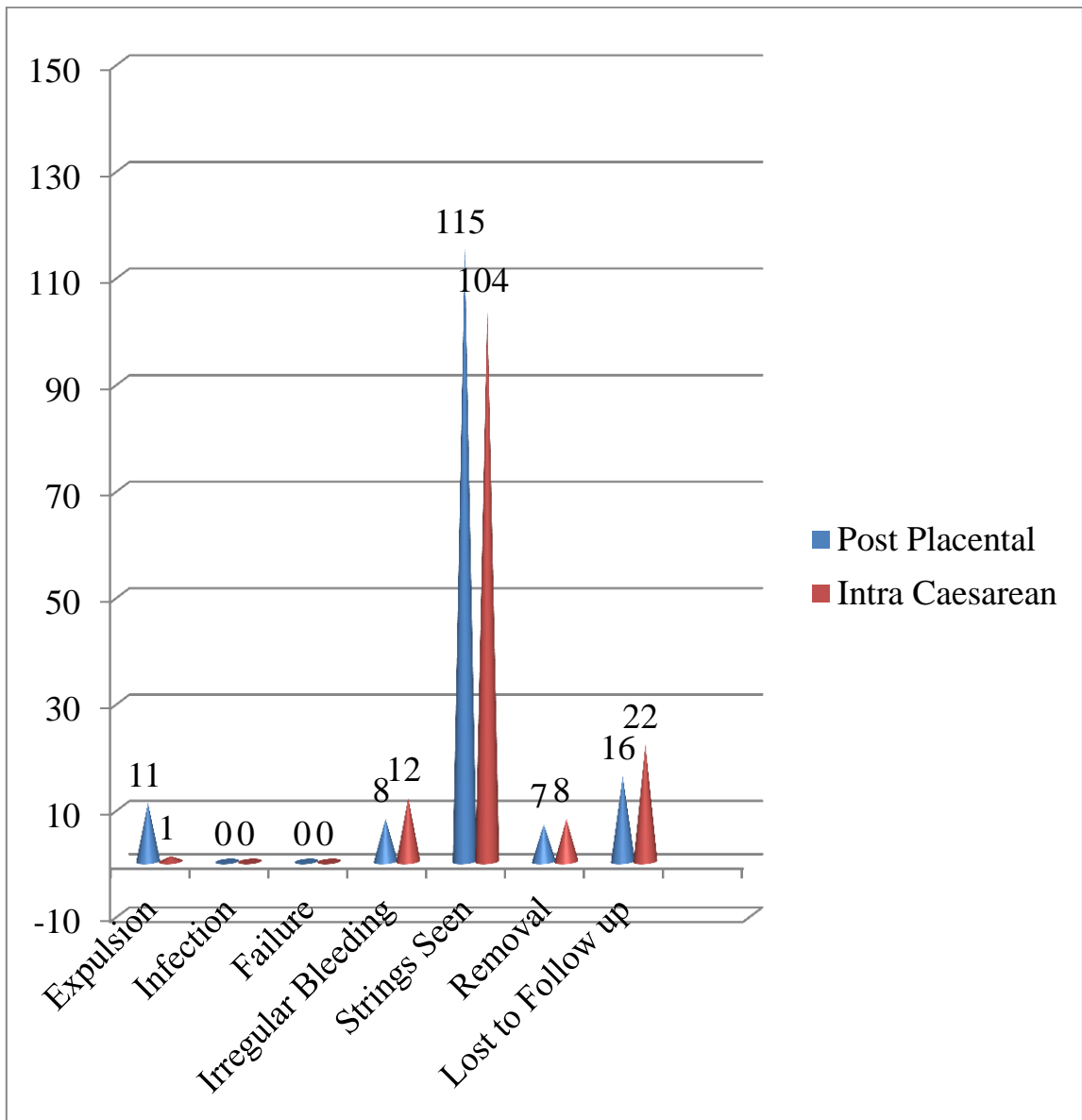


TABLE - 15

TOTAL EXPULSION RATES

Follow-up Period	Post placental	Intra caesarean
6 Weeks	10(6.66%)	1(0.66%)
3 Months	1(0.72%)	0
6 Months	0	0
Total	11(7.33%)	1(0.66%)

Expulsion rates are higher in post placental group when compared to intra caesarean group.

Expulsion

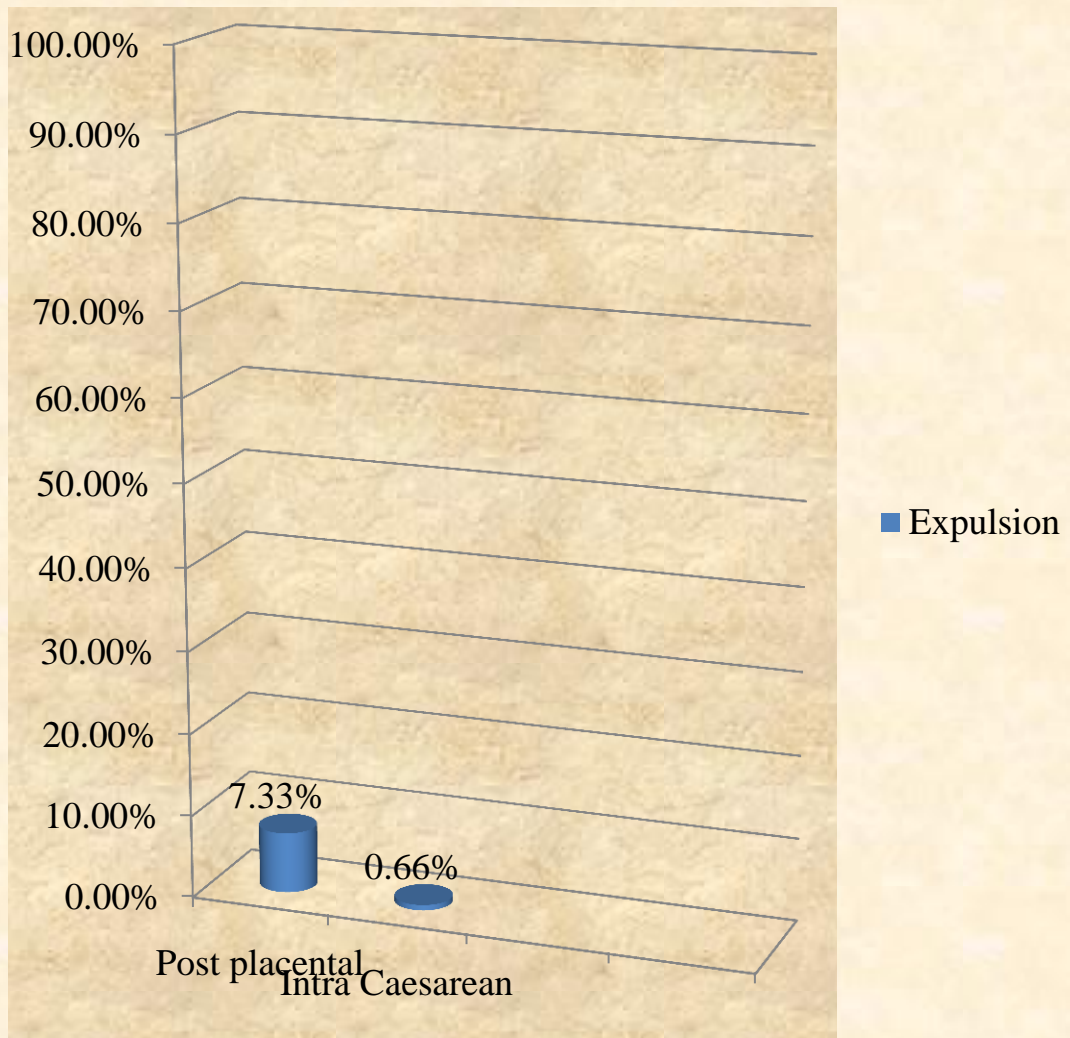


TABLE 16

TOTAL REMOVAL RATES

Follow-up Period	Post placental	Intra caesarean
6 Weeks	2(1.33%)	0
3 Months	3(2.17%)	5(3.59%)
6 Months	2(1.49%)	3(2.34%)
Total	7(4.66%)	8(5.33%)

Removal rates were 4.66% in post placental group and 5.33% in intra caesarean group respectively.

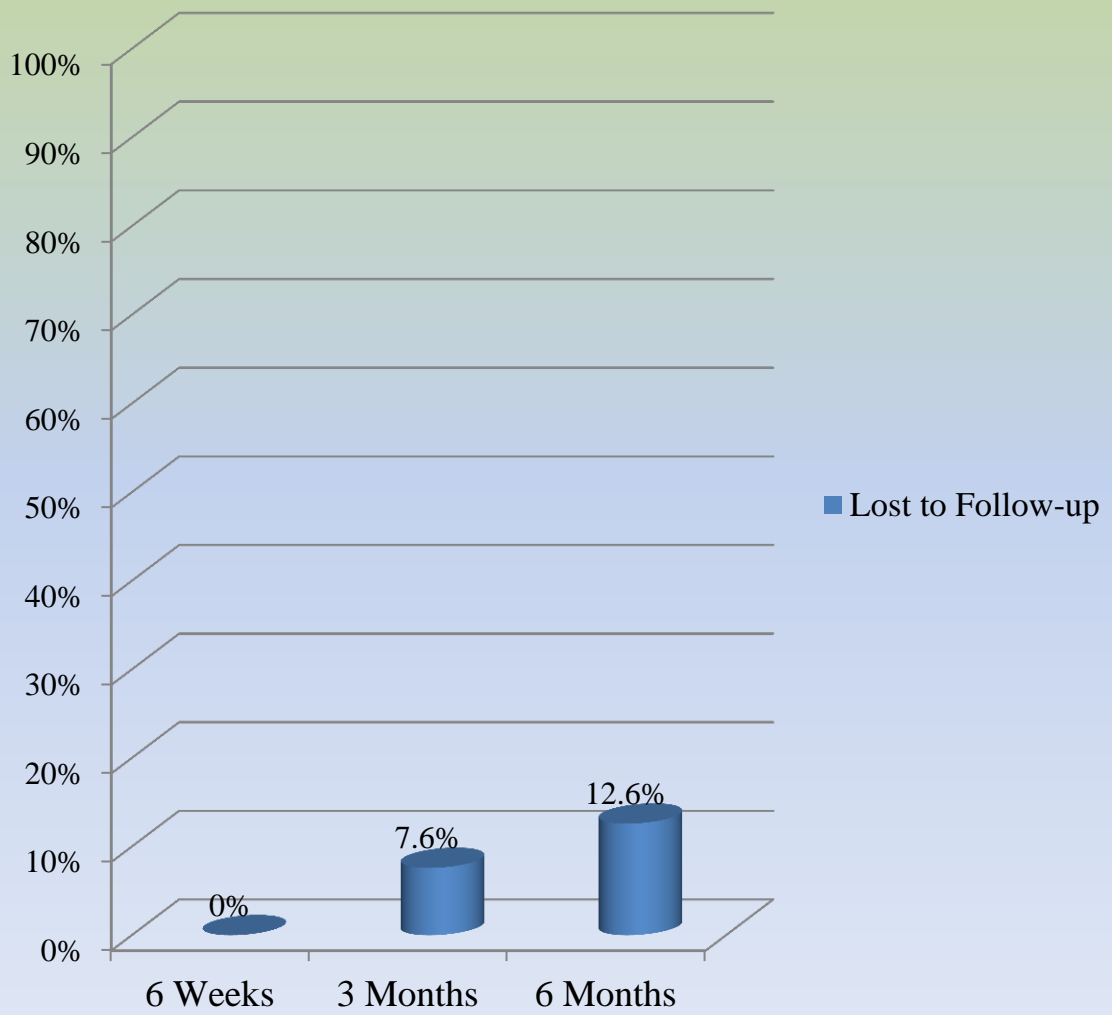
TABLE – 17

LOST TO FOLLOW-UP

Follow-up Period	Post placental	Intra caesarean	Total
6 Weeks	0	0	0
3 Months	12	11	23 (7.6%)
6 Months	16	22	38 (12.6%)

Totally 12.6% did not return for follow up.

Lost to Follow-up



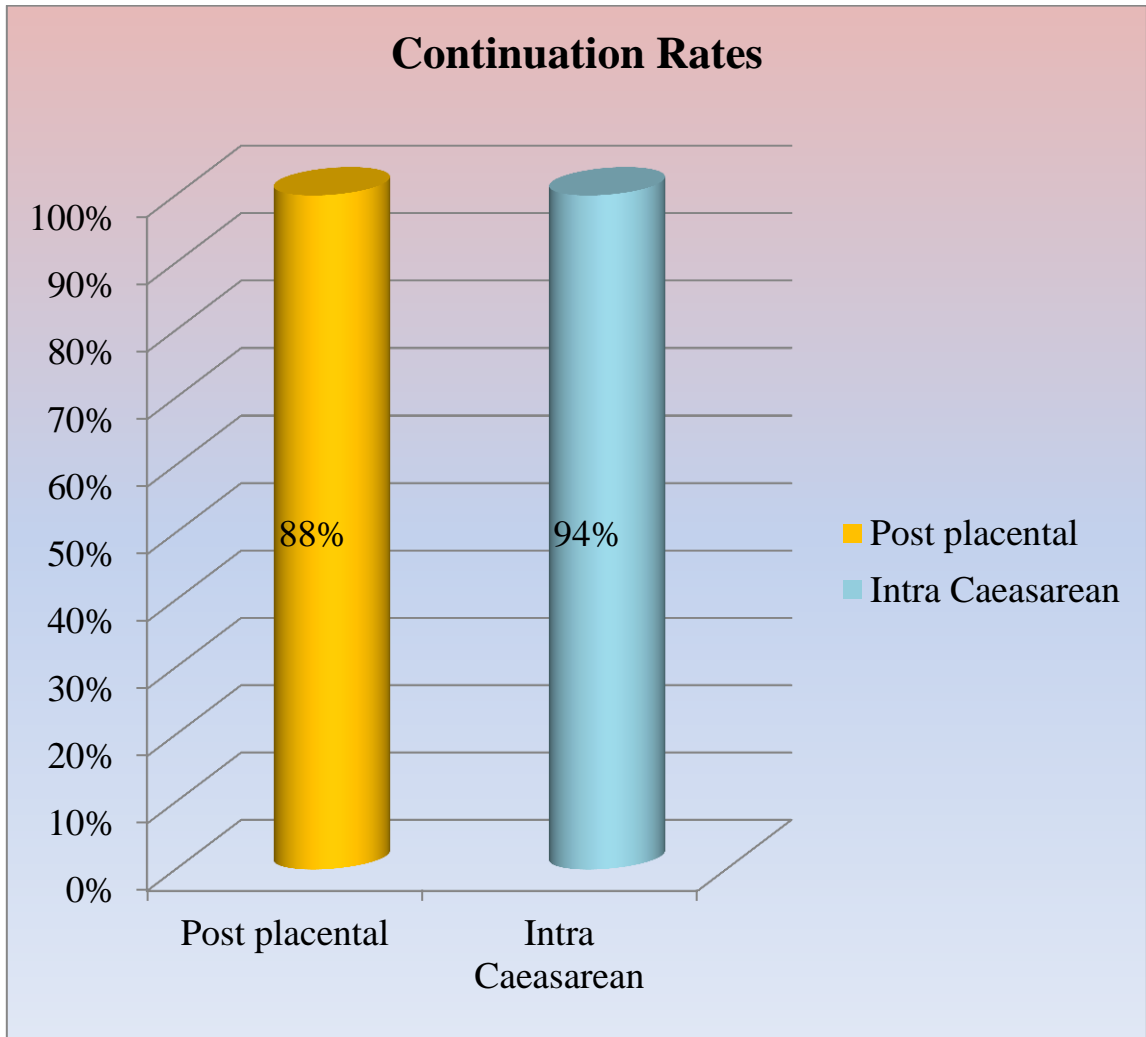
CONTINUATION RATES

TABLE 18

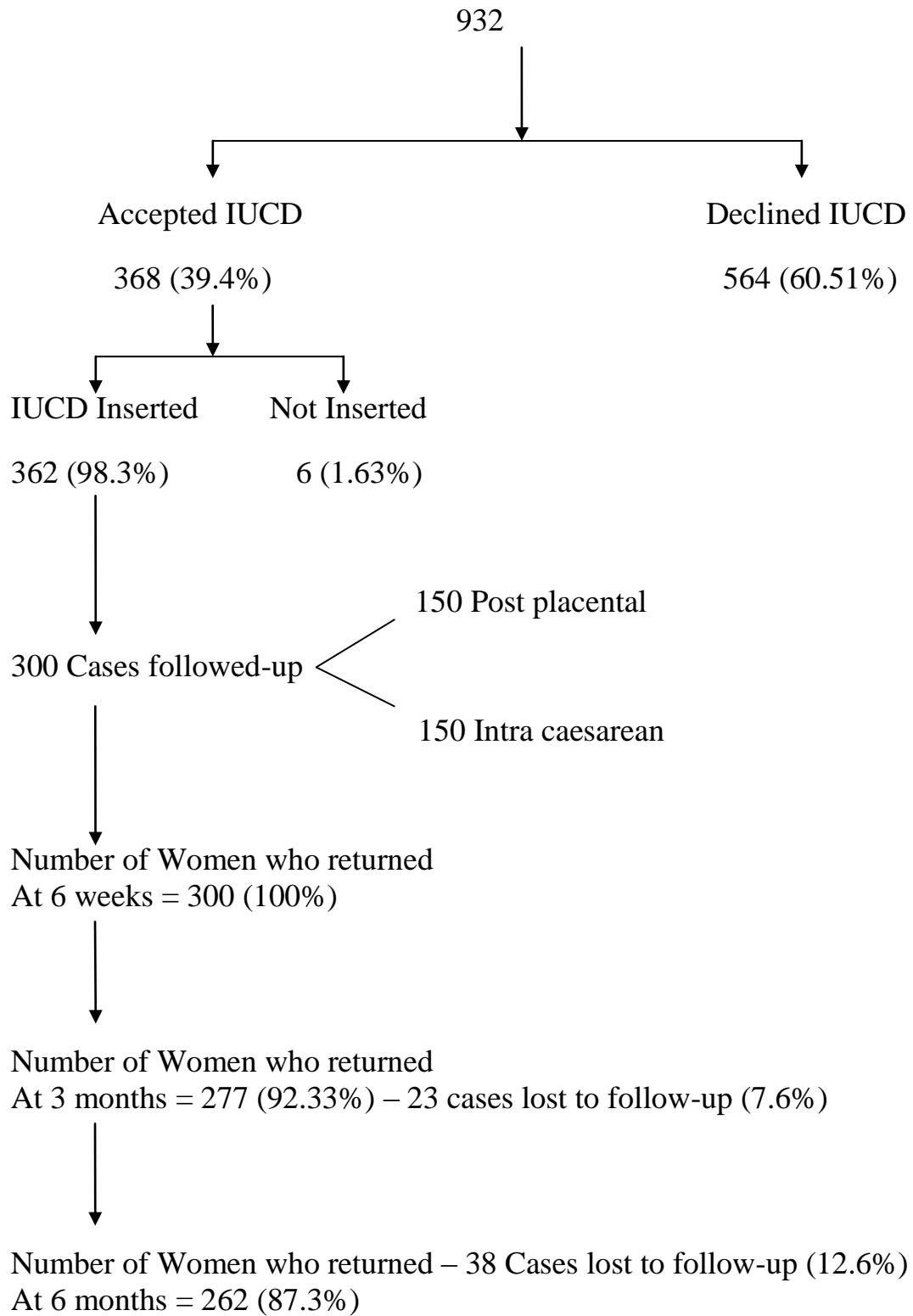
			Continuation Rates
Post placental	Expulsion	11 (7.33%)	132 (88%)
	Removal	7 (4.66%)	
Intra Caesarean	Expulsion	1 (0.66%)	141 (94%)
	Removal	8 (5.33%)	

Continuation rates were 88% in post placental group and 94% in intra caesarean group.

CONTINUATION RATES



TOTAL ANTENATAL WOMEN COUNSELLED



DISCUSSION

DISCUSSION

This study is conducted at RSRM Lying in Hospital, to assess the acceptance and insertion rates of PPIUCD among antenatal women admitted in labour ward and in early labour who were eligible for PPIUCD insertion. Total deliveries from January to March 2014 were 2200.

About 932 women were eligible for insertion and hence counselling given. 368 antenatal women accepted this method (39.4%) and among them 362 were inserted (38.8%).The difference in acceptance and insertion is because 2 cases had distorted uterine cavity due to fibroid during caesarean section and 4 developed PPH after delivery. Gupta et al³⁶ study shows acceptance rate as 14.4%.

300 women who had PPIUCD inserted -150 after normal vaginal delivery,150 after caesarean section were followed up at 6 weeks,3 months and 6 months to find the expulsion ,removal and continuation rates. The remaining women wanted to have their follow up visit at nearby hospital.

Many of earlier studies compared Lippes loop with copper bearing IUCD models and found that effectiveness was significantly lower for Lippes loop in immediate postplacental insertion³⁴.(chi et al 1985).

In this study majority of those inserted with PPIUCD belong to age group – 21-25 years.53.5% in post placental and 58.5% in intra caesarean group. Majority belong to parity 1 (80.11%).

Majority of them studied up to secondary education. 48.9% in post placental and 57.3% in intra caesarean group.

The overall expulsion rates were 7.33% in post placental group and 0.66% in intra caesarean group at end of 6 months shows a significant difference ($p=0.003^{**}$).Celen s et al³⁵ showed 1 year expulsion rate of 12% in immediate PPIUCD insertion .Gupta et al³⁶ showed 6 months expulsion rates as 6.6 % and 2% in both groups.

Shangai and Rivera et al³⁷ showed no significant difference in continuation rates when IUCD is inserted manually by hand or forceps. Gozmann et al¹⁸ in 1993 showed expulsion rate of 7-15% at 6 months.

Morrison et al³⁸ reported that age and parity did not affect expulsion rates.

In our study, total expulsions occurred in 12 cases. Majority of expulsions occurred in parity 2 – 8 cases (66.66%).

7 cases in post placental at 6 weeks, 1 case in intra caesarean group. The expulsion rates were 6.66%, 0.34%, at 6 weeks, 3 months respectively in post placental and 0.79% at 6 weeks in intra caesarean group.

Expulsion rates gradually reduced from 1st to 6th month.

Study of chi et al 1985³⁴ and cole 1984 shows that experience of the provider may influence expulsion rates.

A turkey study³⁹ showed rates of complete expulsions as

14% - following insertion < 10 minutes.

19% - 10 minutes to 48 hours insertion.

4% - IUCD inserted > 6 weeks after delivery.

Irregular bleeding occurred in 8 cases (5.33%) in post placental and 12 cases (8%) in intra caesarean group. The rates at 6 weeks, 3 months, 6 months were 1.33%, 4%, 1.51% and 1.33%, 4.66%, 2.66% respectively in each group.

Most patients do not complain bleeding because any bleeding due to IUCD will be disguised by lochia - cochrane database .Gupta et al³⁶ showed bleeding rates as 3.33% and 5.33% in both groups.

Overall removal rate is 5% (15 cases).Removal was done in 7 cases (4.66%) in post placental and 8 cases (5.33%) in intra caesarean group.

Post placental group-3 cases due to bleeding, 4 cases belong to parity 2 willing for interval sterilisation.

Intra caesarean group-4 cases due to bleeding, 4 cases belong to parity 2 willing for interval sterilisation,1 at patients request due to missing string.

Irregular bleeding(46.6%) was found to be the major complaint for removal.

Zhou SW et al⁴⁰ (1991) showed removal rates as 4.6%and 4.2% respectively in both groups.

There was no failure or infection or perforation in our study. Thiery et al⁴¹ 1985 showed failure rate of 0.85% following post placental insertion.

Rates of perforation was very low following post placental approximately 1 in each population with patient ranging from 1150-3800(cole 1984)⁴².

Roz velarto et al, Zachariar et al⁴³ 1986 showed lactation was not affected by post placental insertion.

Younis et al 1993 showed that uterine involution is not affected. Threads were visualised in 76.6% in post placental and 69.3% in intra caesarean group respectively. Kittur et al 2012⁴⁴ showed copper T to be in situ in 94.78% and ultra sonogram done in 24.76% to find its location in cases where strings were not visible.

16 cases (10.6%) in post placental and 22 cases (14.66%) in intra caesarean group did not come for follow up.

Overall continuation rates were- 88% vs 94% in both groups respectively. In Celen S study³⁵, the continuation rates were 81.6% and 62% at 6 and 12 months, respectively in intra caesarean copper T insertion.

SUMMARY

SUMMARY

The summary of this study conducted at RSRM Lying in hospital in women who were willing for PPIUCD insertion is as follows. Eligible women were counselled and recruited on the basis of medical eligibility criteria. Women were excluded from the study if they are not willing for PPIUCD insertion, had ruptured membranes > 18 hours, maternal fever, uterine anomalies , myoma uterus, anaemia and postpartum haemorrhage.

Among those who were counselled, 368 accepted for PPUCD insertion- the acceptance rate being 39.4%.

Among those who accepted actual insertion was done in 362 (2 had distorted uterine cavity due to myoma uterus,4 had PPH) – actual insertion rate being 38.8%.

PPIUCD was inserted after getting an written informed consent.300 cases (150 in post placental insertion, 150 in intra caesarean) were followed up at 6 weeks,3months and 6 months.

A detailed history was elicited and thorough general and systemic examination was done before PPIUCD insertion and during follow up. The results are interpreted by chi- square tests.

In this study majority are in age group 21-25 years.53.5% in post placental group and 58.5% in intra caesarean group.

Majority of them are educated and belong to secondary education.(48.9% in postplacental,57.3% in intra caesarean group) and this shows that they accept this method better than those who were not educated.(7.57% in postplacental,8.53% in intra caesarean group). There were few graduates (6.56% and 8.53% respectively in both groups) because majority of antenatal women coming to our hospital belong to low socio economic status.

80.11% belong to primi parity as majority of multiparous women were willing for a permanent method of sterilisation.

Total expulsions were in 12 cases - 11(7.33%) cases in post placental and 1 case (0.79%) in intra caesarean group.10 cases (6.7%) vs 1 case (0.7%) in each group respectively had expulsions at 6 weeks shows a significant difference with p value of 0.006.expulsions occurred mainly in parity 2 - 66.6%.Rates were found to decrease from 6 weeks to 6 months.

Irregular bleeding occurred in 5.33% in post placental and 8% in intra caesarean group.

Threads were visualised in 76.6% in post placental and 69.3% in intra caesarean group respectively.

Overall removal rate is 5% (15 cases). Removal was done in 7 cases(4.66%) in post placental and 8 cases(5.33%) in intra caesarean group. The major reason for removal due to complication was irregular bleeding in 7 cases(46.6%). 7 cases belonging to parity 2 were willing for interval sterilisation.

No cases of infection or failure was noted. 16 cases(10.6%) in post placental and 22 cases (14.66%) in intra caesarean group did not come for follow up.

Overall continuation rates were- 88% vs 94% in both groups respectively.

CONCLUSION

CONCLUSION

This study was conducted to assess the acceptability of PPIUCD in order to address the need for postpartum spacing methods. Acceptance was found to be higher in primi parity and in age group 21-25 years. Follow up results show that PPIUCD was demonstrably safe, having no reported incidence of infection, failure, perforation with low rates of expulsion, bleeding and lost strings. Though expulsion rates are high in post placental group compared to intra caesarean group, the continuation rates were high in both groups and thus this method gives a great opportunity for postpartum woman to receive a long acting, safe contraceptive method before leaving the hospital – a step towards diminishing the unmet need of family planning.

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BIBLIOGRAPHY

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ANNEXURES

ABBREVIATIONS

PPIUCD	-	Post partum intrauterine contraceptive device
IUCD	-	Intrauterine contraceptive device
MOH	-	Ministry of Health
JHPEIGO	-	John Hopkins Program for International Education in Gynaecology and Obstetrics.
FHI	-	Family Health International
STD	-	Sexually Transmitted Diseases
JSY	-	Janani Suraksha Yojana
PROM	-	Premature rupture of membranes
USAID	-	United States Agency for International Development
MEC	-	Medical Eligibility Criteria
WHO	-	World Health Organisation
USFDA	-	United States Food and Drug Administration
ESR	-	Erythrocyte Sedimentation rate
PPH	-	Post Partum Haemorrhage

PROFORMA

1. Name

2. Age

3. IP NO.

4. Address with phone number

5. Education status

6. Menstrual history

7. Obstetric h/o.

8. PPIUCD – accepted/declined

7. Obstetrics events - Fever

Anatomic uterine abnormality

Post partum haemorrhage

8. Consent for PPIUCD insertion with signature

9. General examination

10. Abdominal examination

11. Bimanual pelvic examination followed by insertion

12. Time of insertion

-post placental

-intra caesarean

13. Date of insertion

14. Follow up schedule 6wks 3mths 6mths

15. Speculum examination - for visualisation of strings

16. Bimanual pelvic examination if any complaint

17. At each time of follow up visit

Client satisfaction

Any complaints of

Irregular bleeding P/V

Foul smelling vaginal discharge

Fever

Expulsion

Pain

Missing strings

Request for removal

Reason for removal

Pregnancy

18. Ultrasonogram when thread not visualised.

Please return to Hospital when you develop the following;

- Missed periods
- Excessive vaginal bleeding which is not normal
- Excessive abdominal pain
- Abnormal vaginal discharge (foul smelling, increased amount, discoloured)
- Fever or chills
- Lost strings

தகவல் படிவம்

ஸ்டான்லி மருத்துவமனையின் ஆர். எஸ். ஆர். எம். மருத்துவமனையில் மகப்பேறு மற்றும் பெண்கள் நல மருத்துவ துறையில் மேற்கொள்ளப்படும் ஆய்வு தொடர்பான தகவல் படிவம் இது.

இந்த ஆய்வு மரு. ர.ப்ரியா, அவர்களால் அனுபவம் வாய்ந்த மருத்துவர்களின் உதவியோடு நடத்தப்படுகிறது.

இந்த ஆய்வு கருத்தடை சாதனம் (Copper-T) பற்றியதாகும். இதில் பிரசவத்திற்கு பிறகு நஞ்சுகொடி வெளியான உடன் போடப்படும் கருத்தடை சாதனத்தின் பயன்பாட்டினை கர்பிணி பெண்களுக்கு எடுத்துரைத்து, அதனை பிரசவத்திற்கு பிறகு பொருத்திக்கொள்ள முன் வருபவர்களை மட்டுமே வைத்து ஆய்வு மேற்கொள்ளப்படுகிறது.

இந்த ஆய்வு பெண்கள் தங்கள் சுயவிருப்பத்துடன் முன்வந்தால் மட்டுமே மேற்கொள்ளப்படும்.

ஓப்புதல் படிவம்

திரு. / திருமதி.

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என்ற விலாசத்தில் வசிக்கும் நான், எனக்கு அளிக்கப்பட்ட தகவல் படிவத்தில் உள்ள விவரங்களை படித்தும், கேட்டும் புரிந்து கொண்டேன்.

ஆய்வின் முடிவினை சொந்த அடையாளங்களை வெளியிடாமல் மருத்துவ ஆராய்ச்சிக்காக பயன்படுத்திக் கொள்ள சம்மதிக்கிறேன்.

நாள் :

கையொப்பம்

இடம் :

பெயர்

INSTITUTIONAL ETHICAL COMMITTEE,
STANLEY MEDICAL COLLEGE, CHENNAI-1

Title of the Work : Study on acceptability and follow up of Post partum
Intrauterine contraceptive device in a tertiary care
hospital.

Principal Investigator : Dr. Priya R

Designation : PG MS (O&G)

Department : Department of Obstetrics & Gynaecology
Government Stanley Medical College,
Chennai-01

The request for an approval from the Institutional Ethical Committee (IEC) was considered on the IEC meeting held on 02.07.2014 at the Council Hall, Stanley Medical College, Chennai-1 at 2PM

The members of the Committee, the secretary and the Chairman are pleased to approve the proposed work mentioned above, submitted by the principal investigator.

The Principal investigator and their team are directed to adhere to the guidelines given below:

1. You should inform the IEC in case of changes in study procedure, site investigator investigation or guide or any other changes.
2. You should not deviate from the area of the work for which you applied for ethical clearance.
3. You should inform the IEC immediately, in case of any adverse events or serious adverse reaction.
4. You should abide to the rules and regulation of the institution(s).
5. You should complete the work within the specified period and if any extension of time is required, you should apply for permission again and do the work.
6. You should submit the summary of the work to the ethical committee on completion of the work.



MEMBER SECRETARY,
IEC, SMC, CHENNAI

MASTER CHART

32	VINISHRI	21	1264	P1L1	BCOM	25.1.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
33	NAGAVALI	18	1297	P1L1	10TH	26.1.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
34	KALAISELVI	24	1327	P2L2	12TH	26.1.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
35	KALPANA	21	1374	P1L1	NIL	27.1.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO
36	GAYATHRI	20	1368	P1L1	10TH	27.1.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
37	LAVANYA	20	1408	P1L1	6TH	27.1.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
38	YAMINI	21	1455	P1L1	NIL	30.1.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
39	KARPAGAM	25	1452	P1L1	5TH	30.1.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
40	SANGEETHA	29	1447	P2L2	12TH	31.1.14	YES	NO	NO	NO	NO	NO														
41	PREMAKUMARI	20	1481	P1L1	12TH	31.1.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO
42	UMA	21	1505	P1L1	BA	31.1.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
43	SHOBANA	20	1515	P1L1	9TH	1.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
44	VIJI	19	1547	P1L1	6TH	1.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
45	CHITHRA	21	1628	P1L1	NIL	1.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
46	KALAIIVANI	22	1640	P1L1	10TH	1.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO
47	DEVIKA	21	1714	P1L1	10TH	2.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
48	RAGINI	21	1757	P2L2	10TH	2.2.14	NO	NO	NO	NO	YES	NO		YES	NO	NO	NO	YES	NO							
49	DIVYA	19	1763	P1L1	10TH	2.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
50	LAKSMI	29	177	P2L2	BBA	3.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
51	SHARMILA	24	1749	P1L1	8TH	3.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
52	GAYATHRI	20	1789	P1L1	6TH	3.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
53	DEIVANAI	20	1799	P1L1	12TH	4.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
54	REKHA	20	1852	P1L1	12TH	4.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	YES	NO	NO		NO	NO	NO	NO	YES	NO
55	RAJATHI	24	1849	P1L1	12TH	4.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
56	SOWMYA	21	1857	P1L1	10TH	4.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
57	NEELI	24	1898	P1L1	NIL	4.2.14	YES	NO	NO	NO	YES	NO														
58	PAVITHRA	21	1899	P1L1	10TH	5.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
59	PONNI	23	1956	P1L1	8TH	5.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
60	DHANALAXMI	21	2019	P2L2	12TH	5.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
61	REVATHI	24	2018	P2L2	8TH	5.2.14	YES	NO	NO	NO	NO	NO														
62	THEJASRI	24	2251	P1L1	12TH	5.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
63	YESODA	21	2124	P1L1	10TH	5.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
64	REVATHY	19	2093	P1L1	12TH	6.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
65	BENZIR	19	2104	P1L1	10TH	6.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO
66	SINDU	19	2099	P1L1	10TH	6.2.14	NO	NO	NO	YES	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
67	PRIYA	23	2114	P1L1	12TH	6.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
68	MEENAKSHI	19	2162	P1L1	11TH	6.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
69	SHOBANA	23	2174	P2L2	9TH	6.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
70	YAMUNA	23	2096	P1L1	NIL	7.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
71	DEEPA	25	2175	P1L1	10TH	7.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
72	DEVIKA	26	2161	P2L2	8TH	7.2.14	YES	NO	NO	NO	YES	NO														
73	YASMIN	21	1409	P2L2	8TH	7.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	YES							

74	PARIMALA	21	1418	P1L1	10TH	7.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
75	KAVITHA	21	1372	P1L1	12TH	8.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
76	LOGANAYAKI	22	2153	P1L1	12TH	8.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
77	BANUSANKARI	19	2160	P1L1	12TH	8.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
78	SHEELA	22	2270	P1L1	12TH	9.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
79	RESHMA	19	2269	P1L1	12TH	9.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
80	SHEMSATH	21	2286	P1L1	NIL	9.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
81	REVATHY	21	2301	P1L1	7TH	9.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
82	CHITHRA	21	2307	P1L1	12TH	9.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
83	ASYADAS	18	2289	P1L1	9TH	10.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
84	DEIVANAI	19	2833	P1L1	10TH	10.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
85	GNANAPRIYA	21	2347	P1L1	BA	10.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
86	KALYANI	20	2348	P1L1	12TH	10.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
87	MAHALAXMI	30	2353	P2L2	MA	10.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	YES							
88	ABIRAMI	24	2140	P2L2	NIL	11.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
89	GEETHA	19	2385	P1L1	6TH	11.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	YES	YES	NO		NO	NO	NO	YES	YES	YES
90	MONISHA	20	2365	P1L1	10TH	12.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
91	PREMAKUMARI	25	2380	P1L1	12TH	12.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
92	NAGAVALI	20	2396	P1L1	10TH	12.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
93	ARCHANA	25	2401	P1L1	12TH	12.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
94	MAHIBU	20	2430	P1L1	9TH	12.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
95	INDUMATHI	19	2467	P1L1	12TH	13.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
96	ANTHONI	19	2476	P1L1	11TH	13.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
97	BABITHA	20	2420	P1L1	5TH	14.2.14	YES	NO	NO	NO	NO	NO														
98	ASWINI	20	2488	P1L1	NIL	14.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
99	MALLIKA	27	2492	P2L2	NIL	14.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	YES	YES	NO		NO	NO	NO	NO	YES	NO
100	SUMITHA	22	2458	P1L1	12TH	14.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
101	KRISNAVENI	23	2491	P1L1	9TH	14.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
102	SIVAGAMI	19	2054	P1L1	8TH	15.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
103	PRIYA	19	2560	P1L1	12TH	15.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
104	INDUMATHI	21	2611	P1L1	12TH	16.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
105	MURUGAVALI	21	2615	P1L1	10TH	18.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO
106	MAHALAXMI	21	2568	P1L1	BSC	18.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
107	EPSIBA	21	2612	P1L1	10TH	18.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO
108	MAHESWARI	21	2622	P1L1	10TH	18.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
109	DEVI	26	2617	P2L2	8TH	18.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
110	SUBASRE	21	2599	P2L2	8TH	18.2.14	YES	NO	NO	NO	NO	NO														
111	MUTHAMA	21	2138	P1L1	5TH	19.2.14	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
112	SANDIYA	19	2657	P1L1	10TH	19.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
113	ANJALI	21	2666	P1L1	7TH	20.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO
114	SUMATHI	21	2446	P1L1	NIL	20.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	YES	YES	NO		NO	NO	NO	NO	YES	NO
115	UMA	21	2609	P1L1	8TH	20.2.14	NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO		NO	NO	NO	NO	YES	NO

116	NAVOMI	22	2694	P1L1	5TH	20.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
117	GEETHA	23	2690	P1L1	BA	20.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
118	KOUSALYA	19	2579	P1L1	10TH	21.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
119	MANILA	20	2331	P2L2	10TH	21.2.14	YES	NO	NO	NO	NO	NO												
120	PACHAIMAL	26	2737	P2L2	12TH	22.2.14	NO	NO	NO	NO	YES	YES												
121	SANDIYA	21	2714	P1L1	12TH	23.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
122	SUREKHA	20	2665	P1L1	12TH	25.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
123	KALAIARASI	24	2588	P2L2	8TH	25.2.14	YES	NO	NO	NO	NO	NO												
124	AMSA	23	2750	P1L1	10TH	25.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
125	NAGAMMAL	22	2875	P1L1	7TH	25.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
126	MANJU	20	2833	P1L1	NIL	25.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	YES	NO
127	KANAGA	22	2730	P1L1	NIL	26.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
128	TAMILARASI	19	2856	P1L1	10TH	26.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
129	VANITHA	21	2892	P1L1	10TH	26.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
130	BANUSANKARI	18	2886	P1L1	8TH	27.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
131	PAVITTHRA	19	2915	P1L1	NIL	27.2.14	NO	NO	NO	YES	YES	YES												
132	DANABAGYAM	20	2930	P1L1	6TH	28.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
133	SASIKALA	21	2924	P1L1	11TH	28.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
134	NANDINI	20	3033	P1L1	BCOM	1.3.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
135	KANMANI	24	2981	P2L2	12TH	1.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
136	RANJANI	21	3042	P1L1	7TH	2.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
137	VASANTHI	22	3094	P1L1	8TH	5.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
138	RAJALAXMI	24	3041	P1L1	12TH	5.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
139	SANKARI	19	2985	P1L1	8TH	6.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
140	MOBIN	22	3068	P1L1	10TH	6.3.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
141	PRIYA	19	3143	P1L1	10TH	6.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
142	KAVITHA	22	3149	P1L1	8TH	8.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
143	KOUSALYA	28	3153	P2L2	8TH	9.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
144	HEMAVATHI	21	3161	P1L1	8TH	9.3.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
145	KALPANA	19	3142	P1L1	12TH	9.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
146	SANGEETA	23	2601	P1L1	9TH	9.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
147	LOGESWARI	18	3270	P1L1	12TH	10.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
148	KALAIVANI	25	3265	P1L1	8TH	10.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
149	DIVYA	26	3280	P2L2	7TH	10.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
150	MONISHA	19	2496	P1L1	9TH	12.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO

32	TAMILARASI	24	1611	P1L1	10TH	12.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
33	THILAGAVATHY	20	1623	P1L1	7TH	13.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
34	JAYAGOWRI	35	1682	P1L1	9TH	14.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
35	SOWMYA	20	1644	P2L2	12TH	14.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
36	SHEELA	19	1725	P1L1	8TH	14.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
37	BHAVANI	21	1762	P1L1	10TH	14.1.14	NO	NO	NO	NO	YES	NO													
38	SUNITHA	23	1753	P1L1	12TH	15.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
39	RISWANA	20	1785	P1L1	9TH	15.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
40	ILLAMATHI	21	1793	P1L1	7TH	15.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
41	AZHAGURANI	23	1808	P1L1	NIL	15.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	YES	YES	YES	YES
42	INDHUMATHI	28	1700	P1L1	10TH	16.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
43	CHITRA	30	1752	P1L1	6TH	16.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
44	MALATHY	24	1837	P1L1	7TH	17.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
45	SIVAGAMI	30	1841	P1L1	NIL	17.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO							
46	RESHMA	25	1797	P1L1	NIL	17.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
47	ARIHA	17	1869	P2L2	9TH	17.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
48	DEEPA	22	1863	P1L1	8TH	18.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
49	VALLI	28	1817	P2L2	8TH	18.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO
50	JAINABEGUM	21	1816	P1L1	8TH	18.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
51	PRIYA	19	1892	P1L1	10TH	18.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
52	LATHIKA	22	1909	P1L1	NIL	19.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
53	SANGEETHA	21	1972	P2L2	7TH	19.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
54	VIJAMMAL	21	1948	P1L1	12TH	20.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO							
55	GOMATHI	22	1987	P1L1	NIL	20.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
56	PAVITHARA	21	1989	P1L1	MSC	21.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
57	LATHA	19	1818	P1L1	8TH	21.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
58	MAHALAKSHMI	27	1965	P1L1	NIL	21.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
59	MAHESWARI	32	1981	P1L1	BSC	22.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
60	KALPANA	26	2256	P1L1	10TH	22.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
61	SUGANTHI	27	1993	P1L1	BCOM	22.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
62	ISHWARYA RANI	26	2127	P1L1	NIL	22.1.14	NO	NO	NO	NO	YES	NO													
63	SHEELA	28	2253	P2L2	MSC	23.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
64	STELLA MARY	29	2134	P1L1	5TH	23.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
65	MALA	22	2083	P1L1	12TH	23.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
66	SARATHI	23	2111	P2L2	12TH	24.1.14	NO	NO	NO	NO	NO	NO													
67	SANDHIYA	19	2113	P1L1	12TH	24.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO
68	ASWINI	20	2186	P2L2	10TH	24.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES						
69	SANDHAPRIYA	20	2184	P1L1	12TH	25.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
70	SAMUNDEESWARI	21	1981	P1L1	10TH	25.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO
71	CHELLI	21	2110	P1L1	12TH	25.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO

72	RAMESHWARI	22	2210	P1L1	NIL	26.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
73	REENA	30	2202	P1L1	12TH	26.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
74	PARVEEN	25	2180	P2L2	10TH	27.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
75	JOTHI	22	1836	P1L1	10TH	27.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
76	REKA	22	2283	P1L1	NIL	27.1.14	NO	NO	NO	NO	YES	NO												
77	REVATHI	25	2271	P1L1	10TH	28.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
78	NAGALAKMI	21	2167	P2L2	BCOM	28.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
79	NITHYA	21	2316	P1L1	BA	28.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
80	SANMADHI	21	2342	P1L1	9TH	28.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
81	VADHINI	21	2321	P1L1	NIL	28.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
82	SHAMI	23	2367	P1L1	7TH	29.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
83	JAYANTHI	20	2118	P1L1	7TH	29.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
84	NADHIYA	22	2387	P2L2	12TH	30.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
85	VIJAYLXMI	21	2283	P1L1	5TH	30.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
86	KANAGA	22	2414	P1L1	NIL	30.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
87	DIVYA	20	2416	P1L1	9TH	30.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
88	ANITAH	19	2429	P1L1	8TH	31.1.14	NO	NO	NO	NO	YES	NO												
89	SUGUNA	21	2439	P1L1	8TH	31.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
90	RAJESHWARI	21	2441	P2L2	8TH	31.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
91	RIHANNA PARVEEN	21	2443	P1L1	10TH	31.1.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
92	LATHA	20	2392	P1L1	12TH	31.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	YES	NO
93	SUBASHINI	23	2445	P2L2	10TH	31.1.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
94	KALAIVANI	20	2452	P1L1	8TH	1.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
95	VINOTHA	23	2469	P1L1	10TH	1.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO						
96	PREMA	24	2329	P1L1	8TH	1.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
97	DATCHAYINI	25	2500	P1L1	4TH	2.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
98	LAXMI	22	2563	P1L1	8TH	3.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
99	MUNIYAMMAL	20	2608	P1L1	9TH	3.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
100	KARPAGAVALLI	19	2589	P1L1	10TH	3.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
101	RENUGA	21	2678	P2L2	8TH	3.2.14	YES	NO	NO	NO	YES	NO												
102	CHANDRAKALA	21	2449	P1L1	10TH	3.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
103	SMITHA	22	2733	P1L1	11TH	3.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
104	VANADHI	22	2719	P1L1	12TH	4.2.14	NO	NO	NO	NO	YES	NO												
105	DURGA	21	2736	P1L1	BCOM	4.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
106	KARTHIGA	20	2813	P1L1	12TH	5.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
107	MALII	22	2587	P1L1	BCOM	6.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
108	VIMALA	20	2569	P2L2	10TH	7.2.14	NO	NO	NO	YES	YES	NO	NO	NO	NO	YES	YES	YES						
109	PAVITHRA	20	3874	P1L1	10TH	7.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
110	KASTURI	20	2872	P1L1	10TH	7.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
111	EESWARI	23	2910	P1L1	8TH	7.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO

112	GOWRI	20	2247	P2L2	10TH	7.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
113	LATHA RAJNI	24	2974	P1L1	12TH	8.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO						
114	AASHINI	19	2979	P1L1	NIL	10.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
115	UMA DEVI	26	3123	P1L1	BCOM	11.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
116	MANJULA	22	3158	P2L2	NIL	13.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
117	VAGITHA BEGUM	22	2946	P1L1	12TH	15.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
118	BAVANI	20	3162	P1L1	9TH	15.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
119	MANJU BEGUM	25	3218	P1L1	12TH	15.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
120	SAFI	23	3236	P1L1	8TH	15.2.14	NO	NO	NO	NO	YES	NO												
121	USHA	22	3231	P1L1	10TH	15.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
122	SHAMINI	21	3235	P2L2	8TH	16.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
123	MUTHULAXMI	26	3085	P1L1	8TH	16.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
124	SARANYA	20	3255	P1L1	10TH	17.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES	YES	NO
125	SELVI	25	3124	P1L1	12TH	19.2.14	NO	NO	NO	NO	YES	NO												
126	ANUSHYA	18	3283	P1L1	9TH	19.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
127	MALATHY	21	3258	P1L1	10TH	20.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
128	KUMUDHA	22	3296	P2L2	6TH	21.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
129	ABIRAMI	25	3386	P1L1	8TH	21.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
130	SUGUNA	24	3393	P1L1	5TH	21.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
131	BUVANA	25	3392	P1L1	11TH	22.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
132	NOORI	29	3391	P1L1	8TH	22.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
133	KAVYA	21	3399	P2L2	12TH	23.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO						
134	REVATHY	26	3402	P1L1	NIL	23.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
135	JAYANTHI	25	3420	P1L1	10TH	24.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
136	REVATHY	23	2958	P1L1	11TH	25.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
137	FATHIMA	21	3334	P2L2	9TH	25.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
138	ROCHEN	23	3092	P2L2	4TH	25.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
139	VENNILA	22	3232	P2L2	BCOM	26.2.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
140	SAMUNDISHWARI	27	3570	P2L2	10TH	26.2.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES						
141	SIVA RAJUM	20	3522	P1L1	10TH	1.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
142	LAXMI	23	3571	P1L1	9TH	1.3.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
143	TULASI	23	3641	P1L1	7TH	1.3.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
144	THILAGAVATHY	23	3623	P1L1	10TH	3.3.14	NO	NO	NO	NO	YES	NO												
145	SUGANTHI	26	3689	P1L1	9TH	5.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
146	UDAYAMANI	26	3704	P1L1	7TH	7.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
147	MANISHA	19	3657	P1L1	7TH	8.3.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
148	PRIYA	19	3584	P1L1	9TH	8.3.14	NO	NO	NO	NO	NO	NO												
149	KAVITHA	26	3763	P1L1	MCOM	8.3.14	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO
150	VARSHINI	27	3882	P2L2	4TH	10.3.14	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO