

# LAPAROSCOPIC STERILIZATION AT DOORSTEPS THROUGH MOBILE OPERATION THEATRE IN RURAL INDIA

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## Overview:

Family planning is the process of controlling the number of children by using modern contraception and other methods of birth control. The focus is to address the unmet need for family planning—children who are born because of lack of access to permanent operative contraceptive services—and are a major cause of population boom in Rural India. It helps parents to plan their lives without being overly subject to sexual and social imperatives. It is estimated that about 215 million women worldwide lack access to modern minimal access operative contraception. It is also true that wherever it is available, the use is often limited due to cultural acceptance, women empowerment, affordability and service delivery system. These factors impacted the family planning programmes adversely. About 70 % of population lives in rural India. The quality and standards of healthcare services provided to rural India leaves much to be deserved. In order to promote and provide services of reasonably high quality to such a large section of the society without hindrance for want of infrastructure, technology, or manpower resources, it is imperative to promote the laparoscopic sterilization technology in the field of reproductive healthcare and population control of rural India. In the recent past, laparoscopic sterilization has assumed a greater role as being the most safe, reliable and effective tool. Therefore, for a successful family planning programme, it is necessary that laparoscopic

sterilization technology must be taken to the rural areas. Patients who undergo laparoscopic sterilization have faster recovery, less chance of infection, less postoperative pain, no need of hospitalization and early return to work. It is a kind of day care operative procedure where overnight stay of the patient is not required. The laparoscopic surgical procedures can be carried out not only for sterilization but also include tubal ligation, lysis of adhesions, aspiration of cysts, salpingostomy and salpingectomy for ectopic pregnancy, removal of foreign body, myomectomy and even hysterectomy if required. There is no better surgical technique available for permanent method of sterilization than laparoscopic sterilization all over the world.

### **What intend to do and achieve?**

The objective is to provide family planning services to the rural population at their doorsteps through Laparoscopic sterilization inside a fully equipped air conditioned mobile operation theater by qualified and skilled laparoscopic surgeons. Mobile laparoscopic operating theatre is a fully equipped air conditioned and abundantly functional theatre to perform laparoscopic sterilization surgery in different parts of the rural India by qualified and skilled laparoscopic surgeons. This is innovative approach towards meeting the challenge of ever increasing population pressure on this planet. It provides optimal combination of high performance, functionality and mobility. The mobile operating theatre has all the required internal facilities to operate on its own. These facilities include but not limited to all electrical services, mechanical services such as operating theatre, ventilation system to provide clean air, medical gas system, plumbing, operating table, operating light, surgical pendants and so forth. It also includes induction room, sterile preparation room, sterile store, scrub-up area and the OT itself. The OT has standard overall dimensions and arranged in such a way as to conform fully to normal hospital requirements

### **Methodology:**

A field survey of identified area, village(s), as the case may be, where to take the mobile operation theater, will be conducted with the participation of local people/authority/body. Thereafter, paramedical team will conduct preoperative investigation of the willing persons of the area. The paramedical staff will interact with the local people including sarpanch / village

head and explained to them the advantages of small family and to motivate the married couples who have completed their families. They will also educate the families about Maternal and Child Healthcare, the advantages of good health and laparoscopic sterilization and disadvantages of unintended pregnancy. Through counseling women and men are made aware to know about their options and the real risks and benefits of any method or procedure. They will be treated respectfully and without moral judgments. Necessary assistance will be given to enable them to make their choices/decisions. Print media, Broachers, Operative procedure educational CD, showing the success and advantages of laparoscopic sterilization will be distributed among the people. Adequate care should be taken that they do not need to be told what to do. Thereafter, with the association of local Gram Sabha, the team will make a second visit to collect blood samples and other related tests of the persons who have shown their interest for pre-operative assessment. All necessary tests will be done and documented properly. The willing persons will be registered. All the investigations will be revisited by a team of qualified laparoscopic surgeons and based on their investigations only the suitable fit cases for sterilization will be selected without any co-morbidity. Thereafter, date and place will be decided and conveyed to the registered persons for holding laparoscopic sterilization mobile camp. We believe in local problem-solving approaches through participatory mechanism. Success is achieved through participatory program development.

Now when the date is finalized, the mobile operation theater will be completely sterilized, fully charged and properly tested and move towards the designated destination where sterilization is to be conducted. In one visit 25 - 30 laparoscopic sterilization can be performed safely by a team of 3-4 laparoscopic surgeons. Once the surgery is completed in the mobile camp, one qualified doctor and 2 nurses would be put on duty to stay overnight to watch and for postoperative care of patients. They will also educate the patients as to how to take care of their wound and take post-operation medicines if necessary. A proper list of names of the patients, and the surgeons who have performed the surgery will be kept. In case of any complication, the patient will directly consult the surgeons and if any emergency arises patient can be directly brought to World Laparoscopy Hospital, Cyber city, Gurgaon for further management, though such situations will rarely arise as laparoscopic sterilization is very safe and effective method of surgery where statistical data has shown that chances of complications are less than 0.1 percent.

## **Why this project/solution is required?**

### **Why Laparoscopic Sterilization?**

#### **Temporary method of sterilization leads to unintended pregnancy:**

Intended pregnancies are those that are clearly and consciously desired at the time of conception. Unintended pregnancies are those that were not wanted at the time of conception. Unintended pregnancies are pregnancies that were unwanted at the time of conception, these are sometimes divided into unwanted pregnancies generally due to failure of temporary contraceptives methods like Oral Contraceptives and Condom. It is very easy for the female to miss these pills and they get unintended pregnancy and pregnancy can't be hidden from others so they cannot go for abortion due to social inhibition. Worldwide, 38% of pregnancies were unintended in 1999 (some 80 million unintended pregnancies in 1999). Unintended pregnancies are the primary cause of induced abortion, resulting in about 42 million induced abortions. Unintended pregnancy is linked to numerous maternal and child health problems. The laparoscopic sterilization methods has greatly reduced the incidence of unintended pregnancy, particularly in more developed countries. However the India has an unusually high rate of unintended pregnancy, especially among the poor.

Pregnancy has risks and potential complications. On average unintended pregnancies result in poorer outcomes for the mother and for the child, if birth occurs. Unintended pregnancy usually precludes pre-conception counseling and pre-conception care, and delays initiation of prenatal care. The great majority of abortions result from unintended pregnancies.

#### **Unintended pregnancy due to Condom and Oral Contraceptive:**

Prenatal care initiate later, and less adequate. Adversely affects health of woman and of child and less preparation for parenthood. Unintended pregnancies preclude chance to resolve sexually transmitted diseases (STD) before pregnancy. Untreated STD in pregnant woman can result in premature delivery, infection in newborn or infant death.

**The Disadvantage of Unintended Pregnancy to mother:**

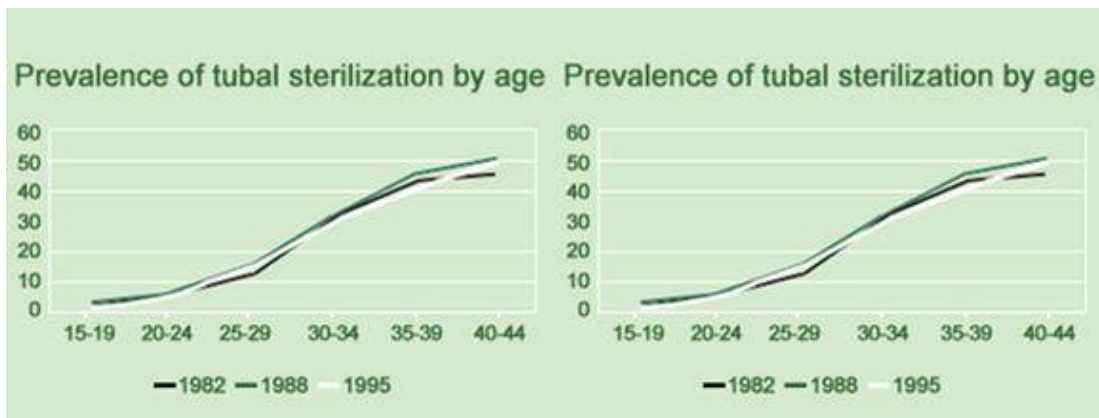
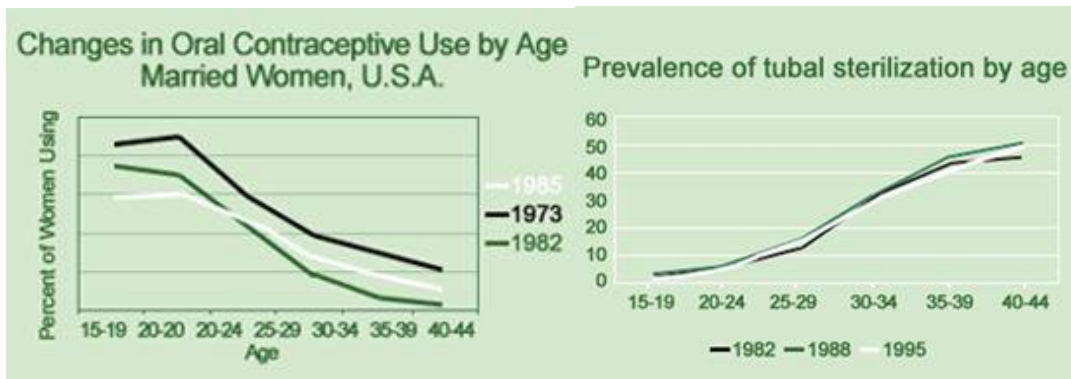
1. Poorer maternal mental health
2. Increased risk of physical violence during pregnancy
3. Reduced likelihood of breastfeeding, resulting in less healthy children
4. Lower mother-child relationship quality[

**The Disadvantage of Unintended Pregnancy to Child:**

1. Children whose births were unintended are:
2. Greater likelihood of low birth weight, particularly for unwanted pregnancies.
3. Greater infant mortality.
4. likely to be less mentally and physically healthy during childhood
5. At higher risk of child abuse and neglect
6. less likely to succeed in school
7. more likely to live in poverty
8. more likely to need public assistance
9. more likely to have delinquent and criminal behavior

There is no denying that large health systems are slow to change. Sustainable programs take long-term, steady, evolutionary work. Service delivery systems that work efficiently and preserve resources and time that involve and create job satisfaction for managers and providers, and are of good quality oriented to client needs are much more likely to endure. This project is imminently fit to provide good quality services for voluntary sterilization if it is widely available and used by those who need and want it.

Technology for female sterilization with several innovations in the technique of laparoscopic sterilization is available. The technique is very simple and painless procedure performed under local anaesthesia without sedation. Since the simplicity of the procedure allows resumption of normal routine the very next day it is readily acceptable to the women from the rural and tribal areas. The method is not only cost effective and avoids sedation, but also evidence based and robust.



The percentage of couples who used sterilization doubled from 1973 (16%) to 1998 (36%)

Laparoscopic sterilization offers the greatest benefit at the most reasonable cost and that can be sustained. It can also offer better safeguards for the client and increase access without jeopardizing quality of delivery of services. Based on the variety of clients, facilities, personnel, and practices, laparoscopic sterilization may be the best procedure for rural India.

We see the possibility of improved surgical outcomes in terms of pain, recovery, and need for full sterilization compared with traditional surgery. However, family planning is not seen by all as a humane or necessary intervention. It is an arena of contestation within broader social and political conflicts involving religious and cultural injunctions, patriarchal subordination of women, social-class formation, and global political and economic relations. Contraception is only one element of a general lack of reproductive health services which mean that half a million women die each year during pregnancy and childbirth. The preoperative, intra-operative and post operative management of the laparoscopy sterilization will be ensured by team who is fully equipped for the purpose. The patient does not require incurring any expenses. Suitable incentives will be arranged for every patient who undergoes sterilization. It is proposed to perform 25 cases of sterilization per field visit. There will be 4 field visits per months to the identified areas in rural India. Post operative follow up of patients who are operated by us. Free distribution of all the requisite medicines will be ensured. This will benefit vulnerable population of rural India in big way. This will go a long way in bring changes in the family planning and reproductive healthcare services in the demography of the nation.

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