



## Sterilization Study: Vasectomy and Tubectomy

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### Abstract

*Birth planning for a couple from the first and subsequent births can be arranged so that the welfare of the community increases and other undesirable things can be anticipated from afar. The methods include using contraception or prevention of pregnancy and family planning. Sterilization is to spay a man or woman by operating (in general) so as not to produce offspring. Sterilization for men (vasectomy) and women (tubectomy). Procedurally, vasectomy in men is relatively simpler than tubectomy while the procedure for tubectomy is a bit complicated and complex.*

## Introduction

Marriage, a basic institution, is a necessity of life that is inevitable even become natural law. Marriage embraces a broader purpose including giving birth to a new generation for the survival of mankind because in essence, giving birth to a new generation will add to the relationship of married couples. To control a large number of births in Indonesia this effort is integrated with national development planning (Dwyer, 2012).

It is very necessary for birth planning between one and the next birth. And the welfare of the community increases and other undesirable things can be anticipated from afar. These methods include contraception or prevention of pregnancy and family planning (Warwick, 1986).

According to the World Health Organization (WHO), family planning is an action that helps married couples avoid unwanted pregnancies, get births that are very desirable, set intervals between pregnancies, control the time of birth in relation to the age of husband and wife and determine the number of children in family (Steiner et al., 2006).

It is undeniable and indeed it must be recognized that there is no ideal method of contraception. Research continues to find methods that are 100% effective and safe, free of side effects, easy to use, not related to sexual acts, and accepted by all religions. New contraceptive methods are still being explored and current contraceptive methods are still being investigated for the improvement of Sitruk-Ware et al (2013). The basis of the research carried out is the cause of side effects, the possible relationship between certain methods and disease (safety), as well as the mechanism of action (RamaRao 2003). It is very important to develop a way to accurately estimate ovulation time at least 4 days in advance. Potential new contraceptive methods, which are the type of existing methods (inhibiting methods and hormonal methods).

### *Definition of Sterilization*

Sterilization is to spay a man or woman by operating (in general) so as not to produce offspring. Thus, sterilization is different from the way or contraception which generally only aims to avoid or ban pregnancy for a while (WHO, 2010).

Based on the theory of people who are sterilized can still be restored (reversible), but medical experts admit the hope will be very thin to be successful. Sterilization for men (vasectomy) and for women (tubectomy) is the same as abortion can result in infertility so that they no longer have offspring. Therefore, the international planned parenthood federation (IPPF) does not encourage its member countries to carry out sterilization as a contraceptive device or method. The IPPF only recommends that its member countries choose a contraceptive method that is considered suitable and good for each.

In this case, the Indonesian government has never officially encouraged its people to carry out sterilization as a method of contraception in the family planning program (Hayati, 2018). This is due to seeing the effects of sterilization, which is infertility forever and respecting the aspirations of the Islamic Ummah in Indonesia.

### *Distribution of Sterilization*

The first is vasectomy sterilization, which is sterilization in men called vasectomy or vas ligation, which is the surgical removal or binding of the ducts or vessels that connect the testis (sperm factory) with the prostate gland (the sperm warehouse), so that sperm cannot flow out of the penis (urethra). Vasectomy can also be said to be a cut or blockage of the *vas diverenns* to prevent the passage of sperm. Sterilization in men includes minor surgery, does not require hospital treatment and does not interfere with his sexual life and will not even lose his male nature (Kjersgaard et al., 1989).

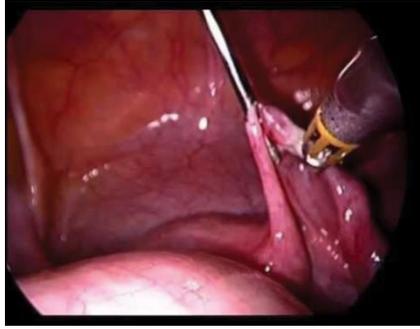
Second Tubectomy is sterilization in women called tubectomy or tubal ligation, namely the disconnection of the channel or egg vessels (fallopian tubes) which channels the ovum and closes both ends, so the egg cannot come out and enter the uterine cavity. while the sperm cells that enter the woman's vagina do not contain spermatozoa, so there is no pregnancy even though coitus remains normal without any disturbance.

### *Method or type of Sterilization Action*

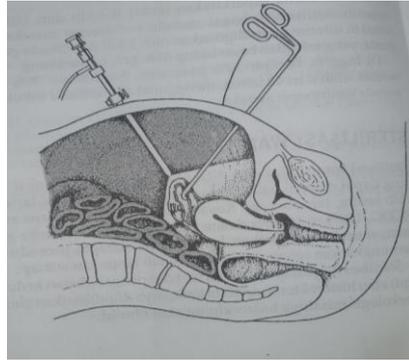
The type of action is laparoscopy or tubectomy, laparoscopy that is through a small sub umbilicus incision, trocar and cannula are inserted into the abdomen which has been completely filled with gas and the trocar is replaced by a laparoscope. Tubectomy is blocking the egg through the fallopian tubes so that there is no conception with sperm. Tubectomy is done by binding to the two oviducts, through direct ligation of the ducts, tubal electrocoagulation, tubal ring installation (falope ring), tubal clips (the last three methods are performed by laparoscopy).



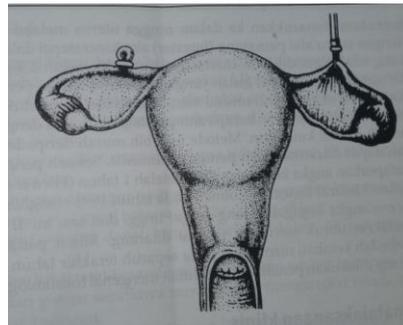
*Figure 1.1 laparoscopy*



*Figure 1.2 Laparoscopy*



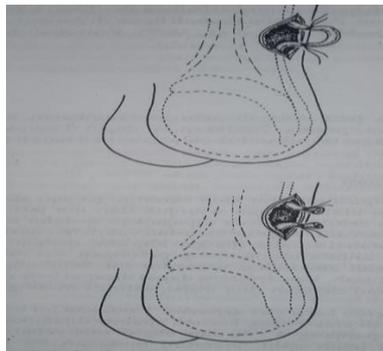
*Figure 1.3 Laparoscopy*



*Figure 1.4 Falope Ring Application*

Minilaparotomy is a technique with an incision of 3cm above your pubis, for which tubal ligation is then performed. Minilaparotomy can be done by a doctor, it's just that the resulting scarring is quite large. While laparoscopy should be done by obstetricians, the resulting small scarring is barely noticeable and healing is faster.

Aksetomi means to cut a portion (0.5cm-1cm) of the seed canal so that there is a gap between the end of the testicular side of the testicle and the remaining side of the seed canal and at each end of the remaining canal is bound so that the canal becomes clogged.



*Figure 1.5 Axectomy*

## *Advantages and Disadvantages of Sterilization*

The advantage of sterilization is that it is safer because there are fewer complaints compared to other methods of contraception, it is more practical because it only requires one action. more effective, because the failure rate is very small and is a permanent method of contraception, more economical because it requires the cost of just one action.

Disadvantages of sterilization, tubectomy, i.e pain/discomfort in the short term after the action. There is a possibility of having the risk of surgery. Vasectomy is that it cannot be done on people who still want to have children. There must be a minor surgical procedure. Vasectomy Standard Methods and Vasectomy Without Knives (VTP). The first method is performed using a scalpel and local anesthesia. The vas deferens channel in men will be sliced (to release sperm) and then cut. After that, the channel will be bound and sewn to its original shape (Dachlan & Rochadi, 1999).

Sterilization is the most effective method of preventing pregnancy permanently. Vasectomy is almost completely effective in preventing pregnancy (Wantouw & Tendean, 2013). However, vasectomy does not affect sexual life, such as erectile ability, ejaculation, and semen volume. Vasectomy also has no effect on the production of the hormone testosterone, the hormone responsible for sex drive, the depth of the male voice, beard growth, and other masculine traits. Usually, it takes two to four months after vasectomy until semen does not contain sperm at all. Procedurally, vasectomy in men is relatively simpler than tubectomy. Some facts about vasectomy provide an illustration of this man's sterilization. The principle of vasectomy cuts the sperm duct, either cut or tied.

Sterilization needs to pay attention to four things namely age, usually, doctors recommend sterilization if women are over 30 years old. Under that age, this action is not recommended. The number of children you already have. If a couple already has children and does not want to add more, this contraception can be considered. Sterilization still cannot prevent sexually transmitted diseases, such as HIV/AIDS or chlamydia. The use of postoperative supporting contraception for three to six weeks will increase the success of sterilization.

Tubectomy is a bit complicated and complex. It can be heard to some facts about the following tubectomy. There are two common tubectomy actions, namely Sterilization through the abdominal cavity and Sterilization by laparoscopic surgery. Deciding the fallopian tube can be done by using a small clip as a binder or cut. The sterilization procedure can be done after the mother gives birth.

## **Conclusion**

Sterilization, in general, is an attempt to spay a man or woman by operating (in general) so as not to produce offspring. Vasectomy is sterilization in men called vasectomy or vas ligation, which is the operation of terminating or binding the ducts or vessels that connect the testis (sperm factory) with the prostate gland (sperm warehouse). Tubectomy is the sterilization of women called tubectomy or tubal ligation, which is the termination of the connection channel or egg vessels (fallopian tubes) that channel the ovum and closes both ends so that the egg can not get out and enter the uterine cavity.

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