Department of Health

No-Scalpel Vasectomy

A Skills Training Course for Vasectomy Providers and Assistants

Trainer's Guide

FOREWORD

The Department of Health, with its commitment to the delivery of quality care in family planning services, is strengthening the training system for the acquisition of knowledge and skills. In line with this commitment, the Training Manual on No-scalpel Vasectomy (NSV) has been revised with the goal of establishing a training system that will aid in the implementation of a national standardized training for health workers all over the country. With the revised training manual on NSV, service provision on NSV is expected to improve in terms of performance and quality. The revised manual will serve as a reference for the conduct of training in voluntary surgical contraception, particularly in male sterilization. The revised manual adapts up-to-date and evidence-based information on vasectomy and provision of services.

The manual contains topics and components that are important in teaching and learning the standardized NSV technique. The topics include counseling, voluntary decision making and informed consent, the surgical procedure, local anesthesia, infection prevention, postoperative recovery, and complication management. The overall objective of the manual is to build the competence of health service providers on male sterilization by NSV in terms of their knowledge, skills, and attitudes.

I encourage the dissemination and use of this manual by health service providers in the implementation of training and expansion of VSC services to increase the number of competent NSV providers across the country.

ENRIQUE T. ONA, MD
Secretary of Health

ACKNOWLEDGMENT

The Department of Health would like to acknowledge the stakeholders and development partners who have contributed their time and expertise to the development of this training manual on no-scalpel vasectomy (NSV). Their input and guidance have contributed significantly to the translation of the performance and quality of NSV in this manual.

In particular, the DOH would like to thank the following:

- The Technical Working Group (TWG) whose members came from various sectors and agencies. The following TWG members have contributed technical inputs in the development of the manual:

  - Dr. Cynthia Garcia, PRISM 2
  - Dr. Louie Garcia, Friendly Care
  - Dr. Cesar Maglaya, Consultant
  - Dr Bernabe Marinduque, UP-PGH
  - Dr. Virgilio Oblepias, UP-PGH
  - Dr. Edna Abcede, CHD III
  - Dr. Gerardito Cruz, Consultant
  - Dr. Francis Floresca, PRISM2
  - Dr. Jondi Flavier, CMEN
  - Dr. Joyce Mondina, Dr. Jose Fabella Memorial Medical Center
  - Dr. Esmeraldo Ilem, Dr. Jose Fabella Memorial Medical Center

- The following field implementation partners who joined our consultative workshop in Subic (March 11-15, 2013) to review and provide inputs to the draft:

  - Ms. Teresita de la Cruz, CHD III
  - Ms. Armi dela Cruz, CHD Ilocos
  - Dr. Jovette Guinal, CHD Central Visayas
  - Dr. Cynthia Dionio, CHD Zamboanga Peninsula
  - Dr. Casimiro Bacugan, Region 1 Medical Center
  - Dr. Maricel Palattao, Cagayan Valley Medical Center
  - Dr. Joselita Cacdac, Dr. Paulino J. Garcia Memorial Medical Center
  - Dr. Cherry Pangilinan, Vicente Sotto Memorial Medical Center
  - Dr. Distancy Montejo, St. Anthony Maternal and Child Hospital
  - Dr. Gay Gonzales, Zamboanga Medical Center
  - Dr. Jun Bot, Dr. Jose Rodriguez Memorial Hospital

  - Ms. Aurora Doria , PHO FP Coordinator-Pangasinan
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  - Ms. Vivian Durangparang, PHO FP Coordinator Cebu
  - Ms. Imelda Luy, PHO FP Coordinator Zamboanga del Sur

The United States Agency for International Development for providing technical assistance through the Health Policy Development Program in the final consolidation and review of the inputs from the various partners and in the review, copy editing, and layout of the final draft of the training manuals.

We also recognize and acknowledge the Engender Health Module entitled No Scalpel Vasectomy Curriculum, Trainers Manual, 2nd Edition, which served as reference in the development of this manual.

ACRONYMS

AO	Administrative Order
BTL	Bilateral tubal ligation
BHW	Barangay health worker
CCT	Conditional cash transfer
CHD	Center for Health and Development
CHT	Community health teams
COCs	Combined oral contraceptives
DOH	Department of Health
FP	Family planning
GIDA	Geographically isolated and disadvantaged area
HLD	High-level disinfection
IUD	Intrauterine device
LCE	Local chief executive
LAPM	Long acting and permanent method
LAHRC	Long acting hormonal reversible contraceptives
LGU	Local government unit
MNCHN	Maternal and newborn and child health and nutrition
MDGs	Millennium development goals
MEC	Medical Eligibility Criteria
MLLA	Mini-laparotomy under local anesthesia
NHTS	National Household Targeted Survey
NBB	No balance billing
NSV	No-scalpel vasectomy
PHO	Provincial health office
PHIC	Philippines Health Insurance Corporation
STIs	Sexually transmitted infections
VAWC	Violence against women and children
VSC	Voluntary surgical contraception
WHO	World Health Organization

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NO-SCALPEL VASECTOMY (NSV) TRAINING DESIGN

Introduction to the NSV Skills Training Course

TOPIC	TEACHING/LEARNING PROCESS
SKILLS TRAINING COURSE IN NO SCALPEL VASECTOMY (HOST) (Venue) (DATE)	◆ Introduce the course by flashing the title slide.
OPENING ACTIVITIES ▪ PRAYER ▪ NATIONAL ANTHEM ▪ WELCOME REMARKS ▪ INTRODUCTION OF PARTICIPANTS AND TRAINERS/FACILITATORS ▪ LEVELING OF EXPECTATIONS ▪ PRE-TEST ▪ OVERVIEW OF THE COURSE	◆ Call on the persons responsible for the different opening activities. ◆ Adopt strategies for the introduction and leveling of expectations. ◆ Distribute the pretest papers. ◆ Provide an overview of the course.
COURSE DESCRIPTION ▪ This 3-day competency-based skills training course on no-scalpel vasectomy (NSV) is designed to train prospective NSV Surgeons and assistants to include the provision of NSV into their professional practice. ▪ This course emphasizes the information needed to provide safe and effective NSV services and may require extensive practice time. ▪ It assumes that participants will bring skills, knowledge, and self-motivation to the training. ▪ The course consists of two parts: a two-day didactics and a one-day supervised practicum.	◆ State the course description as shown on the slide.

GOALS OF THE COURSE ▪ To provide the latest and evidence-based information on NSV ▪ To provide the knowledge, skills and attitude in performing NSV ▪ To provide the knowledge and skills needed to prevent, recognize and manage complications related to NSV ▪ To provide the knowledge and skills to integrate NSV into their existing service delivery system	◆ Enumerate the goals of the course as presented on the slide.
SPECIFIC OBJECTIVES At the end of the 3-day course, the trainee will be able to ▪ Do method-specific counseling, applying the principles of Informed Choice and Voluntarism for Voluntary Surgical Contraception ▪ Perform client assessment based on the WHO standards (MEC and Applicability of Laboratory and other ancillary procedures) ▪ Perform the standard NSV, including infection prevention and use of anaesthesia ▪ Recognize and manage complications ▪ Provide routine follow-up ▪ Develop an Action Plan on the integration of NSV into his/her practice	◆ State the objectives of the course as presented on the slide.
TRAINING/LEARNING METHODS ▪ Training/Learning Methods: ▪ Illustrated lectures ▪ Individual and group exercises ▪ Case Studies ▪ Demonstration and Return Demonstration ▪ Simulated Practice on Scrotal Model (or other alternatives) ▪ Guided Clinical and Surgical Activities (Practicum)	◆ Enumerate the training methods as shown on the slide.

TRAINING MATERIALS
▪ Training Curriculum consisting of:
  ▪ NSV Trainers' Manual
  ▪ NSV Participant Handbook
  ▪ Manual containing Powerpoint Presentation for each Module
▪ *No-Scalpel Vasectomy videos:* produced by the Cooperative Movement for Encouraging No Scalpel Vasectomy (CMENI or the World Health Organization
▪ *NSV instruments:* Ringed clamp (extracutaneous ringed forceps) and dissecting
▪ forceps (especially designed for NSV by Dr. Li Shunqiang)
▪ *Scrotal model.*
▪ *NSV supplies:* Suture material and a syringe with a 25- or 27-gauge needle, along with NSV instruments (straight scissors, sterile gloves, antiseptic solution, adhesive tape, etc.)
▪ *Other training aid:* Audiovisual equipment, condoms and a penis model, flipchart paper, tape, markers, etc.
	◆ State the training materials for the course as presented on the slide.

METHOD OF EVALUATION

LEVEL 1 AND 2 EVALUATION

TRAINEE:

- **Attendance**
- ***NSV Knowledge Assessment Test (Pre-test and Post-test)***
  - These tests are designed to be given at the beginning and at the end of the workshop.
- ***NSV Surgical Skills Checklist***
  - Since this is a competency-based course, the trainee's performance will be evaluated using the NSV Surgical Skills Checklist. Trainees should not begin supervised surgical practice until the trainer has used this checklist to evaluate their performance on the scrotal model (or alternative practice model) as satisfactory. Trainees will not have successfully completed this course until the trainer has evaluated their clinical performance as satisfactory using this checklist.

◆ Describe the process of evaluation as shown on the next two slides.

METHOD OF EVALUATION

Course

- Course Evaluation completed by the trainees

SUGGESTED COURSE COMPOSITION

- **1:8 trainer/trainee (includes assistants) ratio during the didactics**
- **1:1 trainer/trainee (Surgeon only) ratio during the practicum**

◆ Mention the suggested course composition as shown on the slide.

CLIENT'S CONSENT TO BE TRAINING SUBJECTS

- **As with any medical service, the rights of the client are paramount and should be considered at all times throughout the training course.**
- **All clients must be adequately counseled, and each client must make an informed and voluntary decision to undergo vasectomy.**
- **Each client's permission must be obtained before a participant in this training observes, assists with, or performs any aspect of care related to vasectomy.**
- **Clients who consent to participate in training should be informed in advance that they will receive care from a vasectomy trainer or from a participant under the direct supervision of a qualified trainer.**

◆ Emphasize the need for client consent in the training course as given in the next two slides.

CLIENT'S CONSENT TO BE TRAINING SUBJECTS

- **Clients are within their rights to refuse care from a participant.**
- **A client who refuses to grant permission, appears uncomfortable with receiving services from a participant, or appears to be uncomfortable about having participants present when the procedure is performed should not be denied services, nor should his procedure be postponed.**
- **If a client refuses to be operated on by a participant, the trainer or a qualified member of the training center should perform the procedure.**

CERTIFICATION

- A **Certificate of Training or Attendance to training** is given after the trainee has satisfactorily completed the requirements of the course (complete attendance, passing score in the post-test and satisfactory skills ratings in the NSV Surgical Skills checklist).
- A **Certificate of Competency or Certificate as Service Provider** is given after the trainee has successfully integrated NSV into his professional practice (performing NSV independently and competently) as observed during the post-training monitoring. Such Certificate of Competency may be given to the trainee during the training period if performance of NSV has been demonstrated competently.
- It is the responsibility of the institution that provides the certification to ensure that the participant meets all the necessary requirements of competency in this procedure.

◆ Explain the process of certification as shown on the slide.

POST-TRAINING MONITORING AND EVALUATION

LEVEL 3 EVALUATION

- **A post-training follow-up is conducted 2, 6, and 12 months after the training to assess the performance of the trainee, to assist the trainee resolve problems on setting up and integrating his/her learned skills to his/her health service delivery system and to evaluate the impact of the training program.**
- **The frequency of doing this depends on the needs of the trainee and of his/her facility towards successful integration of quality NSV services.**

◆ Describe the process of post-training monitoring/evaluation as shown on the next two slides.

POST-TRAINING MONITORING AND EVALUATION

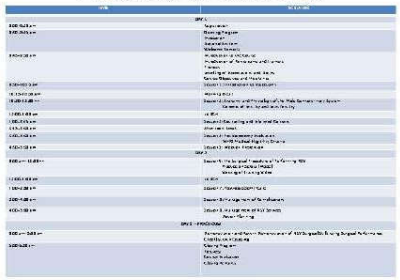
LEVEL 4 EVALUATION

- **A post-training follow-up is conducted 3 or 5 years after the training to assess the impact and even cost-effectiveness of the program.**

No Scalpel Vasectomy Course

- Session 1: Introduction to Vasectomy
- Session 2: Anatomy and Physiology of the Male Genito-urinary System including the Concept of Fertility and Joint Fertility
- Session 3: Counseling and Informed Consent for NSV
- Session 4: Pre-Vasectomy Evaluation
- Session 5: Infection Prevention
- Session 6: The Surgical Procedure: Performing NSV
- Session 7: Post-Vasectomy Care
- Session 8: Management of Complications
- Session 9: Management of NSV Services including Action Planning

◆ Enumerate the contents of the course as presented on the slide.

PROGRAM OF ACTIVITIES 	◆ Show the flow of activities as shown on the slide.
HOUSE RULES	◆ Draw and agree on the different house rules that should be observed during the course.
ANY QUESTIONS?	◆ Ask participants for any other questions, comments, or concerns that they may have before starting the course proper.

COURSE OVERVIEW

Course Description

This three-day competency-based skills training course on NSV is designed to train prospective NSV surgeons and assistants to perform NSV. This course provides the information necessary to offer safe and effective NSV services and may require extensive practice time. Participants are expected to bring skills, knowledge, and self-motivation to the training. The course consists of two parts: a two-day didactics and a one-day supervised practicum.

Goals:

- To provide the latest and evidence-based information on NSV
- To provide the knowledge, skills, and attitude in performing NSV
- To provide the knowledge and skills needed to prevent, recognize, and manage complications related to NSV
- To provide the knowledge and skills necessary to integrate NSV into their existing service delivery system

Specific Objectives

At the end of the three-day course, the trainee will be able to

- Carry out method-specific counseling, including the application of the principles of informed choice and voluntarism for VSC
- Perform client assessment based on the World Health Organization (WHO) standards (Medical Eligibility Criteria [MEC] and applicability of laboratory and other ancillary procedures)
- Perform the standardized NSV, including infection prevention and use of anesthesia
- Recognize and manage complications related to NSV
- Provide routine follow-up
- Develop an action plan on the integration of NSV into medical practice

Training/Learning Methods

- Illustrated lectures
- Individual and group exercises
- Case studies
- Demonstration and return demonstration
- Simulated practice on scrotal model (or other alternatives)
- Guided Clinical and surgical activities (Practicum)

Training Materials

- Training curriculum consisting of
  - NSV Trainers' Manual
  - NSV Participants' Handbook
  - Manual containing PowerPoint presentations for each module
- NSV videos produced by the Cooperative Movement for Encouraging No-scalpel Vasectomy (CMEN) or the WHO
- NSV instruments, including ringed clamp (extra-cutaneous ringed forceps) and dissecting
- forceps (especially designed for NSV by Dr. Li Shunqiang)
- Scrotal model
- NSV supplies, including suture material and a syringe with a 25- or 27-gauge needle, along with NSV instruments (straight scissors, sterile gloves, antiseptic solution, adhesive tape, etc.)
- Other training aids, including audiovisual equipment, condoms, penis model, flipchart paper, tape, and markers

NSV TRAINERS' MANUAL

Trainer's Notes, Options, Tips, and Activities

- The first two pages of each module contain introductory information with essential details about the following:
  - How to present the content of the module
  - Estimated time needed for the training based on the module

- Training supplies
- Advance preparation
- Purpose and objectives of the module

NSV PARTICIPANTS' HANDBOOK

The NSV participants' handbook includes all essential course information. The distribution of this handbook minimizes the need for participants to take notes and allows them to concentrate on the course. The handbook can also be used for advanced reading of the course contents.

TRAINERS

The trainers of the course must be

- Proficient in providing training (Prior certification in Training of Trainers Course on Voluntary Surgical Contraception is an added advantage.)
- Proficient in performing NSV

This curriculum contains information that will guide and assist the trainer in workshops and in decision making to enhance the learning experience. However, the trainer must have full knowledge of adult learning concepts, experience with various training methods and techniques, and the ability to adapt materials depending on the needs of the participants.

The trainer for this course may or may not be affiliated with the site where the training is conducted or with the institution sponsoring the training. **The trainer should strictly follow the clinical content of the course, including standards and guidelines regarding certification, training follow-up/monitoring/evaluation, and supervision.**

TRAINING SITE

Whenever possible, skills training for NSV should be conducted at the location where the participants work to increase the likelihood that the participants will use the skills immediately after training. However, the trainer should find as many opportunities as possible to have participants from various institutions or locations discuss how they can apply what they have learned at their own site.

TRAINEES' SELECTION CRITERIA

Trainees for this course should be doctors of medicine with experience in performing minor surgery. They should be family planning (FP) supporters who are interested and committed to learning about and providing NSV. Assistants who will be trained to work with the surgeons are either nurses or another doctor in the facility.

NSV is performed to conscious clients under local anesthesia; hence, the trainees should demonstrate empathy and sensitivity toward clients and any doubts that clients may have about the procedure.

The trainer should give priority to individuals from institutions that are committed to providing NSV and have an existing demand for NSV services. Without client demand and institutional commitment, the participants will not be able to use newly learned skills. Furthermore, each sponsoring institution should be able to provide the space, equipment, and operating time needed for NSV services.

Assessment of the knowledge and experience levels of the participants is necessary before the training commences. A trainer who is sending application forms or information about the course to potential participants will find the following questions useful:

- What experience do you have in performing surgery?
- Have you had any training in vasectomy?
- Do you currently provide vasectomy services?
- What experience and training have you had in providing FP services?
- What is your educational background?

METHODS OF EVALUATION

Trainee

- Attendance
- NSV Knowledge Assessment Test (Pretest and Post-test)
- These tests are designed to be given at the beginning and at the end of the workshop.
- NSV Surgical Skills Checklist.
  The performance of the trainees will be evaluated using the NSV Surgical Skills Checklist because the course is competency based. Trainees can only begin supervised surgical practice when the trainer has considered their performance on the scrotal model (or alternative practice model) satisfactory based on the NSV Surgical Skills Checklist.

COURSE

Course evaluation completed by the trainees

DURATION

The course will be conducted in the selected training facility for three days (two days of didactics and one day of practicum). Trainees should ensure that enough clients are available for learning. For trainees not connected with the training facility or unable to demonstrate competency because of lack of case loads, an NSV Day will be arranged or scheduled in their site of practice.

SUGGESTED COURSE COMPOSITION

- 1:8 trainer/trainee (includes assistants) ratio during the didactics
- 1:1 trainer/trainee (surgeons only) ratio during the practicum

CLIENT SELECTION AND CLIENT RIGHTS

Client's Consent to be Training Subjects

As with any medical service, the rights of the client are paramount and should be considered at all times throughout the training course. All clients must be adequately counseled and must provide an informed and voluntary decision to undergo vasectomy. Each client's permission must be obtained before a participant in this training observes, assists with, or performs any aspect of care related to vasectomy.

Clients who agree to participate in the training should be informed in advance that they will receive care from a vasectomy trainer or from a participant under the direct supervision of a qualified trainer.

Clients are within their rights to refuse care from a participant. A client who refuses to grant permission and who appears uncomfortable with receiving services from a participant or with the presence of participants during the procedure should not be denied services nor should the procedure be postponed. If a client refuses to be operated on by a participant, the trainer or a qualified member of the training center should perform the procedure.

CONFIDENTIALITY

The client's right to confidential medical care must be observed. However, participants may need to discuss the specifics of a particular case during training sessions. Discussions about clients must be confined to rooms that afford the required degree of privacy. Hallways, corridors, waiting areas, and other public areas are not appropriate venues for discussing clients.

EVALUATION

Evaluation is an important part of the training. Evaluation involves giving feedback to participants about what they have learned and helps trainers determine effective training strategies. Each module contains several tools and activities for evaluation. For example, a self-assessment is included at the end of most modules. The trainer can use this instrument in several ways:

- At the beginning and end of the module, have individuals respond in writing to the questions.
- At the beginning and end of the module, have the group respond orally as each question is read aloud.
- Throughout the workshop, note which questions participants found difficult to answer.
- At the end of the last module that contains a self-assessment (Module 10), have participants review these questions. Use the assessments as part of a final group review.

A trainer who adapts this curriculum must include appropriate evaluation options to

- Assess participants' needs and abilities before training by
  - Using the knowledge assessment test as a written pretest
  - Presenting the questions from the test to the participants for discussion
  - Using the knowledge assessment test as a verbal pretest
  - Asking all participants about their experience with vasectomy and ask specific questions related to their knowledge and skill levels
- Assess participants' progress during training by
  - Using the NSV Clinical Skills Checklist in every module where it is appropriate
  - Using the module's self-assessment
  - Observing participants during practice sessions
  - Asking questions to groups of participants or to individual participants
  - Presenting case studies or situations for discussion
- Assess cumulative knowledge and skills at the end of training by
  - Using the knowledge assessment test as a written or verbal post-test
  - Carrying out a final skills observation
  - Asking questions to test knowledge and comprehension

- Assess the outcomes or results of the course after training by
  - Carrying out a follow-up of the applications of the knowledge and skills taught during the training

An end-of-training evaluation is also necessary to have an overview of the process and results. Trainers should check if the institution they are working with has a preferred form. Trainers may have a form they have used before or may prefer to design one specifically for this course.

POST-TRAINING FOLLOW-UP/MONITORING/EVALUATION

A post-training follow-up is conducted 2, 3, and 12 months after the training (Level 3 per HRBD Guidelines on PTE) to assess the performance of the trainee, to assist the trainee in resolving problems on setting up and integrating his/her learned skills to his/her health service delivery system, and to evaluate the impact of the training program. The frequency of post-training follow-up depends on the needs of the trainee and of his/her facility toward successful integration of quality NSV services.

After three to five years of training (Level 4), the participant would undergo post-training evaluation to determine the effect of the training program on the health situation of the country.

CERTIFICATION

A Certificate of Training is given after the trainee has satisfactorily completed the requirements of the course (complete attendance, passing score in the post-test, and satisfactory skills ratings in the NSV Surgical Skills checklist).

A Certificate of Competency is given after the trainee has successfully integrated NSV into his/her professional practice (performing NSV independently and competently) as observed during the post-training monitoring. The Certificate of Competency may be given to the trainee during the training period if performance of NSV has been demonstrated competently.

The institution is responsible for providing the certification to ensure that the participant meets all the necessary requirements of competency in this procedure.

PROGRAM OF ACTIVITIES

TIME	ACTIVITIES
DAY 1	
8:00–8:30 AM	Registration
8:30–8:45 AM	Opening Program Invocation National Anthem Welcome Remarks
8:45–9:30 AM	Introduction to the Course Introduction of Participants and Trainers Pre-test Leveling of Expectations and Norms Course Objectives and Mechanics
9:30–10:15 AM	Session 1: Introduction to Vasectomy
10:15–10:30 AM	Morning Break
10:30 AM–12:00 NN	– Session 2: Anatomy and Physiology of the Male Genito-urinary System – Concept of Fertility and Joint Fertility
12:00–1:00 PM	LUNCH
1:00–3:15 PM	Session 3: Counseling and Informed Consent
3:15–3:30 PM	Afternoon Break
3:30–4:30 PM	Session 4: Prevasectomy Evaluation WHO Medical Eligibility Criteria
4:30–5:30 PM	Session 5: Infection Prevention
DAY 2	
8:00 AM–12:00 NN	– Session 6: Surgical Procedure of Performing NSV – Practice on Scrotal Model Viewing of Training Video
12:00–1:00 PM	LUNCH
1:00–2:00 PM	Session 7: Postvasectomy Care

2:00–4:00 PM	– Session 8: Management of Complications
4:00–5:00 PM	– Session 9: Management of NSV Services – Action Planning
DAY 3 PRACTICUM	
8:00 AM–5:00 PM	Demonstration and Return Demonstration of NSV Surgical Skills using Surgical Performance Checklist with Coaching
5:00–5:30 PM	Closing Program Post-test Course Evaluation Closing Remarks

Session I

INTRODUCTION TO VASECTOMY

OVERVIEW

VSC is currently the most widely used contraceptive method in both developing and developed countries. This procedure accounts for nearly half of all contraceptive use.

Vasectomy is safer, simpler, less expensive, and just as effective as female sterilization, yet the number of female sterilization users exceeds the number of vasectomy users by five to one. The 2011 Family Health Survey showed an unmet need of 19%, with 8.8% on limiting and 10.5% for spacing birth. Although bilateral tubal ligation (BTL; 9%) is second to pills (16%) among the most commonly used FP methods, vasectomy rates remain very low at less than 1%.

For many years, the blame for the underutilization of vasectomy has been placed on men, who were believed to be reluctant to take responsibility for FP. However, evidence suggests otherwise: the principal reason is not the men's resistance to the method or their unwillingness to take responsibility but rather the failure of health professionals to make information and services available and accessible to men.

This failure has often been the result of health professionals' lack of knowledge, misinformation, and personal dislike of vasectomy or untested presumptions about what men thought and wanted.

As men lack full access to information and services, they can neither make informed decisions nor take an active part in FP, which they have otherwise been willing to do.

This session contains basic information on vasectomy to enable service providers to provide accurate, evidence-based information on vasectomy, especially NSV, which is the standard procedure approved by the Department of Health (DOH).

LEARNING OBJECTIVES

At the end of this session, the participant will be able to:

1. Discuss basic information on vasectomy
   - ◆ What it is
   - ◆ Mechanism of action
   - ◆ Effectiveness
   - ◆ Advantages and disadvantages
   - ◆ Possible side effects
   - ◆ Warning signs of complications
2. Provide evidence-based facts to address myths and misconceptions about vasectomy

ADVANCE PREPARATION

- ◆ PowerPoint slides on "Introduction to Vasectomy"
- ◆ Computer, LCD, and projector screen
- ◆ Meta-cards
- ◆ Flip charts with easel sheets and/or whiteboards
- ◆ Markers
- ◆ Masking tapes

TOPIC	TEACHING/LEARNING PROCESS
SESSION 1 **INTRODUCTION TO VASECTOMY**	◆ Introduce the topic by flashing the title slide.
Session Overview ▪ Voluntary Sterilization is the most widely used contraceptive ▪ Vasectomy is safer, simpler, less expensive and just as effective as female sterilization, yet female sterilization users exceed the number of vasectomy users by five to one ▪ Evidence suggests that the principal reason for the low (or declining) use of vasectomy is the failure of health professionals to make information and services available and accessible to men	◆ State the session overview as presented on the slides.

Learning Objectives

- At the end of the module, the trainee will be able to:
  - Discuss the basic information on Vasectomy
    - What it is
    - Mechanism of action
    - Effectiveness
    - Advantages and Disadvantages
    - Possible side effects
    - Warning signs of complications
  - Provide evidence-based facts in addressing common fears to vasectomy

◆ State the learning objectives as presented on the slide.

What is vasectomy?

- A permanent method of contraception
- A minor surgical procedure performed by cutting the vas deferens that carries the sperm from the man's testicles to become a part of the semen
- No scalpel vasectomy is a small puncture on the scrotum (not using a scalpel) to get the vas.
- This no-scalpel vasectomy (NSV) technique was developed by Dr. Li Shunqiang who performed the first NSV at the Shunqiang Clinic in 1974.
- After it was introduced as an alternative technique for vasectomy procedure, several vasectomy surgeon got interested in the procedure and trained under Dr. Li.
- Worldwide, including the Philippines, NSV is now the technique of choice .

◆ Describe vasectomy and its mechanism of action as presented in the next two slides.

Mechanism of Action

- **The service provider makes a puncture in the man's scrotum and ties and cuts the 2 vas. The vas carries sperm from the testicles.**
- **Semen is still produced and found in the tubes after the blocked vas**
- **With the 2 vas blocked, there will be no sperm in the semen.**
- **The man continues to have erections and ejaculate semen.**

Effectiveness

- **Failure rate is less than one percent**
- **Effectiveness is at 99% for correct use – client uses condom or his woman partner continues using another effective method for three months after the procedure and after a semen check showed a sperm-free semen**
- **Typical use effectiveness is 99.8%**

◆ Discuss the effectiveness of vasectomy as shown on the slide.

What do you know about Vasectomy?

◆ Ask participants to write on meta-cards what they know or heard about vasectomy in terms of its:

- Advantages
- Disadvantages
- Side effects
- Complications
- Fears (or myths and misconceptions)

◆ Remind participants of the correct use of the meta-card:

- One idea per meta-card
- Five to seven words
- Large letters

◆ Ask participants to post their meta-cards on the board under the five headings (Advantages, Disadvantages, etc.)

◆ Review each posted card with the participants

◆ Ask for clarifications about unclear ideas

◆ If participants have exhausted the anticipated entries, the slides need not be shown. Otherwise, review the following slides.

Advantages of Vasectomy

- **Very effective**
- **Permanent. A single decision leads to lifelong, safe and effective family planning**
- **Nothing to remember except to use condoms or another effective method for at least 3 months after the procedure**
- **No interference with sex. Does not affect the man's ability to have sex.**
- **Increased sexual enjoyment because no need to worry about pregnancy.**
- **No supplies to get, and no repeated clinic visits required**
- **No known long-term side effects or health risks**

◆ Present the two slides on the advantages of Vasectomy, and elaborate as needed.

Advantages of Vasectomy

Compared to BTL, vasectomy is:

- More effective
- Safer
- Easier to perform
- Less expensive
- Able to be tested for effectiveness at any time
- If pregnancy occurs in the man's partner, less likely to be ectopic

Disadvantages of Vasectomy

- Requires minor surgery by a specially trained health care provider
- Not immediately effective. The couple should use another effective family planning method for at least 3 months after the procedure.
- Must be considered as permanent. Reversal surgery is more difficult, expensive, may not be available in some areas, and success is not guaranteed. Men who may want to have more children in the future should choose a different method.
- Does not protect against STIs including HIV/AIDS

◆ Present the disadvantages of vasectomy, and elaborate as needed.

Possible side effects

- NSV is likely to produce tenderness, discomfort and slight swelling during the first 2-3 days afterwards
- These are normal and may not require medication
- Client may return to normal activities and sexual intercourse with temporary contraception after 2-3 days

◆ Present the possible side effects of vasectomy, and elaborate as needed

Warning Signs of Complications

Client should be advised to seek medical attention if he experiences:

- Fever
- Blood or pus oozing from the incision
- Strong pain or swelling

◆ Discuss the warning signs of complications as presented on the slide.

Common Fears of Vasectomy

- Fear of surgery
- Fear of pain
- Loss of masculinity or libido
- Limited activity
- Loss or weight gain
- Risk of getting prostate/testicular cancer

◆ Review the entries written on the meta-cards on fears (also myths and misconceptions) regarding vasectomy.

◆ Responses may be sufficient, or the slide may be shown as a supplement.

Addressing the Fear of Surgery

- Recognize that fear exists
- Recognize that vasectomy could be the best solution on their personal or family situations
- Short term fear is offset by long term benefits
- Balance anxiety with knowledge and understanding that the procedure is widely used, accepted as safe, simple and requires less time
- Vasectomy is less expensive

◆ Ask participants how fear of surgery may be addressed.

◆ Supplement responses given as necessary.

Addressing the Fear of Pain

- The vasectomy procedure includes a local anesthesia and regional vasal block that numbs the area
- After the anesthetic wears off, mild discomfort may be felt but this can be relieved with pain medication, application of ice pack and the use of athletic supporter

◆ Ask participants how fear of pain may be addressed.

◆ Elaborate further if necessary.

Addressing the fear of loss of masculinity or libido

- Vasectomy only involves cutting of the vas deferens that prevents the sperm from joining the semen and the testicles and its functions are not affected at all
- The testicles continue to produce sperms and male hormones that maintain the male characteristics
- It does not affect sexual drive, continue to have erection, ejaculate or have intercourse as before

◆ Ask participants how fear of losing masculinity or libido may be addressed.

◆ Supplement responses given as necessary.

Addressing the fear of limited activity • Clients are advised to rest and avoid strenuous activities or heavy lifting only for one week • Most clients feel completely normal in one week and can work as hard as before	◆ Ask participants to elaborate on fear of limited activity and how it may be addressed.
Addressing Fear of Losing or Gaining Weight • Clients will not gain nor loss weight after vasectomy • Vasectomy does not cause a man to grow fat or become weak	◆ Ask participants about reports of vasectomy causing weight changes among acceptors. ◆ Present the slide on addressing fear of losing or gaining weight.
Addressing the risk of getting prostate/testicular cancer • Evidence from large, well designed studies shows that vasectomy does not increase risks of cancer of the testicles (testicular cancer) or prostate (prostatic cancer).	◆ Ask participants about reports or actual cases encountered linking vasectomy to cancers of the prostate or testis. ◆ Supplement with information as shown on the slide.
KEY MESSAGES • Vasectomy is a safe, simple surgical procedure intended to provide life-long, permanent and very effective protection against pregnancy; • It does not affect male sexual performance but offers no protection against STI/HIV/AIDS; • It has fewer side effects and complications than many methods for women.	◆ Enumerate the key messages for Session 1 as shown on the slide.

NARRATIVE

VASECTOMY

Description

- Vasectomy is known as male sterilization, as it provides permanent contraception for men who decide to no longer have any more children.
- Vasectomy is a safe, simple, and quick surgical procedure. The procedure can be performed in a clinic or office with appropriate infection prevention practices.
- The procedure involves tying and cutting a segment of the two vas that carry the sperm.
- NSV involves a small puncture on the scrotum (not using a scalpel) to reach the vas.
- The NSV technique was developed by Dr. Li Shunqiang, who performed the first NSV at the Shunqiang Clinic in 1974.
- After the introduction of NSV as an alternative technique for the vasectomy procedure, several vasectomy surgeons became interested in the procedure and trained under Dr. Li.
- NSV is now the global technique of choice.

Mechanism of Action

- The service provider punctures the man's scrotum and then ties and cuts the two vas. The vas carries the sperm from the testicles.
- Semen is still produced and can be found in the tubes after the vas are blocked.
- With the two vas blocked, no sperm will be contained in the semen.
- The man continues to have erections and ejaculate semen.

Effectiveness

- Vasectomy is 99.9% effective for correct use, but the rate is slightly lower with typical use at 99.8%.
- Vasectomy is more effective when used correctly. Correct usage entails the use of condoms or his woman partner using another effective FP method (e.g., pills or injectables) consistently for at least three months after the procedure and after a semen check showing no sperm has been performed.

Advantages

- Very effective
- Permanent. A single decision leads to lifelong, safe, and effective FP.
- Nothing to remember except to use condoms or another effective method for at least three months after the procedure
- No interference with sex and does not affect the man's ability to have sex
- Increased sexual enjoyment because the concern over pregnancy is eliminated
- No supplies to get, and no repeated clinic visits required
- No known long-term side effects or health risks

- Compared with BTL, vasectomy has the following advantages:
  - More effective
  - Safer
  - Easier to perform
  - Less expensive
  - Can be tested for effectiveness at any time
  - Less likely to result in ectopic pregnancy should it occur in the man's partner

Disadvantages

- Requires minor surgery by a specially trained health care provider
- Not immediately effective. The couple should use another effective FP method for at least three months after the procedure.
- Must be considered as permanent. Reversal surgery is difficult and expensive, may not be available in some areas, and has the possibility to fail. Men who may want to have more children in the future should choose a different method.
- Does not protect against STIs including HIV/AIDS

Possible Side Effects

- NSV is likely to produce tenderness, discomfort, and slight swelling during the first two to three days after the procedure.
- These symptoms are normal and may not require medication.
- Client may return to normal activities and sexual intercourse with temporary contraception after two to three days.

Warning Signs

Several problems affect men's satisfaction with vasectomy. Therefore, the service provider must attend to clients complaining of the following warning signs of complications and refer such clients to a facility or health service provider who can assess and manage the complaint. These warning signs are:

- Fever
- Blood or pus oozing from the incision
- Strong pain or swelling

Common Fears of Vasectomy

- Fear of surgery
- Fear of pain
- Loss of masculinity or libido
- Limited activity
- Weight loss or weight gain
- Getting prostate/testicular cancer

Addressing the Fear of Surgery

- Recognize that fear exists.
- Recognize that vasectomy could be the best solution to address their personal or family situations.
- Short-term fear is offset by long-term benefits.
- Balance anxiety with knowledge and understanding that the procedure is widely used, accepted as safe and simple, and requires less time.
- Vasectomy is inexpensive.

Addressing the Fear of Pain

- The vasectomy procedure includes a local anesthetic and regional vasal block that numbs the area.
- After the anesthesia wears off, mild discomfort may be felt but can be relieved with pain medication, application of ice pack, and the use of an athletic supporter.
- Some men report chronic pain or discomfort, but surgery is not required to relieve the pain.

Addressing the Fear of Losing Masculinity or Libido

- Vasectomy only involves the cutting of the vas deferens that prevents the sperm from joining the semen.
- The testicles and its functions are not affected at all.
- The testicles continue to produce sperms and male hormones that maintain the male characteristics.
- The procedure does not affect sexual drive. Clients continue to have erections and ejaculations or engage in intercourse as before.

Addressing the Fear of Limited Activity

- Clients are advised to rest and avoid strenuous activities or heavy lifting for only one week.
- Most clients feel completely normal in one week and can work as hard as before.

Addressing the Fear of Losing or Gaining Weight

- Clients will neither gain nor lose weight after vasectomy.
- Vasectomy does not cause a man to grow fat or become weak.

Addressing the Fear of Getting Prostatic/Testicular Cancer

- Evidence from large, well-designed studies shows that vasectomy does not increase the risk of cancer of the testicles (testicular cancer) or prostate (prostatic cancer).

Key Messages

- Vasectomy is a safe, simple surgical procedure intended to provide life-long, permanent, and very effective protection against pregnancy.
- The procedure does not affect male sexual performance but offers no protection against STI/HIV/AIDS.
- Vasectomy has fewer side effects and complications compared with many methods for women.

SESSION II

ANATOMY AND PHYSIOLOGY OF THE MALE GENITO-URINARY SYSTEM

OVERVIEW

This session provides basic information on the anatomy and physiology of the male genito-urinary system as well as on the concept of fertility and joint fertility as they relate to vasectomy. The knowledge gained from this session will help service providers further understand vasectomy as a procedure and enable them to perform vasectomy safely as an FP method and to reduce misconceptions about the method.

LEARNING OBJECTIVES

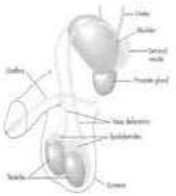
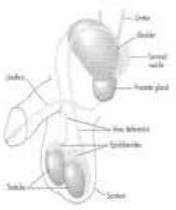
At the end of the session, the participant will be able to:

1. Describe the external and internal organs and the parts of the male genito-urinary system
2. Explain the physiology of the male genito-urinary system
3. Explain the changes in the physiology of the male genito-urinary system after vasectomy
4. Explain the effects of vasectomy
5. Explain the concept of fertility and joint fertility

ADVANCE PREPARATION

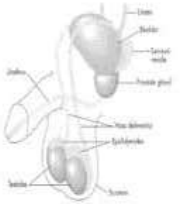
- ◆ PowerPoint slides on the "Anatomy and Physiology of the Male Genito-urinary System"
- ◆ Computer, LCD, and projector screen
- ◆ Meta-cards
- ◆ Flip charts with easel sheets and/or whiteboard
- ◆ Markers
- ◆ Masking tapes

TOPIC	TEACHING/LEARNING PROCESS
SESSION 2 **ANATOMY AND PHYSIOLOGY OF THE MALE GENITO-URINARY SYSTEM**	◆ Introduce the session by flashing the title slide.
Overview ▪ **The session provides the basic anatomy and physiology of male genito-urinary system and the concept of fertility and joint fertility as they relate to vasectomy;** ▪ **The knowledge will help service providers to better understand vasectomy as a procedure and enable them to provide safe vasectomy services.**	◆ State the overview of the session as presented on the slide.

Learning Objectives ▪ **At the end of the module, the trainee will be able to:** ▪ Describe the external and internal organs and parts of the male genito-urinary system ▪ Explain the physiology of the male reproductive system ▪ Explain the physiologic changes in the male genito-urinary system after vasectomy ▪ Explain the effects of vasectomy ▪ Explain the concept of fertility and joint fertility	◆ State the learning objectives of the session as shown on the slide.
EXTERNAL ORGANS OF THE MALE GENITO-URINARY SYSTEM ▪ **Penis contains the urethra and specialized highly vascular tissue necessary for erection** ▪ **Scrotum is divided into 2 scrotal sacs** ▪ **Each sac contains 1 testis** 	◆ Discuss the parts of the external organs of the male genito-urinary system as shown on the slide. ◆ Elaborate on the functions of the parts as needed.
INTERNAL ORGANS OF THE MALE GENITO-URINARY SYSTEM ▪ The male internal reproductive organs are made up of three groups: the testes, the ducts, and the accessory glands. ▪ The *testes* (also called testicles or male gonads) produce sperm and the male sex hormone testosterone. 	◆ Discuss the parts of the internal organs of the male genito-urinary system as shown on the next three slides. ◆ Elaborate as needed.
INTERNAL ORGANS OF THE MALE GENITO-URINARY SYSTEM ▪ The second group of organs is a series of connected ducts: the epididymides, the vasa deferentia (vas deferens), and the urethra. ▪ There are epididymides (which begin at and are connected to the testes) one each connected to one of the vasa deferentia. ▪ At the prostate, they come together and are connected to the urethra and the accessory glands. ▪ The epididymides and vasa deferentia carry sperm to mix with secretions from the accessory glands. ▪ The urethra carries the sperm and seminal fluid out of the body during ejaculation. The urethra also carries urine. ▪ The vas begins at the epididymis and ends at the base of the prostate, where it is joined by the seminal vesicle. ▪ Together, the vas and seminal vesicle ducts form the ejaculatory duct. ▪ The ejaculatory duct opens into the urethra to allow the passage of sperm and seminal fluid during ejaculation. 	

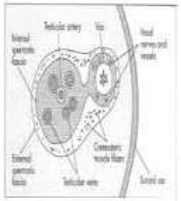
INTERNAL ORGANS OF THE MALE GENITO-URINARY SYSTEM

- The third group of internal organs is called the accessory glands.
- These include: the seminal vesicles, the prostate, and the bulbo-urethral glands (not herein pictured).
- These glands secrete the seminal fluid that carries sperm through the urethra during ejaculation.



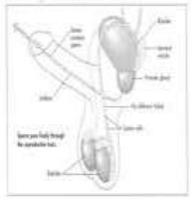
THE SPERMATIC CORD

- The vas deferens is located within the spermatic cord.
- The vas is approximately 35 cm long and 2–3 mm in diameter.
- It can be easily palpated and differentiated from other structures in the cord (spermatic fascia, arteries, and veins), as it is a firm, thick structure within the spermatic cord.

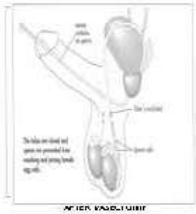


◆ Discuss the anatomy of the spermatic cord as shown on the slide.

PHYSIOLOGIC CHANGES AFTER VASECTOMY



BEFORE VASECTOMY

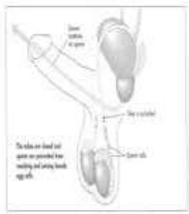


AFTER VASECTOMY

◆ Discuss the physiologic changes in the male sexual and reproductive system as shown on the next four slides.

PHYSIOLOGIC CHANGES AFTER VASECTOMY

- After vasectomy, the male sexual and reproductive physiology remains unaffected, aside from the desired change in fertility.
- The nerves involved in erection have not been involved.
- Seminal fluid, which forms the largest part of ejaculatory fluid, continues to be produced.
- The client will not notice any reduction in the amount of ejaculatory fluid.



PHYSIOLOGIC CHANGES AFTER VASECTOMY

- Sperm production continues, even though the sperm's passage through the reproductive system has been blocked.
- These sperm are absorbed into the tissue and tubes of the epididymis.
- Sometimes sperm blockage causes pressure to build up in the epididymis and its tubes, causing these structures to distend and, in time, rupture. Ruptures are usually asymptomatic and not problematic.
- The sperm granulomas that can form at the site of the rupture do not usually require treatment.
- Although some vasectomists believe that this build-up can be avoided by leaving the testicular end of the vas open, the effect of this open-ended technique on failure rates has not been adequately studied.

PHYSIOLOGIC CHANGES AFTER VASECTOMY

- Vasectomy causes a breakdown in the blood-testes barrier that leads to increased levels of serum anti-sperm antibodies in most men who have had a vasectomy.
- If a man has a vasectomy reversal, the presence of these antibodies can make pregnancy impossible, even if the vasa are successfully reconnected.
- However, sperm antibodies have no known impact on general health.

EFFECTS OF VASECTOMY

- Vasectomy entails cutting the tubes that carry the sperm (the vas deferens) so that sperm cannot pass through.
- The client's sexual desire will not be affected and that there will still be erections and ejaculations.
- The change is that the seminal fluid ejaculated will have no sperms due to the vasectomy.

AFTER VASECTOMY

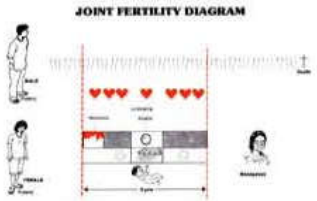
◆ Reiterate the effects of vasectomy as shown on the slide.

Long-term Health Effects

- Studies show no long-term health effects
- No relationship between vasectomy and cardiovascular disease, testicular cancer and prostate cancer

◆ Discuss the long-term health effects of vasectomy as shown on the slide.

The CONCEPT of FERTILITY and JOINT FERTILITY	◆ Flash the slide on the concept of fertility and joint fertility. ◆ Ask participants about their idea of fertility and joint fertility. ◆ Ask participants to write their ideas on an easel sheet or whiteboard.
Definitions ▪ FERTILITY ☐Capacity of a woman to conceive and bear a child ☐Capacity of a man to have a woman conceive ▪ JOINT FERTILITY ☐The united and equal contribution of the male and female in the decision and ability to have a child.	◆ Consolidate the participants' output, and show the slide on the definitions to support the given ideas.

JOINT FERTILITY  	◆ Randomly ask participants to interpret the Joint Fertility Diagram flashed on the slide. ◆ Explain male and female fertility using the diagram and by citing the following: **Male Fertility:** ◆ After reaching puberty, males are always fertile and are able to make females pregnant at any time. ◆ Fertility of males ends at death. **Female Fertility** ◆ Unlike males, female fertility is very limited. ◆ After puberty, females are fertile only on one day within a menstrual cycle, that is, during ovulation. ◆ On other days, females are infertile. ◆ Fertilization occurs when sperm cells are available to fertilize the ovum at the time of ovulation. ◆ Female fertility ends at menopause, which occurs at 50 years of age (on average).
KEY MESSAGES ▪ The unique location of the vas deferens makes it easily accessible to perform vasectomy ▪ There are no health risks nor changes in the physiology of the male genito-urinary system after a vasectomy ▪ The understanding of Fertility and Joint Fertility makes one understand men's contribution to them.	◆ Discuss key messages as shown on the slide.

NARRATIVE

EXTERNAL ORGANS OF THE MALE GENITO-URINARY SYSTEM (Figure 1)

The penis is the male organ for copulation. It is made up of spongy erectile tissues. When a man becomes sexually excited, the penis becomes erect; it stiffens and grows both in width and in length. An erect penis is approximately 5 inches to 7 inches long and approximately an inch or an inch-and-a-half in diameter.

The scrotum, the only other visible external male reproductive organ, is divided into two sacs (scrotal sacs). Each sac contains one testis.

During vasectomy, a puncture is made in the scrotum to allow access to the vasa (ductus) deferentia. The opening is made midway between the base of the penis and the top of the testes on the median raphe. This puncture site is chosen because of easy access to the vasa through the scrotal sac and the avoidance of risks of injury to the epididymides and the testicles.

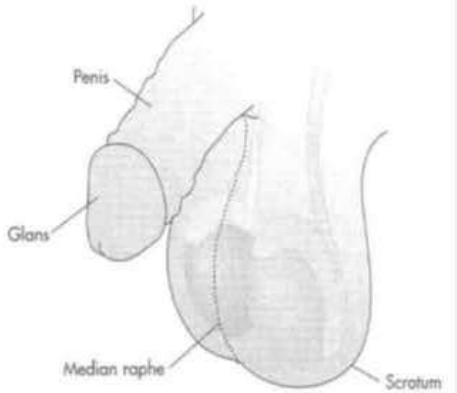
The scrotal sac is the pair of wrinkled skin pouches that contain and protect the testes or testicles. The scrotum controls the temperature of the testicles. The normal temperature is approximately 6 °C lower than the body temperature, which is ideal for sperm production.

THE MALE INTERNAL REPRODUCTIVE ANATOMY

- A man is fertile everyday from puberty (ages 8 to 12) and for the rest of his life.
- The testes are the pair of male sex glands that produce sperm and testosterone.
- Sperms are the male sex cells.
- Testosterone is the major male hormone responsible for the development of sperm and secondary male sex characteristics.
- Normal sperm analysis: count, 60 million/mL; motility, 60%; morphology, 30% or more of normal morphology; volume, 1 mL to 6 mL per ejaculation; ph, 7.2 to 7.8; liquefaction, less than 20 minutes.
- Once sperms are produced, they travel to the epididymis, where they start to mature. The epididymis is a small tube at the base of the testes.
- When a man ejaculates, sperms leave the epididymis and travel through a pair of tubes called the vas deferens, also known as sperm ducts.
- The vas deferens enables the passage of sperm to the seminal vesicles, the glands that produce a fluid that enters the vas deferens to nourish the sperm.
- The vasa deferentia are the tubes that are cut during vasectomy.
- After the fluid from the seminal vesicles mixes with the sperm, this mixture continues to travel through the vas deferens to the prostate gland, which is situated at the base of the urinary bladder and surrounds part of the urethra. This gland produces a thin, milky, and alkaline fluid that forms part of the semen.
- Semen with sperms travels out of the man's body through the urethra, the tube that runs through the center of the penis. In males, the passageway for urine and that for sperm are the same. A man cannot urinate and release semen simultaneously.

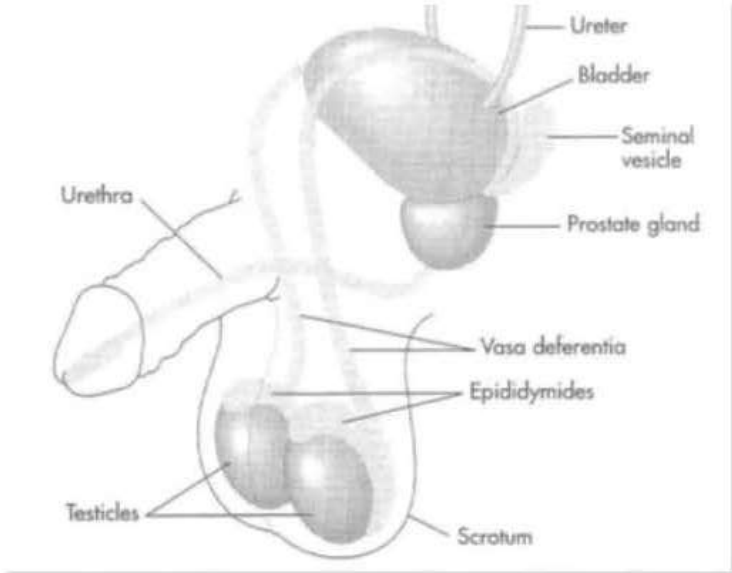
- Before the semen leaves the man's reproductive system, the Cowper's gland releases a small amount of fluid. This fluid further makes the seminal fluid alkaline so that sperms are not destroyed as they pass through urethra during ejaculation.

Figure 1-1. External Male Organs



INTERNAL ORGANS OF THE MALE GENITO-URINARY SYSTEM

Figure 1-2. Internal Male Organs



As shown in Figure 1-2, the male internal reproductive organs are made up of three groups: **the testes, the ducts, and the accessory glands.**

The testes (also called testicles or male gonads) produce sperm and the male sex hormone testosterone. After vasectomy, the testes continue to produce both sperms and hormones.

The second group of organs is a series of connected ducts: the **epididymides**, the **vasa deferentia** (vas deferens), and the **urethra**. The two epididymides (which begin at and are connected to the testes) are each connected to one of the vasa deferentia. At the prostate, the epididymides come together and are connected to the urethra and the accessory glands. The epididymides and vasa deferentia carry sperm to mix with secretions from the accessory glands. The urethra carries the sperm and seminal fluid out of the body during ejaculation. The urethra also carries urine.

The vas begins at the epididymis and ends at the base of the prostate, where it is joined by the **seminal vesicle**. The vas and seminal vesicle ducts form the ejaculatory duct. The ejaculatory duct opens into the urethra to enable the passage of sperm and seminal fluid during ejaculation. When using the three-finger technique of the NSV procedure, the vas can be easily felt by rolling the spermatic cord between the thumb and the third finger.

The third group of internal organs is called the accessory glands, which includes the **seminal vesicles**, the **prostate**, and the **bulbo-urethral glands** (not shown in Figure 1-2). These glands secrete the seminal fluid that carries the sperm through the urethra during ejaculation.

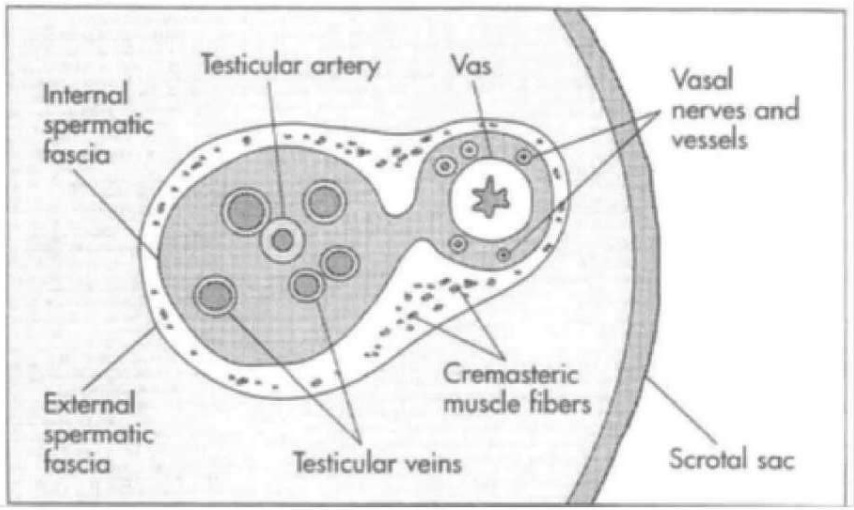
SPERMATIC CORD

One of the first steps in vasectomy is to identify the vas deferens so that it can be anesthetized and occluded. During NSV and during the injection of a local anesthetic, care should be taken to avoid the testicular artery and veins located within the internal spermatic fascia (see Figure 1-3).

The vas deferens is located within the spermatic cord. It can easily be palpated and differentiated from other structures in the cord (spermatic fascia, arteries, and veins), as it is a firm, thick structure within the spermatic cord.

The vas is approximately 35 cm long and 2 mm to 3 mm in diameter. The small diameter of the lumen of the vas presents the main challenge to vasectomy reversal. Without microsurgical techniques, the success of vasectomy reversal is low (pregnancy rates range from 15% to 30%). Even when microsurgical techniques are used, success is limited (the success rate of microsurgical techniques is between 50% and 60%).

Figure 1-3. Cross Section of the Spermatic Cord



PHYSIOLOGICAL CHANGES AFTER VASECTOMY

Aside from achieving the desired change in fertility, the male sexual and reproductive physiology remains unaffected after vasectomy. The nerves involved in erection are not involved in vasectomy. Seminal fluid, which forms the largest part of the ejaculatory fluid, continues to be produced. The client will not notice any reduction in the amount of ejaculatory fluid.

Sperm production continues despite the blockage of the passage of sperm through the reproductive system. These sperms are absorbed into the tissue and tubes of the epididymis. Sometimes, sperm blockage causes pressure to build up in the epididymis and its tubes, causing these structures to distend and eventually rupture. Ruptures are usually asymptomatic and not problematic. The sperm granulomas that can form at the site of the rupture do not usually require treatment. Although some vasectomists believe that this build-up can be avoided by leaving the testicular end of the vas open, the effect of this open-ended technique on failure rates has not been adequately studied.

Vasectomy causes a breakdown in the blood-testes barrier that results in increased levels of serum antisperm antibodies in most men who have had a vasectomy. If a man has a vasectomy reversal, the presence of these antibodies can make pregnancy impossible, even if the vasa are successfully reconnected. However, sperm antibodies have no known effect on general health.

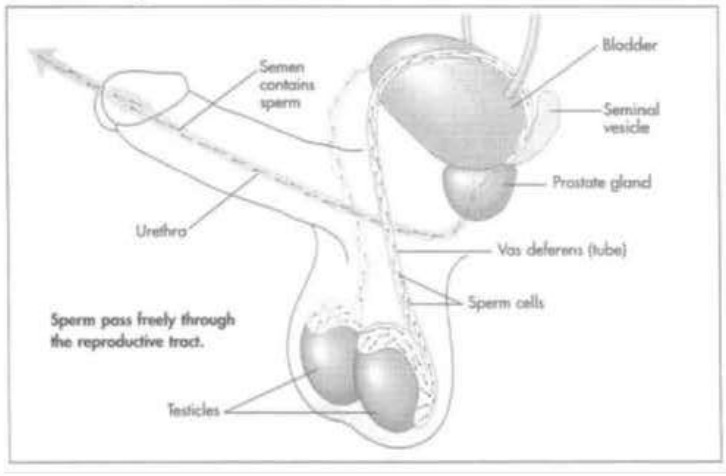
EXPLAINING THE EFFECTS OF VASECTOMY TO CLIENTS

During prevasectomy counseling, vasectomy must be explained to the client using a language that he can easily understand. Diagrams like those in Figure 1-4 should be used as an aid to the explanation. Clients should be shown where the small opening for NSV will be made, explaining that the puncture is not into the penis or testes. The location of sperm production must be pointed out, and the cutting of the tube that carries the sperm (the vas deferens) for sperm blockage must be explained. The client must be assured that his sexual desire will not be

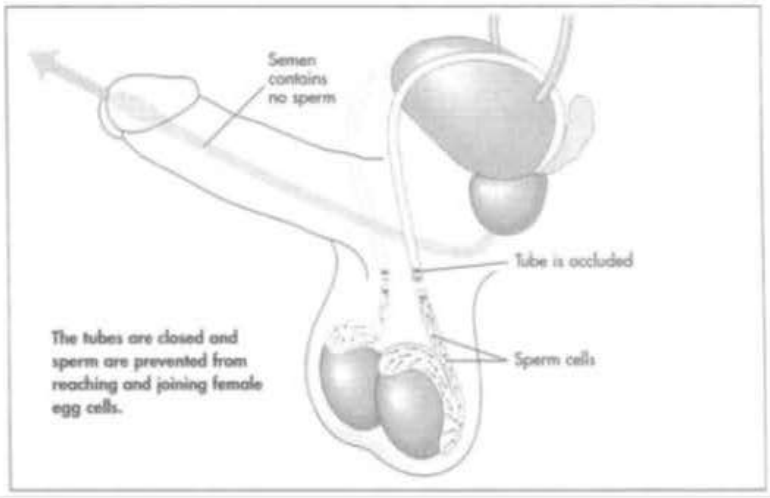
affected, and that he will still be able to have an erection. The client should also be shown that seminal fluid will still pass through the urethra, and that he will still be able to ejaculate normally. The change is that the seminal fluid ejaculated will have no sperms because of the vasectomy.

Figure 1–4. Effects of Vasectomy on the Male Anatomy

a. Before Vasectomy



b. After Vasectomy



LONG-TERM HEALTH EFFECTS

To date, no studies indicate that vasectomy causes any long-term health problems. Studies that raised concerns about the relationship between vasectomy and cardiovascular disease, testicular cancer, and prostate cancer have not been substantiated by recent published studies.

Some health personnel and clients may have been misinformed about the long-term health effects of vasectomy. FP providers must therefore correct myths and rumors held by colleagues and clients.

CONCEPT OF FERTILITY AND JOINT FERTILITY

Fertility is the capacity of the woman to conceive and bear a child and the capacity of a man to have a woman conceive.

When we refer to joint fertility, we focus on both male and female fertility not separately but in a joint or combined perspective. Joint fertility involves contributions from both the male (sperm) and the female (egg), resulting in the conception of a child.

Male Fertility

- After reaching puberty, males are always fertile and are able to make females pregnant at any time.
- Male fertility ends at death.

Female Fertility

- Unlike males, female fertility is very limited.
- After puberty, females are fertile only on one day within a menstrual cycle, which is during ovulation. On other days, females are infertile.
- Fertilization occurs when sperm cells are available to fertilize the ovum at the time of ovulation.
- Female fertility ends at menopause, which occurs at 50 years of age (on average).

Joint or Combined Fertility

- This perspective highlights the united and equal contribution of the male and female in the decision and ability to have a child.

PUBERTY

Puberty refers to the process of physical changes by which a child's body becomes an adult body capable of reproduction. In a strict sense, this process refers to the bodily changes induced by sexual maturation. Puberty is initiated by hormone signals from the brain to the gonads (the ovaries and testes). In response, the gonads produce a variety of hormones that stimulate the growth, function, or transformation of brain, bones, muscle, skin, breasts, and reproductive organs. During puberty, major differences in size, shape, composition, and function develop in many body structures and systems. The most obvious changes are referred to as secondary sex characteristics.

Signs of Puberty

In Females

Girls begin the process of puberty approximately one to two years earlier than boys do. The process begins at the age of 9 to 14 years.

- Breast Development

  The first physical sign of puberty in females is usually a firm, tender lump under the center of the areola(e) of one or both breasts, occurring on average at approximately 10.5 years of age. Within 6 to 12 months, the swelling begins on both sides, softens, and can be felt and seen extending beyond the edges of the areolae. By another 12 months, the breasts approach a mature size and shape, with the areolae and papillae forming a secondary mound. In most young women, this mound disappears into the contour of the mature breast.

- Pubic Hair

  Pubic hair is often the second obvious change in female puberty. Pubic hairs are usually visible first along the labia. Within another 6 to 12 months, the hairs become too numerous to count and appear on the pubic mound as well. Later, the pubic hairs densely fill the "pubic triangle" and spread to the thighs and sometimes upward toward the navel as abdominal hair.

- Vagina, Uterus, Ovaries

  The mucosal surface of the vagina also changes in response to increasing levels of estrogen; it becomes thick and dull pink in color (in contrast to the brighter red of the pre-pubertal vaginal mucosa). Whitish secretions (physiologic leukorrhea) are a normal effect of estrogen as well. In the two years following the development of the breast, the uterus and ovaries increase in size, and follicles in the ovaries reach large sizes. The ovaries usually contain small follicular cysts visible by ultrasound.

- Menstruation and Fertility

  The first menstrual bleeding is referred to as menarche, and it typically occurs approximately two years after the first signs of breast development. The average age of menarche is approximately 11.75 years. Menses (menstrual periods) are not always regular and monthly in the first two years after menarche. Ovulation is necessary for fertility but may or may not accompany the earliest menses. In post-menarchal girls, approximately 80% of the cycles are anovulatory in the first year after menarche (approximately 13 years), 50% in the third (approximately 15 years), and 10% in the sixth year (approximately 18 years).

  During this period, the lower half of the pelvis and the hips widen (providing a large birth canal) also because of the rising levels of estrogen. Fat tissue increases to a greater percentage of the body composition of females than of males, especially in the typical female distribution of breasts, hips, buttocks, thighs, upper arms, and pubis.

  Progressive differences in fat distribution as well as sex differences in local skeletal growth contribute to the typical female body shape by the end of puberty. At age 10, the average girl has 6% more body fat than the average boy, but by the end of puberty, the average difference is nearly 50%.

- Body Odor and Acne

  Rising levels of androgens can change the fatty acid composition of perspiration, resulting in an "adult" body odor. This condition often precedes breast and pubic hair development by one or more years. Another androgen effect is increased secretion of oil (sebum) from the skin. This change increases the susceptibility to acne, a characteristic affliction of puberty that greatly varies in severity.

In Males

Boys begin the process of puberty at approximately 10 to 17 years old. The following are the physical changes during puberty:

- Testicular size, Function, and Fertility

  These factors are the first physical manifestations of puberty in males. The testes start producing testosterone and sperms. Sperm can be detected in the morning urine of most boys after the first year of pubertal changes (and occasionally earlier). Potential fertility is reached at approximately 13 years of age in boys, but full fertility will not be gained until 14 to 16 years of age, although some go through the process very quickly, reaching full fertility only one year later.

- Pubic Hair

  For boys, pubic hair often appears shortly after the genitalia begin to grow. The pubic hairs are usually first visible at the dorsal (abdominal) base of the penis. After another 6 to 12 months, the hairs become too many to count; they become dense to fill the "pubic triangle" and spread to the thighs and upward toward the navel as part of the developing abdominal hair.

- Body and Facial Hair

  In the months and years following the appearance of pubic hair, other areas of the skin that respond to androgens (testosterone) undergo heavy hair growth in roughly the following sequence: underarm (axillary) hair, peri-anal hair, upper lip hair, sideburn (pre-auricular) hair, peri-areolar hair, and the rest of the beard area. Arm, leg, chest, abdominal, and back hair become heavy very gradually. The amount of body hair among adult men is wide ranging, and significant differences in timing and quantity of hair growth are observed among different ethnic groups. Chest hair may appear during puberty or years after. Not all men have chest hair.

- Voice Change

  Under the influence of androgens, the voice box or larynx grows in both sexes. This growth is far more prominent in boys than in girls. It causes the male voice to drop and deepen, sometimes abruptly but rarely "overnight," by approximately one octave. Full adult pitch is attained at an average age of approximately 15 years.

- Male Musculature and Body Shape

  By the end of puberty, adult men have heavier bones and nearly twice as much skeletal muscle.

- Body Odor and Acne

  Rising levels of androgens can change the fatty acid composition of perspiration, resulting in an "adult" body odor. Another androgen effect is the increased secretion of oil (sebum) from

the skin and the resultant variable amounts of acne. Acne cannot be prevented or diminished easily, but it typically fully diminishes at the end of puberty.

KEY MESSAGES

- The unique location of the vas deferens makes it easily accessible when performing vasectomy.
- Health risks or changes in the physiology of the male genito-urinary system are not observed after vasectomy.
- The understanding of fertility and joint fertility makes one appreciate the contribution of men to these concepts.

SESSION III

COUNSELING AND INFORMED CONSENT

OVERVIEW

Counseling serves an important function in providing quality FP services. Through counseling, providers help clients make and implement their own decisions or choices about reproductive health and FP.

Good counseling minimizes the risk of regret or dissatisfaction from vasectomy and therefore facilitates great client satisfaction. This consideration is particularly important for clients choosing a permanent method of contraception.

This session provides an overview of counseling so that service providers become aware of its importance and provision.

OBJECTIVES

At the end of the session, the participants will be able to:

1. Explain FP counseling
2. Enumerate the rights of clients
3. Discuss FP counseling for vasectomy
4. Describe the steps in counseling clients for vasectomy
5. Explain "informed consent"
6. Identify clients at risk for regretting vasectomy
7. Demonstrate proper use of the guide for "Verifying Informed Consent"
8. Instruct clients on the use of the condom

ADVANCE PREPARATION

- PowerPoint slides on "Counseling and Informed Consent"
- Computer, LCD, and projector screen
- Meta-cards
- Flip charts with easel sheets and/or whiteboard
- Markers
- Masking tapes
- Sample Informed Consent form

TOPIC	TEACHING/LEARNING PROCESS
SESSION 3 **COUNSELING AND INFORMED CONSENT**	◆ Introduce the session by flashing the slide.
Overview • Counseling plays an important role in providing quality family planning services • Through counseling, providers help clients make and carry-out decisions or choices on RH and FP • Good counseling minimizes regret or dissatisfaction for vasectomy and leads to greater satisfaction, particularly for those choosing a permanent method • This session provides an overview and awareness of its importance and provision	◆ State the overview of the session as shown on the slide.

Learning Objectives
• At the end of the module, the trainee will be able to:
  • Explain family planning counseling
  • Enumerate the rights of the clients
  • Discuss FP counseling for vasectomy
  • Describe the steps in counseling clients for vasectomy
  • Explain "Informed Consent"
  • Identify clients at risk for regretting vasectomy
  • Demonstrate proper use of the guide for "Verifying Informed Consent"
  • Instruct the clients on the use of condom
	◆ State the learning objectives of the session as shown on the slide.

Benefits of Counseling • Helps ensure informed, voluntary and well-considered decisions • Increases client satisfaction • Contributes to higher rates of continuation • Increases rate of correct use • Improves the quality of the FP Program • Enhances the reputation of the FP Program and its staff	◆ Enumerate the benefits of counseling as presented on the slide.
Counseling Potential Vasectomy Clients Emphasize that: • Vasectomy is a surgical method • Vasectomy is intended to be permanent, and there are some failures • Vasectomy does not protect against STI, HIV and AIDS • Vasectomy is not immediately effective; have to use protection for 3 months after vasectomy	◆ Discuss the counseling points that need to be emphasized for potential NSV clients as presented on the slide.
FP Counseling and Vasectomy Responsibilities of the Counselor: • Assess client's knowledge of FP alternatives and provide missing information • Help client arrives at an understanding of needs and circumstances related to children and FP • Help client comes to an independent decision about which choice is right for him	◆ Discuss the responsibilities of the counselor when dealing with potential NSV clients as presented on the slide.

Steps in Counseling

STEP 1 Preparation for Counseling
STEP 2 Counseling Session Begins
STEP 3 Providing Information to the Client
STEP 4 Assessing the Client Decision to Have Vasectomy
STEP 5 Counseling the Client about the Vasectomy Procedure

◆ Enumerate five steps in counseling as shown on the slide.

Step 1: Preparation for Counseling

Basics for a Successful Counseling Session:

- A Respectful Counselor
- An Appropriate Setting
- Adequate Supplies

◆ Discuss the basic requirements for a successful counseling session as shown on the slide.

Step 2: The Counseling Session Begins

- Put the client at ease, treat him with respect, make him feel welcome in the health facility
- Getting information from the client – personal data, previous FP method, health status
- Assess client knowledge about the human reproductive system, availability of temporary methods
- Benefits, risk and side effects of temporary and permanent methods

◆ As presented on the slide, discuss the process to be carried out once the counseling session begins.

Step 3: Providing Information to Client

- Tailor information to suit client's knowledge and FP goals
- Provide accurate, unbiased information; Correct misunderstanding
- Fill in gaps in the client's knowledge of human reproductive system, benefits, risks and side effects of temporary and permanent methods; benefits and risks for not using an FP method
- Encourage client to ask questions, provide feedback
- If appropriate, explain how to prevent transmission of STI/HIV/AIDS
- Discuss fee that client may have to pay

◆ Discuss how to provide the information required by the vasectomy client as presented on the slide.

Step 4: Assessing Client Decision About Vasectomy

- When a client expresses interest in vasectomy – be sure the client understands the method involves surgery and intended to be permanent
- Assess decision and feelings; psychologically prepare client for ending his fertility

◆ Assess client's decision to undergo vasectomy as shown on the slide.

Step 4: Assessing Client Decision About Vasectomy

- If the client decides not to use vasectomy – be sure the client understands the risk of pregnancy to his partner
- Tell the client to return if he changes his mind
- Inform client about other services, alternative FP methods available

◆ If the client decides against vasectomy, provide required information as presented on the slide.

Step 4: Assessing Client Decision About Vasectomy

- If the client decides to use temporary methods:
  - Screen for appropriate method;
  - Explain and demonstrate how to use, risks, danger signals, what to do if problem arises
  - Whom to contact to discontinue the method
- Prepare client for any inconveniences, fees client is expected to pay
- Provide the chosen method
- Schedule for follow-up visit if appropriate

◆ As shown on the slide, discuss how to assist the client should he decide to use a temporary method.

Assessing Client Decision to Have Vasectomy

Sound decision
- Client is a mature individual
- Achieved or exceeded desired family size
- With support of partner
- Stable marriage
- Realistic expectations
- Free from stress, confident on decision
- Well established desire to end fertility; well informed

Warning Signals
- The client is young, has few children; feeling pressured in the decision
- Has unstable marriage
- Unrealistic expectations
- Partner does not agree
- Under temporary stress
- Unresolved conflicts
- Economic inducement
- Excessive interest for reversal

◆ As shown on the slide, discuss the characteristics of a client giving a "sound decision" for vasectomy and the "warning signals" of regrets or dissatisfaction for vasectomy.

Step 5: Counseling the Client About the Vasectomy Procedure

- Explain the benefits, risks and side effects
- Make sure he understands that it does not provide protection for STDs/HIV and AIDS
- Psychologically prepare him for surgery – describe what to expect during and after the procedure
- Make sure the client has been provided oral and written pre-operative and post-operative instructions
- Advise use of temporary method before and after the procedure if necessary
- Complete informed consent procedures

◆ Discuss how to counsel clients about the vasectomy procedure as presented on the slide.

Informed Consent Procedures

- Knowledge of availability of temporary methods
- Understanding that it is a surgical procedure
- Understanding the risks, benefits of vasectomy including small risk of failure
- Understanding that it is intended to be permanent
- If successful, client could no longer father a child
- Knowledge of option to decide against the procedure at any time

◆ Discuss the components of informed consent as shown on the slide.

Completing Informed Consent

- Obtain client's signature or thumb mark if illiterate and obtain a witness's signature attesting that the client has signed the informed consent form
- Schedule an appointment for screening and surgery
- Remember the consent is voluntary

◆ Discuss the other features of informed consent as shown on the slide.

Verifying Informed Consent

	STOP	CAUTION	GO
Questions to ask CLIENT	Should not have surgery now	Need more counseling	Signs of sound decision
Who made the decision?	Someone else	Client is decided but someone objects	Client and partner (or client if single)
When did the client decide?	Now	Recently	Some time ago
Why choose a permanent method?	Pressured by someone else	Aware method can be reversed	Wants no more children
How did client decide?	While upset or undecisive	Without enough consideration or information	After consideration and full information

◆ Explain the procedure for verifying informed consent as presented on the slide.

◆ Review the procedure for using this guide as shown on the next slide.

HOW TO USE THIS GUIDE?

- Part of the surgeon's responsibility for clients about to undergo surgery for permanent contraception is to verify that the client has made an informed and voluntary decision for the procedure.
- This simple aid can help the surgeon check the client's readiness for permanent contraception before the operation.
- The assessment should be made before starting any part of the procedure.
- Use of this guide does not substitute for client counseling, which should come much earlier.
- Furthermore, good judgement is needed when using this guide (or any other) and when interpreting the results.
- For example, if all of the client's answers fall in the "go" category, but he is unduly nervous, and his agitation does not appear to be related to a fear of surgery, the surgeon or another staff member should take time to determine what is causing his anxiety before performing the procedure.

Instructions for Condom Use

1. Tear open the package carefully.
   - Do not use fingernails, teeth, or anything that can damage the condom
   - Do not unroll the condom before putting it on.

Instructions for Condom Use

2. Put the condom on the hard penis. If you are not circumcised pull back the foreskin.

Note: If the condom is initially placed on the penis backwards, throw it away and start a new one.

Instructions for Condom Use

3. While pinching the tip of the condom to squeeze out air, unroll the condom all the way to the base of the erect penis.

◆ Discuss back-up methods, such as condom use for three months, to improve the effectiveness of vasectomy.

◆ Do not assume that all men know how to correctly use a condom.

◆ Incorrect use is common and is a major cause of condom failure.

◆ All vasectomy clients should be provided with instructions on the correct use of condoms. These instructions are presented on the next six slides

Instructions for Condom Use

4. Check to make sure there is space at the tip and that the condom is not broken

- With the condom on insert the penis for intercourse.

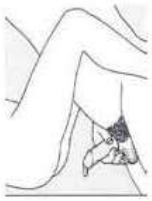
- After ejaculation, hold onto the condom at the base of the penis.

- Keeping the condom on, pull the penis out before it gets soft.

Instructions for Condom Use

5. After ejaculation, hold onto the condom at the base of the penis.

- Keeping the condom on, pull the penis out before it gets soft.



Instructions for Condom Use

6. Slide the condom off without spilling the semen inside.

- Wrap the condom in its package and put in the rubbish or latrine.

-Do not put the condom into a flush toilet, as it can cause problems with plumbing.

KEY MESSAGES

- The Principles of Informed Consent and Voluntarism must always be upheld in the provision of NSV;
- Service providers must devote time to provide quality Counseling especially for permanent methods like NSV;
- The 6 elements of Informed Consent must be adequately elucidated to clients;
- Condom use as a back-up method while waiting for the 3 months for vasectomy to be effective must be emphasized.

- Ask the participants about the key messages they obtained from the session.
- Review the responses, including but not limited to the items listed on the slide.

NARRATIVE

DEFINITION AND RATIONALE

FP Counseling

- Involves two-way communication between counselors and clients
- Provides clients with their rights
- Helps clients make voluntary, informed decisions and actions made by couples/individuals regarding fertility and contraception
- Provides information that clients can apply to their individual needs and circumstances
- Helps clients use the contraceptive method of their choice

The purpose of FP counseling is to ensure that clients make a free and informed decision about reproduction and contraception. The client makes the decision after receiving unbiased, complete information about the available choices and after considering how such choices relate to his needs and circumstances.

Figure 3-1. Rights of the Client

All clients have the right to:

- Clear information
- Access to services
- Their choice of family planning method
- Safe services
- Privacy and confidentiality
- Dignity, comfort, and free expression of opinion
- Continuity of service

Adapted from: "The Rights of the Client," a poster created by the International Planned Parenthood Federation.

BENEFITS OF COUNSELING

- Helps ensure informed, voluntary, and well-considered decisions
- Increases client satisfaction
- Contributes to higher rates of contraceptive continuation
- Increases the likelihood that the client will use the method correctly
- Improves the quality of the FP program
- Enhances the reputation of the FP program and its staff

COUNSELING POTENTIAL VASECTOMY CLIENTS

Vasectomy counseling is particularly critical for the following reasons:

- Vasectomy is a surgical method.
- Vasectomy is intended to be a permanent method.

RESPONSIBILITIES OF THE FP COUNSELOR

Considering the permanence of the effects of vasectomy and the need to minimize regret and dissatisfaction, the counselor is responsible for the following:

- To assess the client's knowledge of FP alternatives and to provide any missing information
- To help the client arrive at an understanding of his needs and circumstances as they relate to children and FP
- To help the client come to an independent decision about which choice is right for him

While performing these responsibilities, the counselor treats the client respectfully and encourages him to talk about his worries, fears, interests, and needs. The counselor spends as much time listening to clients as talking to them. The counselor remains neutral about the client's choice. Each client has the right to choose whether to use a contraceptive method. A decision to have another child, after having considered all the possible choices, is as valid an outcome of counseling as a decision to have a vasectomy.

Regardless of whether the vasectomist or another staff member is responsible for counseling vasectomy clients, a number of steps must be followed to help ensure the most appropriate and effective counseling session possible. These steps are discussed in detail on the following pages.

Table 3-1. Steps in Providing Counseling for Family Planning Clients including Vasectomy Clients

STEP 1	Preparation for Counseling. A respectful counselor, an appropriate setting, and adequate supplies are the basics needed for a successful counseling session.
STEP 2	Beginning of Counseling Session. The counselor puts the client at ease, treats him with respect, and makes him feel welcome at the health facility.
STEP 3	Providing Information to the Client. The client should know that he is free to choose a different contraceptive method and to decide against having a vasectomy at any time before the procedure.
STEP 4	Assessing the Client's Decision to Have a Vasectomy. As vasectomy is intended to be a permanent method, the counselor must determine whether a client's decision to have a vasectomy is a sound one.
STEP 5	Counseling the Client about the Vasectomy Procedure. The counselor ensures that the client has and understands all the basic information about the procedure.

STEPS IN PROVIDING COUNSELING FOR FAMILY PLANNING CLIENTS INCLUDING VASECTOMY CLIENTS

Step 1: Preparation for Counseling

Ask yourself the following questions:

Emotional Climate

- Can I give the client my full attention without being interrupted?
- Can I provide a comfortable atmosphere for the client?

Setting

- Does the setting encourage discussion and provide privacy?
- Is the counseling area tidy and free of distraction?
- Are there comfortable chairs for the client or couple and for me?

Materials

- Do I have the necessary forms (client record, informed consent)?
- Do I have visual aids (flipcharts, brochures, posters, samples of methods, etc.)?
- Do I have materials that remind me of the characteristics, benefits, and risks of the various methods?

Step 2: Start of Counseling Session

Getting started

- Begin by putting the client at ease. Introduce yourself.
- Ask the client why he has come to see you: For information about vasectomy? For vasectomy services? To discuss a problem with his vasectomy? To discuss other contraceptive methods?
- If you scheduled the counseling appointment, explain why. Explain the purpose of the counseling session.

Gathering information from the client

- Personal data (age, marital status, and the age, number, and gender of his children)
- Previous experience with contraceptive methods
- Health status

Assess what the client knows about:

- The human reproductive system
- The availability of temporary contraceptive methods
- The benefits, risks, and side effects of temporary and permanent contraceptive methods

Step 3: Providing Information to the Client

- Tailor information to suit the client's knowledge and family planning goals.

- Provide accurate, unbiased information.
- Correct misunderstandings.
- Fill in gaps in the client's knowledge of:
  - The human reproductive system
  - The benefits, risks, and side effects of temporary and permanent methods
  - The benefits and risks of not using contraception
- Encourage the client to ask questions and to provide feedback to ensure that he and his partner understand all the information.
- If appropriate, explain what the client can do to prevent the transmission of sexually transmitted diseases, including AIDS.
- Discuss fees the client may have to pay for the various methods.

Step 4: Assessing the Client's Decision to Have a Vasectomy

When a client expresses an interest in vasectomy:

- Ensure that the client understands that the method involves surgery and is intended to be permanent.
- Assess the client's decision and feelings. Psychologically prepare the client for ending his fertility. Use probing questions such as:
  - When did you decide to have no more children?
  - Why do you want to end your fertility (completed family size, economic reasons, health reasons, etc.)?
  - How did you first learn about vasectomy (partner, nurse, doctor, friend, field worker, etc.)?
  - How long have you been considering vasectomy?
  - What does your partner think?
  - Do you know anyone who has had a vasectomy?
  - How would you feel if your circumstances changed after the vasectomy (divorce, remarriage, death of child or partner, etc.)?
- Ask yourself: "Is the client making a well-considered decision?"

If the client decides not to use contraception:

- Ensure that the client understands the risk of pregnancy to his partner. The client should also understand the health risks associated with pregnancy.
- Tell the client to return if he or his partner has a change of mind.
- Advise the client about other services, such as prenatal and maternity care.

If the client decides to use a temporary method:

- Screen for appropriateness (health precautions, ability to use the method effectively, etc.).
- Explain and demonstrate the method in detail: how to use it; the risks, benefits, danger signals; what to do if a problem arises; and whom to contact to discontinue the method.
- Prepare the client and his partner for any inconveniences and any common side effects of the method.
- Explain how to obtain the supplies needed for the method.
- Tell the client and his partner about any fees they are expected to pay for the method.
- Provide the method, or refer the client or his partner to an appropriate provider.
- Schedule a follow-up visit if appropriate.

Figure 3-2. Assessing the Client's Decision to Have a Vasectomy

Client is Making a Sound Decision:	Warning Signals:
◆ Client is a mature individual. ◆ Client has achieved or exceeded desired family size. ◆ Client has support from partner. ◆ Client has stable marriage. ◆ Client has realistic expectations. ◆ Client is free from stress. ◆ Client is confident on the decision. ◆ Client has well-established desire to end fertility. ◆ Client is well informed.	◆ Client is young. ◆ Client has few children. ◆ Client is feeling pressured in the decision. ◆ Client has an unstable marriage. ◆ Client has unrealistic expectations. ◆ Client's partner does not agree. ◆ Client is under temporary stress. ◆ Client has unresolved conflicts. ◆ Client decision is based on economic inducement. ◆ Client has excessive interest for reversal.

If the client's partner has not accompanied him to the counseling session, briefly cover the information noted here, and schedule an appointment for the client and his partner to receive counseling together.

If you believe the client is at risk of dissatisfaction or regret after vasectomy:

- Explain that the client has characteristics that make dissatisfaction or regret likely.
- Discuss these characteristics with the client. For instance: "We've learned that men in your situation who have had a vasectomy sometimes change their minds about the choice after the operation is done. This is because..."

◆ Ask the client to spend more time considering the decision. Discuss the temporary methods he can use in the meantime.

Possible Outcomes

- The client agrees to reconsider and may or may not use temporary contraception in the meantime. Schedule another appointment.
- The client may change his mind and decide to use a temporary method or no method.
- The client may persist in the request. If so, consult your colleagues or supervisor.
- Consider referring the client to a more knowledgeable or experienced counselor.

Step 5: Counseling the Client about the Vasectomy Procedure

If you believe that the client's decision for vasectomy is informed, voluntary, and well considered, follow these eight steps:

1. Using simple language, explain in detail the benefits, risks, and side effects of vasectomy. Ensure that the client also understands that vasectomy does not provide protection against STDs, including HIV infection.
2. Psychologically prepare the client for surgery by describing what to expect during the procedure and possible postoperative effects. Use diagrams to describe the surgical procedure (see Figure 3-4).
3. Ensure that the client has been provided with oral and written preoperative instructions. Tell the client about any fees he is expected to pay.
4. Advise the client to use temporary contraception before and after surgery. If needed, provide condom instructions (see Figure 4-4).
5. Ask the client if he has any questions.
6. Complete informed consent procedures. Ensure that the client understands the six points of informed consent listed below and knows what he is signing. Encourage the client to ask questions. The six points of informed consent are:
   - The knowledge of the availability of temporary methods
   - The understanding that vasectomy is a surgical procedure
   - An understanding of the benefits and risks of vasectomy, including the small risk of failure
   - The understanding that vasectomy is intended to be permanent
   - The understanding that if the vasectomy is successful, the client will have no more children
   - Knowledge of the option to decide against the procedure at any time before the operation
7. Obtain the client's signature or mark. If the client is illiterate, obtain a witness's signature attesting that the client has signed the informed consent form.
8. Schedule an appointment for medical screening and surgery.

Remember: The goal of counseling is for a client to make an informed, voluntary, well-considered decision.

INFORMED CONSENT

Informed consent is a client's agreement to use a contraceptive method or to undergo a medical procedure voluntarily and in full possession and understanding of the relevant benefits and risks. For vasectomy, the client gives informed consent after being counseled and signs a consent form before the procedure is performed.

Consent is voluntary when it is given of the client's own free will and is not obtained by means of special inducement, force, fraud, deceit, duress, or other forms of coercion or misrepresentation. The fact that a client has signed an informed consent form does not guarantee informed consent.

Model Informed Consent Form for Vasectomy*

I, _____, the undersigned, request that a vasectomy be performed on my person. I make this request of my own free will, without having been forced or given any special inducement. I understand the following:

1. There are temporary contraceptive methods available to me and my partner.
2. The procedure to be performed on me is a surgical procedure, the details of which have been explained to me.
3. This surgical procedure involves risks in addition to benefits, all of which have
4. been explained to me. Among the risks is the possibility that the procedure may fail.
5. If the procedure is successful, I will be unable to have any more children.
6. The effect of the procedure should be considered permanent.
7. The procedure does not protect me or my partner from infection with sexually transmitted infections, including HIV/AIDS.
8. I can decide against the procedure at any time before the operation is performed (without losing the right to medical, health, or other services or benefits).

\-

_____ _____
(Signature or mark of client) *(Date)*

_____ _____
(Signature of attending doctor or delegated assistant) *(Date)*

If the client cannot read, a witness of the client's choosing (male or female) and who speaks the same language as the client must sign the following declaration:
I, the undersigned, attest that the client has affixed his thumbprint or mark in my presence.

_____ _____
(Signature or mark of witness) *(Date)*

* Adapt this form for use in your facility.

Figure 3–3. Assessing a Client's Decision for Vasectomy

A Surgeon's Guide for Final Assessment

Note: Ensure that the client has signed an informed consent form before conducting this assessment.

Ask the client these questions:	**STOP**	**CAUTION**	**GO**
	Should not have surgery now	*Needs more counseling*	*Signs of a sound decision*
WHO made the decision for sterilization?	Someone else	Client decided, but partner objects	Client and partner (or client, if single)
WHEN did the client decide not to have more children?	Now	Recently	Some time ago
WHY did the client choose permanent contraception?	Pressure from someone else	Has heard permanent method can be reversed	Wants no more children
HOW did the client decide?	While upset or under stress	Without enough consideration or information	After consideration and full information
WHAT does the client know about vasectomy?	Does not know that it: – Is permanent – Is a surgical method – Will mean that he cannot have more children	Has misunderstandings about contraceptive methods	Understands that it: – Is permanent – Is a surgical method – Will mean that he cannot have more children
WHAT does the client know about other contraceptive methods?	Would prefer another method if available	Has little knowledge of other methods or their availability	Knows of other methods, but prefers permanent contraception

How to Use This Guide

Part of the surgeon's responsibility for clients about to undergo surgery for permanent contraception is to verify that the client has made an informed and voluntary decision for the procedure. This simple aid can help the surgeon verify a client's readiness for permanent contraception before the operation. The assessment should be made before starting any part of the procedure.

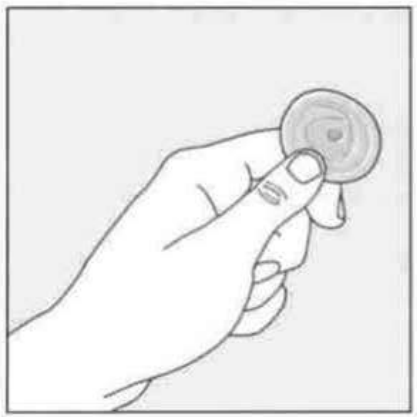
Use of this guide does not substitute for client counseling, which should come much earlier. Furthermore, good judgment is needed when using this guide (or any other) and when interpreting the results. For example, if all of the client's answers fall in the GO category, but he is unduly nervous, and his agitation does not appear to be related to a fear of surgery, the surgeon or another staff member should take time to determine what is causing his anxiety before performing the procedure.

CONDOM INSTRUCTIONS

The infertility effect of vasectomy does not happen immediately after the procedure. The client or his partner needs to use another effective contraceptive for at least three months and after a sperm–free semen examination. A common choice of back–up method is the condom. For this reason, all vasectomy clients should be provided with instructions and practice on the correct use of condoms for use immediately after the vasectomy. Although providers often mistakenly assume that all men know how to use condoms correctly, incorrect use is common and is a major cause of condom failure.

Figure 3–4. Instructions for Condom Use

A. Before Intercourse



1. Carefully open the package so the condom does not tear. (Do not use teeth or a sharp object to open the package). Do not unroll the condom before putting it on.

2. If you are not circumcised, pull back the foreskin. Put the condom on the end of the hard penis. *Note:* If the condom is initially placed on the penis backwards, do not turn it around. Throw it away, and start with a new one.

3. While pinching the tip of the condom to squeeze out air, roll on the condom until it reaches the base of the penis.

4. Check to make sure there is space at the tip, and that the condom is not broken. With the condom on, insert the penis for intercourse.

B. After Intercourse

5. After ejaculation, hold onto the condom at the base of the penis. Keeping the condom on, pull the penis out before it gets soft.

6. Slide the condom off without spilling the liquid (semen) inside. Dispose of the used condom.

Remember:

- Do not use grease, oils, lotions, or petroleum jelly (Vaseline) to make the condom slippery. These substances can make the condom break. Use only jelly or cream that does not contain oil.
- Use a new condom each time you have sex.
- Use a condom only once.
- Store condoms in a cool, dry place.
- Do not use a condom that may be old or damaged.
- Do not use a condom if:
  - The package is broken
  - The condom is brittle or dried out
  - The color is uneven or has changed
  - The condom is unusually sticky

KEY MESSAGES

- The Principles of Informed Consent and Voluntarism must always be upheld in the provision of NSV.
- Service providers must devote time to provide quality counseling, especially for permanent methods such as NSV.
- The six elements of Informed Consent must be adequately explained to clients.
- Emphasize that a condom must be used as a back-up method until three months after vasectomy for the procedure to be effective.

SESSION IV

PREVASECTOMY EVALUATION

OVERVIEW

Assessing a client's suitability to undergo vasectomy is another component of quality care. Careful prevasectomy evaluation reduces the risk of complications, which will adversely affect the acceptability of the procedure.

This module provides the information necessary for service providers to physically evaluate whether a client is a good candidate for vasectomy.

OBJECTIVES

At the end of the session, the participants will be able to:

1. Explain prevasectomy assessment in terms of its rationale, timing, and components
2. Describe the elements of medical history that should be part of a prevasectomy assessment
3. Discuss the steps in performing genital examination and the potential abnormalities that may be detected during the examination
4. Explain the reasons behind recommendations for categorizing certain conditions as precautions for vasectomy

ADVANCE PREPARATION

- PowerPoint slides on "Prevasectomy Evaluation"
- Computer, LCD, and projector screen
- Meta-cards
- Flip charts with easel sheets and/or whiteboard
- Markers
- WHO Medical Eligibility Table

TOPIC	TEACHING/LEARNING PROCESS
SESSION 4 **PRE-VASECTOMY EVALUATION**	◆ Introduce the session by flashing the title slide.
Overview ▪ Assessing the client suitability for undergoing vasectomy is another component of quality care. ▪ Careful pre-vasectomy evaluation reduces the risk of complications which will adversely affect the acceptability of the procedure ▪ This session provides the information necessary for service providers to physically evaluate whether the client is a good candidate for vasectomy.	◆ State the overview of the session as shown on the slide.
LEARNING OBJECTIVES **At the end of the session, the participants will be able to:** 1. Explain pre-vasectomy assessment as to its rationale, timing, and components. 2. Describe the elements of the medical history that should be part of a pre-vasectomy assessment. 3. Discuss the steps of performing genital examination and potential abnormalities that may be detected during the examination. 4. Explain the reasons for the recommendations for categorizing certain conditions as precautions for vasectomy.	◆ State the learning objectives of the session as presented on the slide.

PRE-VASECTOMY ASSESSMENT Rationale: • **Determine the client's fitness for vasectomy** • **Determine whether there are any conditions that are precautions to vasectomy** • **Evaluate whether the client has made an informed choice**	◆ Ask the participants about the rationale for prevasectomy evaluation. ◆ Write responses on the board and process according to content of the slide.
PRE-VASECTOMY ASSESSMENT TIMING The pre-vasectomy assessment can be done: • **The day the vasectomy is to be performed** • **A few days before the vasectomy** • **On the same day as pre-vasectomy counseling**	◆ Discuss with the participants the proper timing of the prevasectomy evaluation as shown on the slide.
PRE-VASECTOMY ASSESSMENT COMPONENTS The essential components of the examination are: • **Medical history** • **Genital examination**	◆ Discuss the components of prevasectomy evaluation as shown on the slide.
COMPONENTS OF THE PRE-VASECTOMY MEDICAL HISTORY • Existence of bleeding disorders • Previous scrotal or inguinal surgery or trauma • Current or past genito-urinary infections, including STIs • History of sexual impairment • Current and recent medications • Allergy to medications	◆ Discuss the components of prevasectomy medical history as presented on the slide.

COMPONENTS OF THE PRE-VASECTOMY PHYSICAL EXAMINATION • **Heart** **- (auscultation, pulse, and blood pressure)** • **Lungs** **- (auscultation and respiratory rate)** • **Abdomen** **- (palpation)** • **Genitals**	◆ Discuss the components of prevasectomy physical examination as shown on the slide.
GENITAL EXAMINATION **Before doing the genital examination:** • **Tell the client what you are going to do and why you will be doing it.** • **Assure him that he won't feel any pain.** • **Explain that in doing the genital examination, you will examine the penis and scrotum.** • **Unless you observe lesions, gloves are unnecessary during a genital examination, but you should wash your hands thoroughly before and after the examination.**	◆ Explain to the participants the prerequisites of the genital examination as presented on the slide.
PENILE EXAMINATION ***VISUAL INSPECTION*** • Visually inspect the penis. • Note any lesions or scarring. • Gently lift the penis and examine the underside as well. • Examine the urethral opening. • Note and assess any abnormalities, such as discharge, reddening, or irritation. • ***Potential abnormalities:*** rash, cyst, discharge, skin cancer (rare).	◆ Discuss what to inspect and what to expect during the penile examination as shown on the slide.
SCROTAL EXAMINATION ***VISUAL INSPECTION*** • Visually inspect the scrotal skin. • Lift the scrotum to examine the posterior side. • Observe the color, size and contour. • Note and assess any swelling or masses. ***Potential abnormalities:*** rash, cyst, poorly developed scrotum (possible cryptorchidism), swelling (possible inguinal hernia, torsion of spermatic cord, strangulated inguinal hernia).	◆ Discuss what to inspect and what to expect during the scrotal examination as shown on the slide.

SCROTAL EXAMINATION

PALPATION

- Palpate the scrotum to examine the testes, epididymis, spermatic cord, and the vas deferens.
- ***Potential abnormalities:*** varicocele, epididymitis, undescended testis.

◆ Discuss what to palpate and what to expect during the scrotal examination as shown on the slide.

SCROTAL EXAMINATION

Palpation of the Testes and Epididymis

First, between your thumb and first two fingers, palpate each testis and epididymis.

Avoid putting pressure on the testis, as this would be painful.

Note the size, shape, and consistency of each testis and epididymis. Note any nodules or tenderness.

***Potential abnormalities* Painless nodules in the testes may indicate testicular cancer. Nodules in the epididymis may indicate an epididymal cyst (seminoma).**

◆ Discuss how to perform the scrotal examination as presented on the slide.

SCROTAL EXAMINATION

Palpation of the Spermatic Cord and Vas Deferens

- ***Using the three-finger technique palpate each spermatic cord and its vas deferens***
- ***Move your thumb and fingers along its length. Note any nodules or swellings.***
- ***Potential abnormalities* include: thickened vas (suggests chronic infection), tortuous veins (suggests varicocele), and cyst in cord (suggests hydrocele).**

◆ Discuss how to perform the palpation of the spermatic cord and the vas deferens as presented on the slide.

VASECTOMY PRECAUTIONS

- Local infection:
  - Scrotal skin infection
  - Balanitis
  - Active STI
- Systemic infection (including bacteremia, malaria, or yellow fever) or gastroenteritis
- Previous scrotal surgery
- Intrascrotal mass
- Inability to locate, isolate, or move the vas
- Large Varicocele
- Large Hydrocele
- Cryptorchidism
- Inguinal hernia
- Coagulation disorders:
  - hemophilia
- Diabetes mellitus

◆ Enumerate the different conditions where caution must be observed in performing vasectomy.

◆ Refer to Table 4.2 for the underlying reasons and recommendations in dealing with these conditions.

Simplified WHO MEC Categories for Permanent Methods (eg VASECTOMY)

Category	Eligibility Criteria
A (Accept)	There is no medical reason to deny sterilization to a person with this condition.
C (Caution)	The procedure is normally conducted in a routine setting, but with extra preparation and precautions.
D (Delay)	The procedure is delayed until the condition is evaluated and/or corrected. Alternative temporary methods of contraception should be provided.
S (Special/ Refer)	The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anesthesia, and other backup medical support. For these conditions, the capacity to decide on the most appropriate procedure and anesthesia regimen is also needed. Alternative temporary methods of contraception should be provided if referral is required or there is otherwise any delay.

◆ Ask participants about their ideas on the WHO MEC.

◆ Discuss the four categories as presented on the slide.

EXERCISE

ON THE USE OF THE WHO MEDICAL ELIGIBILITY CRITERIA (MEC)TABLE FOR VASECTOMY

◆ Introduce the exercise in the use of the MEC table.

◆ Randomly ask participants about the category of the different conditions and the given recommendations as shown on the next two slides (MEC Table for Vasectomy).

Male Sterilization

Condition	Category	Rationale/Comments
[illegible]	[illegible]	[illegible]

Condition	Category	Rationale/Comments
[illegible]	[illegible]	[illegible]

WHO MEC on Applicability of Various Procedures for Contraceptive Use • **Specified examinations/procedures are required for only a few of the FP methods** • **The use of the WHO MEC on Applicability of Various Procedures and Tests shows that a THOROUGH or COMPLETE physical examination MAY NOT BE WARRANTED, if the client is decided on a FP method.**	◆ Discuss the WHO Applicability of Various Procedures and Laboratory Tests as shown on the next two slides.
Applicability of various procedures or tests for contraceptives methods. 	
KEY MESSAGES • The Vasectomist needs to have the necessary knowledge and skills to be able to adequately and accurately assess the health needs, as well as the health status, of clients seeking to undergo vasectomy • Medical History-taking and Physical Examination (esp. Genital Examination) are basic components of pre-vasectomy evaluation. • The WHO Medical Eligibility Criteria aids in assessing clients on their eligibility to undergo vasectomy.	◆ Ask participants what key messages they learned during the session. ◆ Show slide detailing expected responses.

NARRATIVE

PREVASECTOMY ASSESSMENT

Rationale

◆ Determine the client's fitness for vasectomy.

◆ Determine the existence of any conditions that are precautions to vasectomy.

◆ Evaluate whether the client has made an informed choice.

Timing

Prevasectomy assessment can be done:

◆ The day the vasectomy is to be performed

◆ A few days before vasectomy

◆ On the same day as prevasectomy counseling

Components

The prevasectomy medical history and physical examination are discussed in detail in Table 4–1. The essential components of the examination are:

◆ Medical history

◆ Genital examination

Medical History and Physical Examination

The following table lists the required and recommended components of a pre-vasectomy medical history and physical examination and explains the reason why each component is included.

	COMPONENT	REASON
MEDICAL HISTORY	Existence of bleeding disorders	Could indicate the potential for hemorrhage
	Previous scrotal or inguinal surgery or trauma	Scarring or adhesions that could complicate a vasectomy procedure may exist.
	Current or past genito-urinary infections, including STIs	Past infections could have caused scarring and adhesions. Current infection could lead to acute postvasectomy infection.
	History of sexual impairment	Could indicate pre-existing psychological or physiological problems that could later be incorrectly attributed to the vasectomy.
	Current and recent medications	Could indicate medical problems that the vasectomist should be aware of before surgery
	Allergy to medications	Can help prevent complications by determining whether the client has ever had an allergic reaction to any of the medications or antiseptics used before, during, or after surgery

PHYSICAL EXAM	Heart* (auscultation, pulse, and blood pressure)	Can rule out hypertension, heart murmurs, and other cardiovascular diseases that the vasectomist should be aware of before surgery
	Lungs* (auscultation and respiratory rate)	Can rule out infections and other lung disease that the vasectomist should be aware of before surgery
	Abdomen* (palpation)	Can rule out the presence of infections, organ enlargements, or masses that the vasectomist should be aware of before surgery
	Genitals	Can rule out the presence of infections or masses that the vasectomist should be aware of before surgery

** Recommended but not essential*

Genital Examination

After examining the client's heart, lungs, and abdomen, a genital examination must be performed. Before beginning the examination, tell the client about what you are going to do and why you will be doing it. Assure him that he would not feel any pain. During the genital examination, you will conduct a penile and scrotal examination.

Unless you observe lesions, gloves are unnecessary during a genital examination, but you should wash your hands thoroughly before and after the examination.

Penile Examination

Visual Inspection

Visually inspect the penis. Note any lesions or scarring. Gently lift the penis and examine the underside as well. Examine the urethral opening. Note and assess any abnormalities, such as discharge, reddening, or irritation.

Potential abnormalities include rash, cyst, discharge, and skin cancer (rare).

Scrotal Examination

Visual Inspection

Visually inspect the scrotal skin. Lift the scrotum to examine the posterior side. Observe the color, size, and contour. Note and assess any swelling or masses.

Potential abnormalities include rash, cyst, poorly developed scrotum (possible cryptorchidism), and swelling (possible inguinal hernia, torsion of spermatic cord, strangulated inguinal hernia).

Palpation

Palpate the scrotum to examine the testes, epididymis, spermatic cord, and the vas deferens.

Potential abnormalities include varicocele, epididymitis, and undescended testis.

1. Palpation of the Testes and Epididymis

First, between your thumb and first two fingers, palpate each testis and epididymis (see Figure 4-1). Avoid putting pressure on the testis, as this would be painful. Note the size, shape, and consistency of each testis and epididymis. Note any nodules or tenderness.

Potential abnormalities include painless nodules in the testes, which may indicate testicular cancer. Nodules in the epididymis may indicate an epididymal cyst (seminoma).

Figure 4-1
Palpation of the Testes and Epididymis

2. Palpation of the Spermatic Cord and Vas Deferens

Using the three-finger technique (see No-Scalpel Vasectomy: An Illustrated Guide for Surgeons, page 19), palpate each spermatic cord and its vas deferens (see Figure 5-2). Move your thumb and fingers along its length. Note any nodules or swellings.

Potential abnormalities include thickened vas (suggests chronic infection), tortuous veins (suggests varicocele), and cyst in cord (suggests hydrocele).

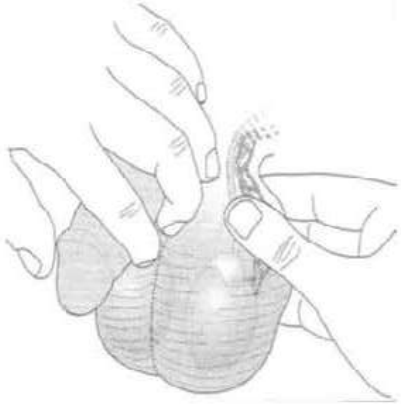


Figure 4-2
Palpation of the Spermatic Cord and Vas Deferens

VASECTOMY PRECAUTIONS

Table 4-2 lists the physical conditions that indicate a precaution to performing a vasectomy. If you do not have sufficient clinical experience in diagnosing these conditions, refer the client to a more experienced physician. For a more comprehensive list of conditions with WHO recommendations, a summarized list of the WHO MEC is included in this module.

Table 4-2. Vasectomy Precautions

Precaution	Reason	Recommendation
Local infection: • Scrotal skin infection • Balanitis • Active STI	Increases the risk of postoperative infection. In addition, surgery at or near the site of an infected lesion can result in wound infection, epididymitis, testicular infection, or sepsis if the organisms gain entry to other tissues or to the bloodstream during surgery.	Treat the infection. Delay the vasectomy until the infection is resolved. Counsel the client about the interim methods of contraception. Counsel clients with STIs about the risk of transmission to others and about preventing future infections. Counsel clients about the need to use condoms.
Systemic infection (including bacteremia, malaria, or yellow fever) or gastroenteritis	Increases the risk of postoperative infection	Treat the infection, or refer the client and delay the procedure. Counsel the client about interim methods of contraception.
Previous scrotal surgery	Possible adhesions to cord structures make it difficult to separate structures. NSV may be difficult to perform if skin is thickened from previous surgery.	Assess the extent of adhesions; if the adhesions will not interfere with vasectomy, perform the procedure. Take additional care when infiltrating the local anesthetic, and pay careful attention to hemostasis.
Intrascrotal mass	May indicate an underlying disease that could affect the health of the client or complicate the procedure	Diagnose the mass, treat abnormal findings, or refer the client for treatment. If findings do not interfere with vasectomy, perform the procedure. If unable to perform vasectomy, counsel about interim contraceptive methods.
Inability to locate, isolate, or move the vas	May make it difficult to access the vas through the puncture site	If the vas cannot be accessed through the puncture site, the client will need to have an incision over the vas.

Large varicocele	Vas may be difficult or impossible to locate. Repairing the varicocele and performing vasectomy in a single procedure may decrease the risk of complications.	If you are experienced in concurrent procedure, repair the varicocele, and perform the vasectomy through the varicocele repair incision. Otherwise, delay the vasectomy, refer the client to a facility with appropriate staff, and counsel the client about interim methods of contraception. If small, a varicocele can usually be isolated from the vas and will not interfere with NSV.
Large hydrocele	Vas may be difficult or impossible to locate. Repairing the hydrocele and performing vasectomy in a single procedure may decrease the risk of complications.	If you are experienced in concurrent procedure, repair the hydrocele and perform the vasectomy through the hydrocele repair incision. If not, delay the vasectomy, refer the client to a facility with appropriate staff, and counsel the client about interim methods of contraception. If small, a hydrocele usually does not interfere with NSV.

Precaution	Reason	Recommendation
Cryptorchidism	When cryptorchidism persists into adulthood, the risk of infertility is very high if the disease is bilateral. Unless fertility has been demonstrated (by pregnancy in the partner or by semen analysis), vasectomy is not needed. If the cryptorchidism is unilateral, the undescended testicle is likely to be nonfunctioning.	If the client has bilateral cryptorchidism and fertility has been demonstrated, extensive surgery will be required to locate the vas. If the cryptorchidism is unilateral and fertility has been demonstrated, you can perform vasectomy on the normal side. If semen examination shows a persistent presence of sperm, more extensive surgery may be required to locate the other vas. Counsel the client on interim methods of contraception until further surgery can be performed.

Inguinal hernia	During herniorrhaphy, the vas is exposed in the inguinal canal and can be ligated.	An experienced surgeon can perform vasectomy concurrently with hernia repair. Counsel the client about interim methods of contraception until treatment is possible.
Coagulation disorders: hemophilia	Bleeding disorders increase the risk of postoperative hematoma formation, which consequently increases the risk of infection. A severe bleeding disorder could result in hemorrhage.	Evaluate before performing vasectomy. If the client has a significant bleeding disorder that cannot be corrected before surgery, do not perform the procedure. If the procedure cannot be performed because of an irresolvable bleeding disorder, counsel the client about alternative contraceptive methods.
Diabetes	Diabetics have an increased likelihood of acquiring post-operative wound infections. If signs of infection appear, treat aggressively with antibiotics.	Correct hyperglycemia before vasectomy, and perform vasectomy only with local anesthesia. Monitor the client closely postoperatively for signs of infection.

World Health Organization (WHO) Eligibility Criteria for Vasectomy Procedures*

Introduction

Considering the irreversibility or permanence of sterilization procedures, special care must be taken to assure a voluntary informed choice of the method by the client. Particular attention must also be given in the case of young people, men who have not yet been fathers, and clients with mental health problems, including depressive conditions. The national laws and existing norms for the delivery of sterilization procedures must be considered in the decision process.

There is no medical condition that would absolutely restrict a person's eligibility for sterilization. Some conditions and circumstances indicate that certain precautions should be taken.

The classification of the conditions into the different categories is based on an in-depth review of the epidemiological and clinical evidence relevant to medical eligibility. The programmatic implications of these updated medical criteria are still to be addressed, taking into account the various levels of service delivery. However, for the particular case of sterilization procedures, the following category definitions were developed.

Definitions

A (Accept): There is no medical reason to deny sterilization to a person with this condition.

C (Caution): The procedure is normally conducted in a routine setting, but with extra preparation and precautions.

D (Delay): The procedure is delayed until the condition is evaluated and/or corrected. Alternative temporary methods of contraception should be provided.

S (Special): The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anesthesia, and other back-up medical support. For these conditions, the capacity to decide on the most appropriate procedure and anesthesia regimen is also needed. Alternative temporary methods of contraception should be provided if referral is required or there is otherwise any delay.

*Adapted from: WHO, 2000.

Sterilization does not protect against sexually transmited infections (STIs) or HIV. If there is risk of STIs/HIV, the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STIs/HIV.

Male Sterilization

Condition	Category	Rationale/Comments
Local infections		There is an increased risk of postoperative infection (Gohn & Bornside, 1989).
Scrotal skin infection	D	
Active STI	D	
Balanitis	D	
Epididymitis or orchitis	D	
Previous scrotal injury	C	
Systemic infection or gastroenteritis	D	There is an increased risk of postoperative infection (Gohn & Bornside, 1989).
Large varicocele	C	The vas may be difficult or impossible to locate; a single procedure to repair varicocele and perform a vasectomy decreases the risk of complications.
Large hydrocele	C	The vas may be difficult or impossible to locate; a single procedure decreases the risk of complications.
Filariasis; elephantiasis	D	The scrotum may be involved in severe elephantiasis, making it impossible to palpate the cord structure and testis.
Intrascrotal mass	D	This may indicate an underlying disease.

KEY MESSAGES

- The vasectomy surgeon needs to have the necessary knowledge and skills to be able to adequately and accurately assess the health needs and health status of clients seeking to undergo vasectomy.
- Taking the medical history of the client and performing a physical examination (especially genital examination) are basic components of prevasectomy evaluation.
- The WHO MEC aids in assessing the eligibility of clients to undergo vasectomy.

SESSION V

INFECTION PREVENTION

OVERVIEW

The use of appropriate infection prevention techniques during the provision of vasectomy services is crucial to the safety of both clients and service providers. This session provides the information necessary for participants to perform or supervise the infection prevention procedures used in providing NSV services.