



# Practice Guidelines

For Family Physicians

Volume 2



## Message from His Excellency

### Prof. Dr. Hatem El Gabaly

Comprehensive development and modernization is one of Egypt's priorities and pursued objectives. Out of this rule, we are committed towards improving the quality of health care services available for all Egyptians; adults, children, the poor and the well-off.

The Ministry of Health and Population has adopted, as a top priority, developing current systems to provide and finance health services in guidance and vision of the political leadership to ensure high quality in service provision and meet needs and expectations of the population as well as keeping up with top-notch developments at all levels - primary, preventive, curative, diagnostic and rehabilitation.

This vision has been translated into a promising and ambitious Five Years Plan to institutionalize the Health Sector Reform Program on the national level. The plan is focusing on implementing the Family Health Model at all primary health care facilities in the 27 Governorates.

Our dream has been realized into a competent program of Health Sector Reform aiming to provide every person with high quality health services. These include physical, psychological and social welfare, which translate into high production and progress for our cherished Country, Egypt.

I am delighted to introduce to one of the important publications for the Sector of Technical Support and Projects, representing a great team effort "**Practice Guidelines for Family Physicians**" for the family physician at all Family Health Unites of MOHP Distributed all over the Country .

**Prof. Dr. Hatem El Gabaly**

**Minister of Health and Population**

## Preface

The Ministry of Health and population is working diligently to achieve equal and available quality health services for all citizens of Egypt. Our objective is to shape national policies for the goal of advancing health care delivery in all parts of the country.

Six years ago, the Ministry has adopted new policies and strategies in order to provide basic health services of high quality for all citizens in the framework of the Family Health Model. This has led to introducing new financing mechanisms that ensure the sustainability of finance and resources, and availability of affordable services along with effectiveness and efficiency of these services.

Having made situational analysis in details, highlighting points of weaknesses and strengths and defining actual needs, strategic plans were subsequently developed putting into practice the reforming infrastructure and human resources as well as partnerships between governmental, private and national sectors.

It gives me great pleasure to present this document. This system is in continuous reform, progressing incrementally, refining the knowledge base, and modifying concepts. This document is not the end product, but rather the first step of many others.

However, I hope it will help us towards our ultimate goal of a quality, effective, efficient, evidence based service to all Egyptians irrespective of geographical or social economic barriers.

The document is a collaborative work of the Ministry of Health and Population staff, and the Sector for Technical Support and Projects on both central and peripheral levels. Work in this document is subjected to continuous assessment, operation research, many of the issues presented in this document will be updated in further version.

**Dr. Emam Mossa**  
**Undersecretary of the Sector for**  
**Technical Support and Projects**

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## Abbreviations and Acronyms

|                |                                     |
|----------------|-------------------------------------|
| <b>BCC</b>     | : Behavior Change Communication     |
| <b>BEOC</b>    | : Basic Essential Obstetric Care    |
| <b>BID</b>     | : Twice Daily                       |
| <b>CED</b>     | : Chronic Energy Deficiency         |
| <b>CIC</b>     | : Combined Injectable Contraceptive |
| <b>COC</b>     | : Combined Oral Contraceptive       |
| <b>CPI</b>     | : Client-Provider Interaction       |
| <b>CPR</b>     | : Contraceptive Prevalence Rate     |
| <b>DMPA</b>    | : Depoprovera                       |
| <b>EC</b>      | : Emergency Contraceptives          |
| <b>FGM</b>     | : Female Genital Mutilation         |
| <b>FHU</b>     | : Family Health Unit                |
| <b>HE</b>      | : Health Education                  |
| <b>HIV</b>     | : Human Immunodeficiency virus      |
| <b>IUD</b>     | : Intra -Uterine Device             |
| <b>IV</b>      | : Intravenous                       |
| <b>KOH</b>     | : Potassium Hydroxide               |
| <b>LAM</b>     | : Lactational Amenorrhea Method     |
| <b>NGOs</b>    | : Non-Governmental Organizations    |
| <b>OBs/Gyn</b> | : Obstetrics and Gynecology         |
| <b>OC</b>      | : Oral Contraceptives               |
| <b>PID</b>     | : Pelvic Inflammatory Disease       |
| <b>POI</b>     | : Progestin- Only Injectable        |
| <b>POP</b>     | : Progestin- Only Pill              |
| <b>QI</b>      | : Quality Improvement Directorate   |
| <b>QID</b>     | : Four Times Daily                  |
| <b>QIP</b>     | : Quality Improvement Checklist     |
| <b>RTI</b>     | : Reproductive Tract Infection      |
| <b>SHP</b>     | : School Health Program             |
| <b>STDs</b>    | : Sexually Transmitted Diseases     |
| <b>STI</b>     | : Sexual Tract Infection            |
| <b>T.D.S</b>   | : Three Times Daily                 |
| <b>Tab</b>     | : Tablets                           |
| <b>TFR</b>     | : Total Fertility Rate              |
| <b>UTI</b>     | : Urinary Tract Infection           |
| <b>WHO</b>     | : World Health Organization         |

**Management  
of Rheumatic  
Fever and  
Complications**

1





## Management of Rheumatic Fever And Complications

### Rheumatic Fever

Peak incidence: 5-15 years

### Diagnosis (revised Jones criteria)

Evidence of previous streptococcal infection

-----PLUS-----

**2 major criteria or 1 major & 2 minor**

### Major Criteria

#### Arthritis

- Fleeting, migratory.
- Large joints.
- Joints are red, hot, swollen & tender.
- Leaves no deformity.

#### Carditis

- New or changed murmur
- Cardiac enlargement or heart failure
- Pericardial rub or effusion or ECG changes; raised ST.
- Myocarditis, inverted or flat T wave.
- A-V block or 1st. degree heart block.
- Transient diastolic murmur (Carry-Combs) due to mitral valvulitis.

#### Chorea:

(Sydenham's chorea, St. vitus dance), spasmodic, unintentional choreiform movements.

### Skin Manifestations

- Erythema marginatum:
  - Transient, pink raised edge
  - On trunk & limbs
  - Crescents
- S.C nodule:
  - Painless.
  - Pea size.
  - Hard.

- Over tendons, joints & bony prominence.

#### Minor Criteria

- Fever.
- Arthralgia.
- Previous rheumatic fever.
- Increased ESR and CRP.
- Leucocytosis.

### Treatment:

1. Bed rest with: Fever, Active arthritis & Active carditis.
2. Treatment of streptococcal infection even if nasal throat swabs are negative.
3. Single intra-muscular injection of 1,200 000 U. of benzathine penicillin or oral phenoxymethyl penicillin (Ospen).
4. Acetyl salicylate (Aspirin) 60 mg/kg/day divided into 6 doses. In adults up to 120 mg/kg/day maximum 8 gram per day. Aspirin should be continued until ESR falls then dose gradually tailed off. Prednisolone is preferable in severe arthritis or carditis. It's dose is 0.25 mg/kg/day in divided doses until ESR is normal then gradually tail dose off over 2-4 weeks.

### Prophylaxis:

#### 1. Prophylaxis of Rheumatic Fever:

Oral phenoxymethyl penicillin 250 mg/day or 1,200 000 U Benzathine penicillin monthly until age of 20 or 5 years after last attack.

- If allergic to penicillin: Sulfadiazine or Erythromycin.

#### 2. Prophylaxis of Infective Endocarditis:

Meticulous oral and skin hygiene.

#### Before Dental Procedures:

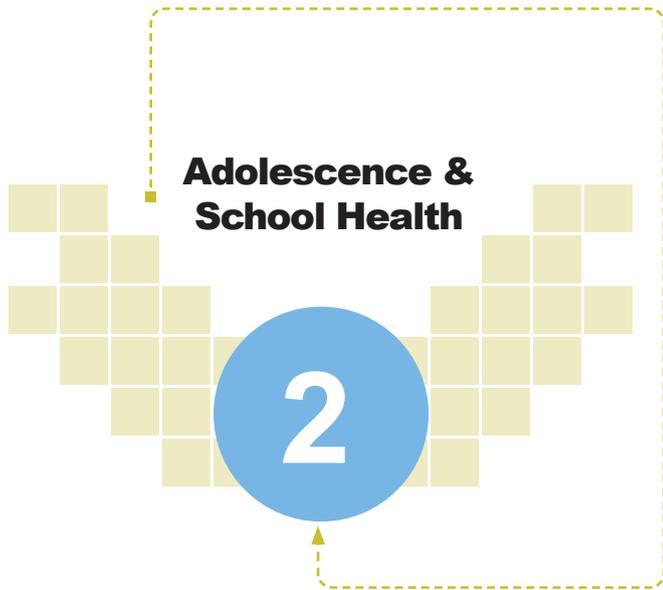
- Single dose of 3 gm amoxicillin one hour before the procedure.

- If allergic to penicillin: Erythromycin 1.5 gm orally one hour before & 500 mg after 6 hours.
- Urinary catheter or IUD or GIT procedures: ampicillin 1 gm IM one hour before & another 500 mg every 8 hours for the next 48 hours plus Gentamycine 1.5 mg/kg IM one hour before and 8 hours after the procedures.

### Refer

#### **Chronic Cases of Rheumatic Heart Disease:**

- Complicated cases of Rheumatic heart disease or nephritis.
- Patients with Rheumatic fever not responding to usual treatment.
- Suspicion of bacterial endocarditis.



**Adolescence &  
School Health**

2



## Introduction

Adolescence is a critical phase of the human life cycle in which young people are particularly vulnerable to physical, emotional / psychological, and social health influences.

Adolescent phase of human life cycle extends from the age of 10 to 19 years. It could be divided into three stages

1. Early adolescence 10 - 14
2. Middle adolescence 15 - 17
3. Late adolescence 18 - 19

(Youth extends from 15 - 24 years)

Adolescents is a period of change characterized by:

- Rapid growth
- Biological and sexual maturation
- Psychological and social changes

## Adolescents Rights

The adolescent has the right to: ([www.who.int](http://www.who.int))

- Acquire accurate information about their health needs
- Build the life skills needed to avoid risk-taking behavior
- Obtain counselling, especially during crisis situations
- Have access to health services (including reproductive health services)
- Live in a safe and supportive environment

### Note

Adolescence is the period during which the future life style and behavior are being shaped. The family physician plays an important role in healthy development of our future generation

## Health Hazards and Risks

### 1. Nutritional Problems:

- Iron deficiency anemia
- Retarded growth and wasting
- Obesity

### 2. Infectious Diseases and Sequelae

- Parasitic Infestations
- Streptococcal Parasitic infection and sequelae (Rheumatic fever, glomerulonephritis)

- Reproductive Tract Infections and STDs (in some environments)

### 3. Violence, exploitation by peers or family members, suppression of self esteem, gender issues, etc.

### 4. Psychological/emotional problems

### 5. Smoking and drugs

## Role of The Family Physician

- Addressing the needs and demands of the adolescents through the critical period of rapid growth and development.
- Promotion of a healthy life style
- Early detection of physical, psychological, and behavioral problems
- Management and follow-up of detected problems

### Note

Dealing with adolescents should meet their needs and demands, be culturally sensitive, and respect the local community norms.

## Dealing With The Adolescents is Done Through

### Direct contact with adolescents as individuals is achieved through

- the development of the family health record
- the comprehensive examination of school children, (if you are the school physician too in rural areas)

### The family with an adolescent who needs special guidance to be able to

- provide a physical, emotional, and spiritual environment supportive of a healthy life style for the whole family including the adolescent.
- understand the nutritional requirements and ensure adequate diet for the whole family.
- deal with the emotional and psychological changes experienced by adolescents.
- avoid gender discrimination, and protect the adolescent from being exploited, and from violence or abuse within the family.
- be alert to any behavioral changes that may indicate the start of smoking, or drug use.

- know their siblings peers, and gently help the adolescents in proper selection of friends.
- work together with the school to identify specific needs and address them early.

### Community groups and activities include

- working through the different types of schools in your catchments area (whether you are the school physician or not).
- work with the youth clubs, and through the family club in your unit specially for female adolescents.
- Identify governmental, and non-governmental organizations (NGOs) that are dealing with adolescents, or could have a potential role in addressing their needs

## Adolescent Health Activities

- Covers all aspects of health: physical, emotional / psychological, social, and spiritual health.  
Health activities for adolescentdolescents.
- Consider an integrated approach to address the health needs of adolescents. Involve other members of the health team, the social workers within the center or in the social care center, the school teachers and other community leaders including religious leaders.
- Involve adolescents in different community activities, and in providing health related activities to other adolescents.

**Tabl. 1: Adolescent Psychosocial Screen**

| Topics    | Areas to Cover    | Suggested Questions  | Possible interventions                |
|-----------|-------------------|--|---------------------------------------|
| School    | Performance       | What kind of grades are you getting?   | Collaboration with school guidance    |
|           | Behavior          | Getting into trouble with teachers / staff?<br>Getting along with your peers ? | counselors and teacher<br>Tutorials   |
| Home      | Cohabitants       | Who lives with you ?   | Recruit supports within family        |
|           | Supports          | Whom do you get along with best?<br>Worst?                                     | Screen for physical abuse             |
|           | Discipline        | How do you get punished ?  |                                       |
| Activity  | Body image        | Are you happy with your body ?   | Screen for eating disorders / obesity |
|           | Exercise          | How much do you exercise in a week?  | Recommend daily exercise              |
|           | Injury prevention | Do you wear seat belts / helmets   | Recommend seat belts / helmets        |
| Substance | Tobacco           | Have you ever tried --?  | Counsel regarding risks               |
| Use       | Alcohol           | When was the last time you used ---?   | Assess readiness to change            |
|           | Marijuana         | Ever been in a car with someone who had been drinking?                         | Recommend quitting                    |
| Mood      | Depression)       | Rank mood from 1 (worst) to 10 (best)  | Contract for safety                   |
|           | Suicide           | Ever feel like dying /killing yourself?  | Ongoing counseling                    |
|           | Homicide          | Ever feel like hurting /killing someone else?                                  | Treat for depression                  |
| Sex       | Contraception     | Have you started having sex?   | Assess readiness                      |
|           | STD prevention    | Using condoms all the time ?   | STD screening                         |
|           | Abuse             | Anyone every try to get you to have sex against your will?                     | Family planning                       |
| Violence  | Weapons           | How many physical fights have you had this year ?                              | Nonviolent conflict resolution        |
|           | Fighting          | Have you ever carried a weapon?  | Counseling regarding weapons          |

**HEADS: a mnemonic useful in the evaluation of adolescent patients**

**Note**

H = Home, habits, hobbies  
 E = Education, employment, exercise  
 A = Accidents, ambition, activities, abuse  
 D = Drugs (tobacco, alcohol, others), diet, depression  
 S = Sex, suicide

Adapted from Goldenring JM, Lohen E. Getting into adolescent heads Contemp pediater 1988

75-90, with permission

**Table.2: Interventions for The Periodic Health Examination: Ages 11-24 Yr**

|   |   |
|---|---|
| Screening<br>Height and weight<br>Blood pressure<br>Papanicolaou (Pap) testb ( females)<br>Chlamydia screens (females < 20 yr) Rubella serology or vaccination hxd (females > 12yr)<br>Assess for problem drinking<br>Counseling<br>Injury prevention<br>Lap / shoulder belts<br>Bicycle /motorcycle /all - terrain vehicle helmetse<br>Smoke detectore<br>Safe storage / removal of firearmse<br>Diet and Exercise<br>Limit fat and cholesterol; maintain caloric balance; emphasize grains, fruits, vegetables<br>Adequate calcium intake (females)<br>Regular physical activitye<br>Dental Health<br>Regular visits to dental care providere<br>Floss, brush with fluoride toothpaste dailye | Substance use<br>Avoid tobacco use<br>Avoid underage drinking & illicit drug Use<br>Avoid alcohol /drug use while driving, Swimming, boating, ect.<br>Sexual behavior<br>STD prevention abstinence; avoid risk behaviore<br>condoms / female barrier with spermicidee<br>Unintended pregnancy: contraception<br>Immunizations<br>See school Health<br>Chemoprophylaxis<br>Multivitamin with folic acid (females planning / /capable of pregnancy) |
|---|---|

**Specific Activities Include:**

**Periodic Examination** is ideally done every year. It include the following:

- History update
- Physical examination
- Height and weight
- Blood pressure
- Hemoglobin level / hematocrit
- Stools for parasites
- Urine analysis by dipstick
- Other investigations if indicated

**Note**

Periodic examination is an excellent opportunity for identification of physical, emotional, psychological and social problems, dealing with them, and for providing counseling related to specific needs of each adolescent

**Health Education (HE)** is a very important component aiming at promoting a healthy life style, and guiding the adolescents through this critical stage of the human life cycle.

Skills-based health ("Life Skills") education is particularly important for adolescents. It focuses on the development of "abilities for adaptive positive behavior that enables individuals to deal effectively with the demands and challenges of everyday life". The primary goal of skills-based education is to enhance the ability of the adolescent to translate acquired knowledge into specific positive behavior. This is also called behavior change communication (BCC), or communication for behavior change (CBC).

The FHU team should plan to provide health education programs that would cover the needs of adolescents in their catchments area.

Groups involved as a target and as providers of health education are:

### 1. Adults Dealing With Adolescents

- Parents
- Teachers
- Community leaders including religious leaders
- Service providers in relevant organizations as NGOs, Social units, Youth clubs, etc.

### 2. Adolescents Themselves

**Note** Certain issues need to be discussed for either sex separately

#### Who Provide HE to Adolescents

- The family physician and other members of the FHU team
- Respected community leaders and religious leaders
- Teachers and equivalent
- Peers "Youth to Youth"

#### The venues for health education sessions / seminars

- The family health clinic halls or family club
- The schools in the catchments area
- Youth clubs
- NGOs, mosques and churches, other civil society facilities
- Community gatherings

**HE messages** vary. Different stages of development need different messages. Adolescents engaged to be married need special sessions to cover specific needs related to marriage and reproductive health. In general HE messages cover the following areas:

- Personal health and personal hygiene. Girls may need special emphasis on personal hygiene related to the monthly menstruation to combat malpractices and lack of hygiene.
- Nutrition and good feeding habits, and combating malpractices as fast

foods, etc. Adequate diet is based on the principles of adequate diet. (See food Guide Pyramid mentioned with antenatal care)

- Physical fitness and exercise
- Psychological health, self esteem, and empowering adolescents need to start early, even from childhood.
- Violence prevention and conflict resolution
- Social relationships, friendship, parent - child relations
- Tobacco and substance use
- Reproductive health
- Marriage and family formation
- Environmental health

**Note**

- Consider the principles of HE
- Follow a participatory approach
- Allow for free questions
- Build trust, be sincere, understanding, and supportive

**Counseling** refers to addressing specific needs for the adolescent. A pre-requisite is to have an adolescent friendly clinic allowing for privacy, confidentiality, and good client-provider interaction (CPI) by all health team members, and workers in the FHU.

Counseling adolescents has a very wide scope covering all aspects of health, physical, emotional, psychological, social, and spiritual. Good counseling addresses both felt, and unrecognized needs of the adolescent, and help him/her reach an informed / appropriate decision.

Counseling should be followed-up. Keep a good relation with the adolescent to encourage follow-up visits and ensure appropriate behavior.

### Smoking Cessation

Primary Health Care Physician must:

- 1) Ask the patient if he is a smoker or not in every visit
- 2) Know how to do brief counseling asking

about:

- (a) Is his patient a smoker or not?
- (b) For how long is the patient smoking?
- (c) How many cigarettes a day ( or shisha hagers ) ?
- (d) Is the patient considering quitting?
- (e) Number of past quit attempts
- (f) Does the patient start smoking within 30 minutes of waking?

(g) Provision of advise tailoring the message of smoking hazards to the patient's condition and the advice to quit. This can be achieved through the 5 As:

- Ask Systematically identify all tobacco users at every visit
- Advice Strong urge all tobacco users to quit
- Assess Determine willingness to make a quit attempt
- Assist Aid the patient in quitting
- Arrange Schedule follow up contact

(h) Provision of self help material

3) Refer to smoking cessation clinic ( in the governorates that has such clinics) if the patient is willing to quit

(a) With a referral form that includes:

- (i) referring clinic
- (ii) name of referring doctor
- (iii) patient health status ( diagnosis )
- (iv) reason for referral
  - i. Health reason
  - ii. Preoperative
  - iii. For prevention of complications of smoking

(b) Give the advice about the hazards of passive smoking

#### Refer

Refer to smoking cessation clinic ( in the governorates that has such clinics) if the patient is willing to quit

## School Health

### Introduction

School health deals with a very important sector of the population, they are the children and adolescents passing a stage of rapid growth and development. With the enforcement of obligatory education to cover both primary and preparatory levels, the school health program (SHP) can reach almost all children from 6-15 years. However, the program actually covers school children from 4-18 years attending kindergarten up to secondary level.

School health services are provided by the Health Insurance Organization (HIO). Services are provided at different levels:

- The level of the general practitioner in school-based clinics or general clinics.
- The level of the specialist in polyclinics mostly in urban areas.
- Hospitals.

#### Refer

There are specially assigned school health general practitioners, and a nurse, except most rural areas, where the HIO contracts the Health District to provide school health services by the PHC Family Physician. and an assigned school nurse The PHC physician refers cases to the secondary level of care.

### Health Problems Among School Children

School children suffer the least mortality. However, they are subjected to high morbidities resulting from their physiologic characteristics of rapid growth and development and psychological/Emotional transitions. The school health environment and the close contact between children in school also affect their health.

#### Nutrition Problems Include:

- Iron deficiency anemia.
- Protein and /or energy deficiency results in retarded growth and wasting.
- Short-term hunger.
- Obesity among certain groups (specially teen-age girls)
- Iodine deficiency disorders in some areas.
- Other vitamin deficiencies include

riboflavin deficiency which is usually associated with the deficiency of high biological value protein

**Psychological/emotional problems** likely to affect school children include psych-pathologies (e.g. suicide attempts), problem behaviors (e.g. delinquency), health-compromising behavior (e.g. anorexia).

**Tobacco use** and the use of drugs are important problems that may start during school-age.

**Parasitic infections** Schistosoma show the highest prevalence among school-aged rural children. Intestinal parasites are also common at this age period.

**Other infections** specially droplet infections and skin infections in the highly crowded schools. Streptococcal infection and its sequelae (e.g. Rheumatic heart disease) is an important health problem among school children.

**Accidents**, especially road and traffic accidents.

### Objectives of The School Health Program

The objective of the SHP is to prepare school children physically, psychologically, socially and intellectually to become healthy productive adults.

The school health program is designed to improve the health of students, school personnel, families and other members of the community.

The goal of the WHO Global School Health Initiative (GSHI) is to increase the number of schools that can be truly called "Health Promoting Schools". A health promoting school is a school that is constantly strengthening its capacity as a healthy setting for living, learning, and working.

#### Note

School health is a good example of implementing the bio-psychosocial approach

### Components of The School Health Program:

A comprehensive school health program includes the following 8 components

1. School health services
2. School health education

3. Healthy and safe environment
4. Nutrition and food safety
5. Physical education and activity
6. Emotional well-being, psychological guidance and counseling
7. Health promotion for staff
8. Family, school and community partnership

### School Health Services

According to the school health insurance program SHIP Laws, school health services include:

- I. Preventive health services
  - Comprehensive medical examination
  - Vaccinations
  - Periodic general examination
  - Monitoring of school environment
  - Medical examination of children sharing in sports teams
  - Increasing health awareness among students
  - Supervising students' nutrition
- II. Curative and rehabilitative services
  - Medical services provided by the general practitioner
  - Medical services provided by the specialist including dentists
  - Radiological and laboratory investigations
  - Inpatient services and surgical services
  - Essential drug therapy
  - Provision of rehabilitation and appliances

**Comprehensive and periodic medical examination / health appraisal:**

These are organized activities carried out to assess the physical, mental, emotional, and social status of the students.

### The objectives of the health examination / health appraisal are:

1. To detect any health problems treat, or refer any disease conditions.
2. To identify students who need special health, educational, or social care.
3. The health examination setting is a good opportunity for health education of the students, parents and teachers.
4. Counseling the students and parents on identified health problems.
5. To complete the personal medical record and provide information for follow-up of the individual students.
6. To provide base-line data for the health conditions/problems among school children. Such information is essential for the proper planning, monitoring and evaluation of the school health program.

#### Note

The school children are most probably members of the families in the catchments area. of the FHU. Be sure to link records and update the personal health record in the family folder according to the comprehensive, and periodic examination.

Comprehensive medical examination is carried at the start of each school level, primary, preparatory and secondary. Ideally, it should be attended by parents and teachers. Comprehensive medical examination includes detailed history taking and systematic examination, dental examination and screening tests including hearing, vision, speech defects, and IQ assessment; urine analysis and blood investigations are sometimes done.

Periodic medical examination is carried yearly for weight and height; and in rural Egypt for Schistosoma.

Parents, teachers and school health visitor / nurse are expected to do daily observations to detect any acute illness and exclude sick children from coming in contact with other students.

### Vaccinations:

Children are vaccinated against diphtheria and tetanus by DT, by meningococcal meningitis vaccine, and MMR. Follow instructions if more vaccines are introduced.

### School Health Education

A comprehensive approach to school health education is one that is planned and sequential, and introduces concepts and messages at developmentally appropriate points in child growth. Comprehensive school health curricula should provide opportunities to develop needed skills and qualities e.g. decision-making, communication skills, resistance to persuasion, and a sense of self-efficacy and self-esteem.

Healthy habits learned early in life will be applied all through and would shape the life style of the individual.

Health education messages are indirectly provided through the school curriculum, or given as direct health education in person-to-person education and seminars. The school day, school policies e.g. tobacco-free schools, and school environment also provide good opportunities for practicing sound health behavior, which supports learning by doing and is highly effective in behavioral change. School newsletter and wall newspaper are good media for communicating health messages.

The school health education program can be reflected on the families and the communities as well.

Health education messages address physical, mental, and social dimensions. It includes:

- Healthy life style and decreasing morbidities.
- How to take care of yourself, and simple curative measures and emergency care.
- Proper nutrition.
- Reproductive health.
- Healthy families, mothers and children.
- Dental health.
- Environmental health and preservation of the environment,

- Youth risk behavior, tobacco use and use of drugs,
- Accident prevention and safe traffic.

Who provides health education? Health education is provided by the school health physician and nurse, the school-teachers, in addition to “Youth to Youth Programs”, which is based on the fact that during adolescence peers act as role models. Change of youth behavior can occur through educating a group of recipient youth who can influence the behavior of the others through a process of “positive deviance”. This can also be achieved through the formation of health groups and health committees in the school.

### Healthy and Safe Environment

Supportive school environment addresses the physical, psychological and social environment. The physical environment deals with school premises (physical layout, classrooms, playgrounds, school gardens, safe water supply, sanitary waste disposal, cleanliness, etc.); the school surrounding; school policies e.g. anti-smoking, and tobacco free schools; in addition to the supportive psychological environment, which is reflected on mental health. Social environment can be supported through different social activities carried by the schools, e.g. school picnics and school parties, which also support the psychological environment. The “Productive Schools” provide opportunities of skill learning for artwork, handcrafts, and small industries. It can also support the social environment through income generating activities.

The school environment is the responsibility of the Ministry of Education and the school staff. Monitoring the school environment is the responsibility of the school physician. The school surrounding is the responsibility of the community.

### Physical Environment:

- School surroundings: The school should be built in a health surrounding away from all kind of environmental pollution. The area around the school should apply safety measures to prevent accidents, especially traffic accidents. Street vendors should be

prevented around schools. Strict food safety measures should be implemented. The school should participate with the community to keep a clean school surrounding.

- School building: The building should conform to standards. The recommended shape is I/L/T/U/H shaped with the classrooms on one side and an open corridor on the other side with windows on the street side and the corridor side to allow for cross ventilation. The school building should include in addition to the classrooms areas for other school activities and hobbies.
- Classroom: The classroom should have adequate space related to the number of students to avoid crowding. The window area should be 20% of the floor area. The windows should allow for cross ventilation and are kept open. However, they should be higher than the student’s heads while sitting to avoid air drafts. The class should have proper lightning with no glistening over the blackboard. The desks and seats should be suitable for the size of the students and should be comfortable.
- School sanitation: The school should have a source of pure water supply, enough taps relative to the number of students; sanitary sewage disposal, enough latrines; and the toilets should be always kept clean.
- The playgrounds: The school should have a wide playground to avoid crowding during the break and to allow the students to enjoy their time. School gardens can be developed by the participation of the students themselves.

### Nutrition and Food Safety

School age is a stage of rapid growth and development. Nutrition requirements are at a very high level. It is also the age of forming sound nutrition habits.

### Nutrition Care Includes:

- Nutrition education and food safety as part of the health education. Learning about adequate diet could be reflected on the dietary habits and the health of the students

and their families.

- School feeding programs, which can either be hot meals, dry meals, or milk-products. In principal the school meal should emphasize high quality protein and energy sources.
- The school canteen should provide nutritious products; avoids unhealthy foods (empty calories foods and sweets), and implements the principles of food sanitation and safety.

### Physical Education and Activity

Physical activity is essential for motor development and for physical fitness. It is important to build the habit of routine physical activity, which is an important component of the healthy life style. Physical education and recreation activities also provide the opportunities for building self-confidence and strengthening friendship between students in non-pressured group situations. These are also important for the psychological and emotional well-being of the students.

### Emotional Well-Being, Psychological Guidance and Counseling

Mental health promotion, building self-esteem and self-confidence are important considerations in the school environment and daily activities. The school climate should support friendship in between students, and between students and

teachers. The school should eliminate sources of stress to the students, and combat child abuse and violence. There must be anti-smoking policies for students and teachers, and the school should be alert to combat drug use.

### Health Promotion for Staff

The staff health and health behavior is reflected on their achievement and on their image as role models for the students. Care for the health of the staff and their families is thus very important. Health education for the staff will also be reflected on their ability to provide effective health education and guidance to the students.

### Family, School and Community Partnership

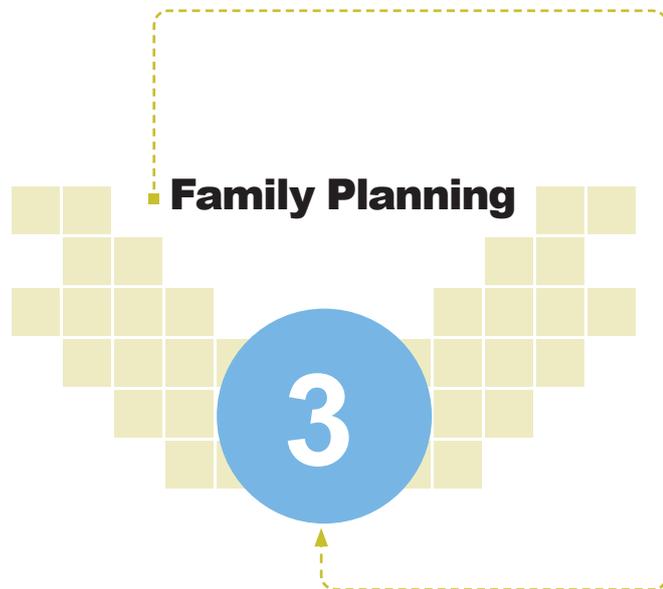
Schools can be effective change agents to the families of their students and to the communities in which they are located. The Parents council and community boards can be the entry point for several activities. Communities should assume responsibility for the school, the school environment and the surroundings. Schools can share community health projects during the school year and through summer activities.

#### Supportive readings

MOHP (2004); National Standards of Practice for Family Planning and Reproductive Health Clinical Service Delivery.  
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صندوق الأمم المتحدة للسكان بالقاهرة – مشروع تنمية المهارات القيادية للشباب EGY/95/PO3، من الشباب و إلى الشباب: دليل لتعليم الرفاق







## Family Planning

High fertility can have an effect on the mother, the coming child and the present child.

Effects of high fertility on the health of the mother:

Maternal morbidity is affected by the 4 "Too" that present risk factors to the health of the mother "Too young" (less than 20), "Too old" (more than 35), "Too many" (5th or more), "Too soon" (less than 2 years inter-pregnancy spacing). The mother would suffer from malnutrition specially iron deficiency anemia due to depletion of iron stores in the body, wasting, and osteomalacia. Mothers with short spacing or too many children are more prone to the postpartum depression.

Lack of child spacing affects the health of the present child (sometimes called the displaced child) by depriving the child from his right in a reasonable period of breast - feeding and his/her right to receive proper care and stimulation to grow and develop to their full potentials. Malnutrition as well as physical and developmental delays are more common with shorter spacing. Infant and child mortality are also higher.

Lack of child spacing also affects the health of the coming child. The mother who did not have enough chance to restore her iron stores and her physical and mental well being

**Note** The national goal is to achieve the population replacement level by the year 2017. This means TFRY 2.1

Contraceptive prevalence rate  
CPR more than 70%.

- Overpopulation is a national priority that receives high political support at all levels.
- Family planning is one of the solutions
- Family Planning is very important for the welfare of the family, the mother, the present child, and the coming child
- Family practice provides an excellent opportunity to promote family planning

The Aim of the Family Planning Program is to help each family in fulfilling their reproductive intentions, and to have the desired number of children This is achieved through:

- Use of contraceptives
- Treatment of infertility
- What is the situation of Family planning in your catchments area?
- Do you know the CPR in your Community?
- How do you compare with the country profile of your area?

## CPR in Egypt

In the latest Demographic and Health Survey (DHS) 2005 the CPR was

|                           |       |
|---------------------------|-------|
| <b>Egypt</b>              | 56.5% |
| <b>Urban governorates</b> | 61.2% |
| <b>Urban lower Egypt</b>  | 62.3% |
| <b>Rural Lower Egypt</b>  | 64.8% |
| <b>Urban upper Egypt</b>  | 56.1% |
| <b>Rural Upper Egypt</b>  | 41.4% |
| <b>Frontier</b>           | 47.2% |

- Are you providing a successful family planning programme in your catchments area?
- Are you Targeting the priority groups? See Box and table
- How to improve the family planning activities in your catchments area?

## Remember

The 4 TOO

- Too young (not for less than 20 years)
- Too soon (not for less than 2 years)
- inter-pregnancy spacing
- Too many (5th or more).
- Too old (not for more than 35 years)



Increased Maternal and child morbidity and mortality

**Table 3. Targeting the Priority Groups in Family Planning**

|                 |  |
|-----------------|--|
| Too young       | <ul style="list-style-type: none"> <li>• Address the community through community leaders to provide the model for the rest of the community in delaying marriage. Make use of the positive deviance phenomenon</li> <li>• Counsel families to avoid early marriage of their daughters</li> <li>• Premarital / early marriage counseling to postpone the first pregnancy.</li> <li>• The most suitable contraceptives are: combined oral contraceptives (COC) and combined injectable contraceptive (CIC) the one month Mesigyna injection</li> </ul>                   |
| <b>Too soon</b> | <ul style="list-style-type: none"> <li>• Identify candidates during antenatal, postnatal care, and during birth registration</li> <li>• Counsel couples during pregnancy</li> <li>• Counsel mothers postpartum</li> <li>• Health education and counseling for mothers bringing their infants for the different vaccinations</li> <li>• The most suitable methods are the lactation-friendly methods (See postpartum section)</li> </ul>  |
| <b>Too many</b> | <ul style="list-style-type: none"> <li>• Consider mothers having 3 or more children</li> <li>• Special emphasis is given for the mothers who do not want any more children</li> <li>• Identify candidates from the family folders</li> <li>• Identify mothers during antenatal / postnatal care</li> <li>• Reach families through home visiting by the extension workers (Raeda Rifeya or Murshidat)</li> <li>• The most suitable contraceptives are the long term ones as IUD, three months progestin-only (POI) injectables Depoprovera (DMPA), Implanon.</li> </ul> |
| <b>Too old</b>  | <ul style="list-style-type: none"> <li>• Consider mothers who are 35 years or more</li> <li>• Identify candidates from the family folders</li> <li>• Reach families through home visiting by the extension workers (Raeda Rifeya or Murshidat)</li> <li>• The most suitable contraceptives are the long term ones as IUD, three months progestin-only (POI) injectables Depoprovera (DMPA), Implanon.</li> </ul>   |

### Remember

- Quality Improvement checklist (QIP)?
- Is your unit fulfilling all the indicators?
- Do you have contraceptive stock enough to cover at least three months?

### Tips for a successful Family Planning service

- Ensure that your team is well trained, and that you all refresh your memory by using the most recent MOHP “National Standards

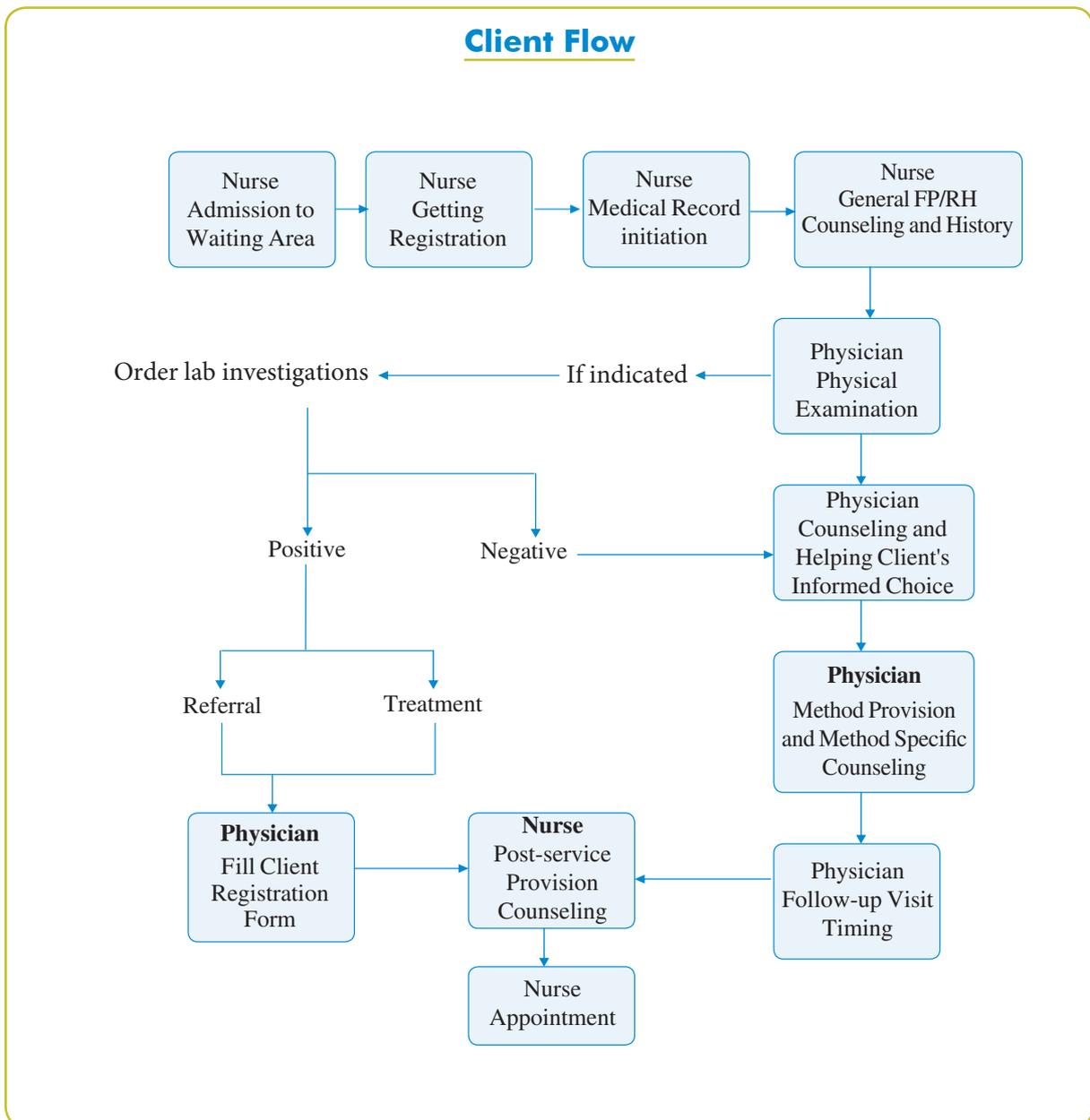
of Practice” (1st Ref.) Which is available in every center.

- Implement the principles of counseling.
- Ensure good client - provider interaction (CPI) with all members of the health team.
- Arrange your clinic to facilitate the client flow as recommended in the standards for the new and return client. (See Charts for Client Flow)
- Ensure a good record system and use the records and registers to calculate relevant indicators to monitor and evaluate your work

- Assess your work every quarter (self assessment), identify any performance problems, analyze the problems to define root causes, and implement continuous quality improvement.

Indicators that you can calculate at the FHU for self evaluation

- Increase in the absolute number of utilizers over the years
- The percentage of utilizers for spacing in relation to total number of utilizers
- The percentage of utilizers having 3 or less children
- The percentage of utilizers younger than 25 years
- Your score in the QIP



**Figure "1": Family Planning Client Flow Chart " New Client "**

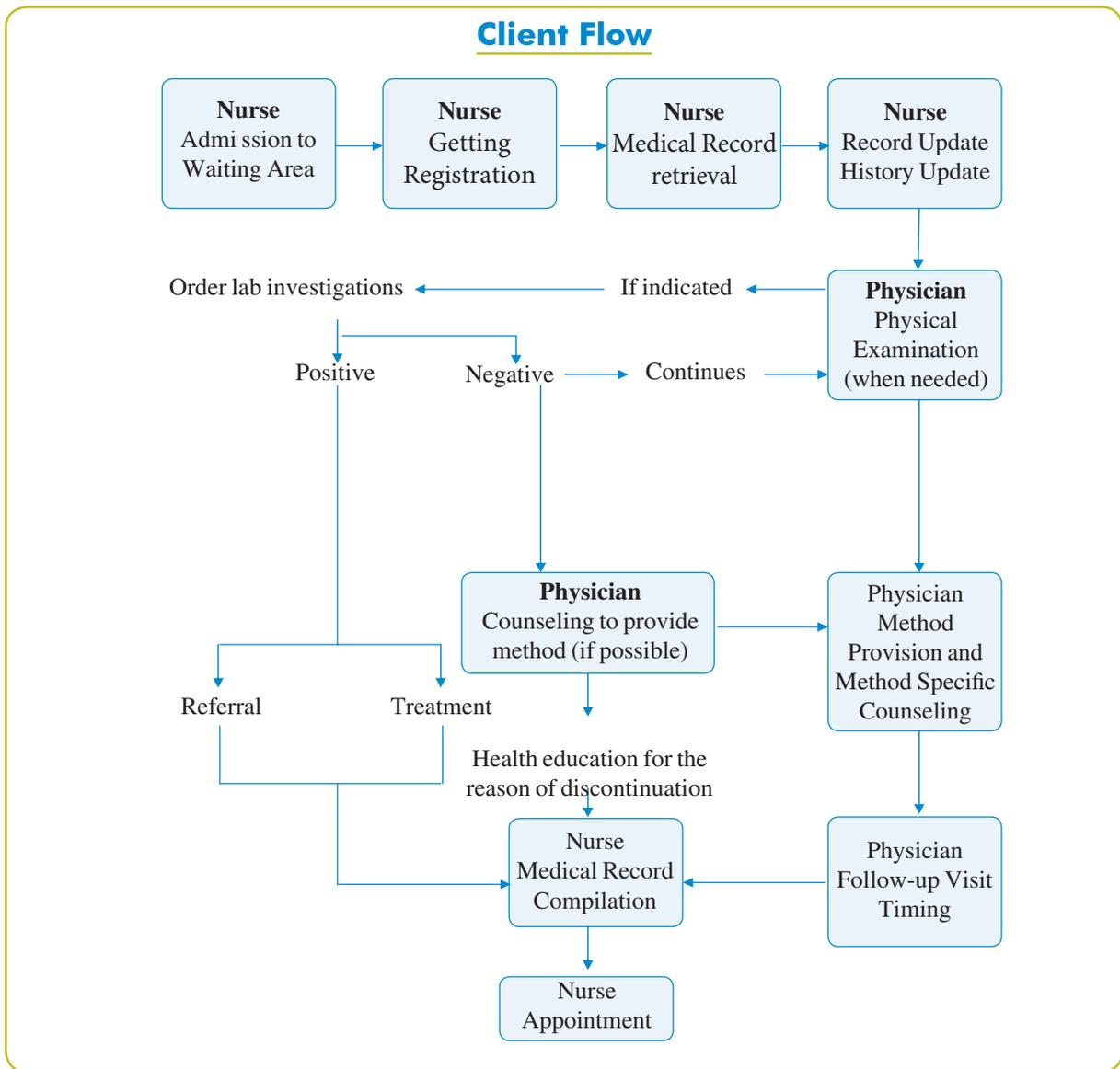


Figure "2": Family Planning Client Flow Chart "Return Visits"

### Contraception

A woman who is coming for family planning or who accepted to practice will follow the new client flow chart.

**Remember**

Proper completion of the family planning record will ensure good history taking and examination

### Counseling

**Remember**

Successful counseling should end with an informed free choice of the method to be used

### Principles of Counseling

**Principles:**

1. Treat each client well. The provider is polite, shows respect for every client and creates a feeling of trust.
2. Interact. The provider listens, learns and responds to the client.
3. Tailor information to the client. Listening to the client, the providers learn what information each client needs.
4. Avoid too much information. Clients need information to make informed choices. Too much information makes it hard to remember really important information.
5. Provide the method that the client wants.

6. Help the client understand and remember.

### Topics to be Covered in Counseling:

1. Effectiveness. How well is the method effective. Give the rate in typical & perfect use.
2. Safety of the methods. Clients should know about the side effects & complications of the methods before they choose & start a method.
3. How to use. Describe the proper way of using the method.
4. Advantage & non contraceptive benefits of the different methods before starting the method.
5. When to return. Try to encourage the woman to return for follow up visits. e.g. for more supplies, for check up if needed.

### Remember

Knowledge about the side effects will decrease the discontinuation rate

### Steps

Greet

Ask

Tell

Help choose the method

Explain everything about the chosen method

Return visit

## Essentials of Counseling for The Different Methods

### Combined Oral pills (COPs):

1. Effective, reversible method.
2. Safe for almost all women. Serious side effects are very rare.
3. Can be used by women of any age whether or not they have had children.
4. Protect against certain cancers, anemia and other conditions.
5. Not recommended for breastfeeding women.

### Progestin-Only pills (POP):

1. A good choice for breast feeding women.

2. Very effective during breast feeding.

3. No estrogen side effects.

4. If used without breast feeding, break through & irregular bleeding is likely to occur.

5. Can be used for emergency contraception.

### DMPA Injectables:

1. Very effective & safe.

2. Changes in vaginal bleeding are likely.

3. Can be used by women of any age.

4. Return of fertility delayed about 4 months longer on average.

5. Safe during breast feeding.

### Once a Month Combined Injectables

1. Safe and highly effective

2. Given on the same date +/- 3 days

3. Reversible, return to fertility is more rapid than DMPA

4. Not recommended for breast feeding women

### Implants:

1. Very effective for up to 3 years in Implanon.

2. Can be used by women of any age.

3. Insertion & removal need trained personnel.

4. No delay in return of fertility after capsules are removed.

5. Changes in vaginal bleeding are likely.

6. Safe during breast feeding.

### Condoms:

1. Condoms prevent pregnancy & STDs including HIV.

2. Condoms work if used correctly (in combination with other local methods) every time.

3. Some men object to condoms because their use interrupt sex, reduces sensation or embarrasses them.

### Intra Uterine Devices:

1. Very effective, reversible, long term method.

2. CuT A 380 IUD lasts for 10 years.

3. Menstrual periods may be heavier & longer especially at 1<sup>st</sup>.

4. Insertion & removal by trained personnel.
5. Could be used immediately post partum.
6. Not advisable for women at high risk for STDs.

### Important Issues in Relation to Contraceptive Use

#### Missed Combined Oral Contraceptive Pills

##### Missed only 1 Hormonal Pill

1. Take the missed pill at once
2. Take the next pill at the regular time. This may mean taking 2 pills on the same day or even at the same time
3. Take the rest of the pills as usual

#### Remember

Missed only 1 hormonal pill  
Take the missed pill at once

##### Missed two or more pills

1. Most important is have another method of protection for 7 days: condoms, spermicide or avoid sex
2. Take a hormonal pill at once
3. a- If more than 7 hormonal pills are left take the rest of the pills as usual  
b- Less than 7 hormonal pills left, take the rest of the pills as usual and start a new pack of hormonal pills the next day
4. In case of presence of reminder pills, the missed (non-hormonal) pill(s) should be thrown away and take the rest of the pills on the next day

#### Remember

Missed two or more pills  
1. Most important is have another method of protection for 7 days: condoms, spermicide or avoid sex  
2. Take a hormonal pill at once

#### Progestin-Only Contraceptive Pills

These are taken daily on the same time of the day.

##### If the woman forgets one or more pills,

- she should take 1 as soon as she remembers and then keep taking one every day as usual
- A breast feeding woman who is still having amenorrhea is still protected if she misses a pill
- If the woman is 3 hours late, and is not breast feeding or breast feeding but resumed her menses should also use condoms, spermicide or avoid sex for 2 days. She should take the last missed pill and continue as usual.

#### Injectable Contraceptives

- These are given by deep intra-muscular route
- Do NOT massage the site of injection
- Should be given every 3 months +/- 2 weeks
- If delayed after 2 weeks: Assess for pregnancy (remember that some women using DMPA have no monthly menses). If she is not likely to be pregnant and still prefers DMPA continue using as usual

#### How to Tell The Woman is Not Pregnant?

- She is within the first 7 days after last normal menses
- She did not have sex since last menses
- She is correctly using a reliable contraceptive method
- She is within 4 weeks postpartum for non-lactating women
- She is fully breast feeding, amenorrheic, less than 6 months postpartum, exclusively breast feeding and frequent day and night feeds (LAM)
- She is within the first 7 days post abortion

#### Emergency Contraception (EC)

Emergency contraception is the use of certain contraceptive methods immediately after unprotected marital relations to prevent pregnancy.

EC is occasionally used and should never replace regular use of contraceptives

It should be used within 72 hours in case of pills, and within 3 days in case of IUD

In Either case the earlier the use the better the results.

Progestin only pills are preferred. It is given according to the following regimen

- Pills containing 75 ug norgestrel, give 20 tablets and repeat after 12hours
- Pills containing 30 ug levonorgestrel, give 25 tablets and repeat after 12hours
- Pills containing 750 ug levonorgestrel (Postinor), give one tablet and repeat after 12hours

**Combined Oral Pills**

- Give 4 tablets and repeat after 12 hours

Side effects for oral emergency contraception: mainly nausea and vomiting

If vomiting occurs within 2 hours repeat the doze.

**IUD**

- Should be inserted within 3 days
- It works the same way as for regular use. It prevents implantation of the ovum. It does NOT induce abortion.
- It has the advantage of being a method to continue with

**Table. 4: Management of Clinical Problems Associated With The Use of Contraceptives**

| Problem: Client feels nauseated after initial use of the pills   |  |
|--|--|
| Advice   | Action   |
| Inform client that nausea usually will disappear after the first few cycles.   | If nausea develops after client has been on pills for some time, exclude pregnancy (by a pregnancy test) or other medical causes of nausea.  |
| Advise her to take the pill at bedtime. Advise her to take the pill with food or milk.   | If the client wishes to continue using pills, she may wish to use Progestin-only pills.  |
| If client vomits within one our of taking the pill, instruct her to take an extra pill from another package of pills.  | If the client wishes another method, assist in deciding which method.  |
| Problem: Spotting and breakthrough bleeding  |  |
| Advice   | Action   |
| Reassure client that this is common and not serious and will decrease with time.   | When indicated, examine the cervix by speculum to exclude a local cause for sporting (e.g., infection, cancer or polyp).   |
| Question the client to determine if she has forgotten to take the pill daily.  | Encourage client to continue using the pill if spotting occurs in the first months (bleeding tends to decrease after that period).   |
| Ask client if she is using other drugs (e.g., Rifampin or phenytoin).  | If client is spotting, advise her to continue daily pill intake.   |
| If client has missed pills, advise her to take two pills daily as missed pills.  | If client is bleeding significantly, advise her to stop taking the pill and to restart after five to seven days. (She should use condoms and spermicides, abstinence, or coitus interruptus during these seven days if sexual intercourse takes place. If this is recurrent, consider using another method). |
| Inform client about the Al-Azhar fatwa that estehada or spotting and bleeding that occur apart from menstruation should not prevent her from performing her religious duties e.g., praying or fasting. |  |
| Problem: Failure to experience withdrawal bleeding for seven days after the end of pill cycle (amenorrhoea)  |  |
| Advice   | Action   |
| Review pill-taking history.  | See Advice   |
| Exclude pregnancy. (Take history of sexual exposure, consistent use of pill, pregnancy symptoms, do examination and do pregnancy test if indicated).   |  |
| If pregnancy is excluded, advise client to start the pill cycle on time (seven days after the last pill was taken).  |  |

**Table. 5: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

|   |  |
|---|--|
| If withdrawal bleeding dose not occur again in the next cycle (amenorrhea continues), again exclude pregnancy.  |  |
| If not pregnant, advice client to start the pill on time  |  |
| If amenorrhea (no withdrawal bleeding) persists for more than three months, refer client to a specialist for further evaluation.  |  |
| <b>Problem: Menstruation becomes scanty and the color becomes darker after using the pills</b>  |  |
| <b>Advice</b>   | <b>Action</b>  |
| Inform the client that this sometime happens and that it dose not affect the client's general health and that the dark color is related to scanty blood flow through acidic vaginal secretions. |  |
| <b>Problem: Pill user complains of persistent headaches</b>   |  |
| <b>Action</b>   | <b>Advice</b>  |
| Ascertain that the client's headache occurred after pill use initiation and was not felt before starting the pills  | If headache is mild suggest asprine or paracetamol and reassure  |
| If headache is increasingly severe or with neurological symptoms, stop pill use and consider referral for evaluation. Help her choose a different method.                                       |  |
| If headache persists after stopping pill, refer client for appropriate medical evaluation.  |  |
| <b>Problem: Depression</b>  |  |
| <b>Action</b>   | <b>Advice</b>  |
| Counsel client and look for other causes of depression.   | If depression was not present before pill intake, counsel client that it may be caused by the pills (hormones in pills)  |
| Give Pyridoxine (e.g., Pyramine tablets).   |  |
| If depression does not improve, and client desires, stop the pills and help her choose another method.  |  |
| <b>Problem: Weight gain</b>   |  |
| <b>Action</b>   | <b>Advice</b>  |
| See Advice  | Diminish caloric intake and increase activity.   |
|   | If there is no response and client so desires, client ay change to another contraceptive method.   |
| <b>Problem: Hypertension</b>  |  |
| <b>Action</b>   | <b>Advice</b>  |
| Client should have BP measured after discontinuing pills and if BP continues to be elevated, the client should be referred for treatment.   | If the diastolic blood pressure is below 90mmHG, advise client to:   |
|   | 1. Loose weight if she is overweight   |
|   | 2. Reduce salt intake, smoking and caffeine  |
|   | 3. Closely follow up measuring blood pressure (BP), particularly during any future pregnancies.  |
|   | If the blood pressure is 140-159 / 90-99 (WHO Category 3) on one occasion without evidence of previous high BP, repeat BP in next visit. If still high, then advise the client to discontinue oral contraceptive pills and to use a non- hormonal contraceptive. If BP> 160/100 stop COC and help her choose another method. |

**Table. 6: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| Problem: Missed pills   |  |
|---|--|
| Action  | Advice   |
| Missed one pill   | Missed one pill  |
| See Advice  | Advise client:<br>1. To take missed pill as soon as she remembers<br>2. To keep taking remaining pills on schedule<br>3. No back-up method needed  |
| Missed more than one pill (e.g., two days)                    | Missed more than one pill (e.g, two days)  |
| See Advice  | If seven or more pills left in the pack:<br>1. Take one pill now<br>2. Take the rest as usual<br>3. Use backup method (condom or spermicide) for seven days  |
|   | If fewer than seven pills left in the pack:<br>1. Take the pill now<br>2. Take the rest as usual<br>3. Start another pack immediately after finishing the current one, without seven-day break<br>4. Use backup method (condom or spermicide) for seven days   |
| Habitually misses taking pill daily                           | Habitually misses taking pill daily  |
| See Advice  | Encourage client to associate pill taking with another daily job, e.g., having dinner, going to bed, washing her face in the morning, and:<br>1. Encourage client to check the pack of pills daily to be sure she took the pill the day before.<br>2. If client continues to forget to take a pill daily, advise her to change to another method |
| Problem: Client's husband travels                             |  |
| Action  | Advice   |
| Travels for 1-3 months  |  |
|   | There is no need for client to discontinue the pills.  |
| Travels for 3+ months   |  |
|   | Client can continue to take pills as usual<br>OR<br>Client can stop using the pills at the beginning of the trip and should restart the pills, on the first day of menstruation, at least one month before arrival of her husband.   |
| Problem: Heavy breasts  |  |
| Action  | Advice   |
| Do breast exam.   | Inform potential user about this possibility before she starts the pills.  |
|   | Reassure client that this is a hormonal effect and is not dangerous.   |
|   | If client desires, switch her to a lower dose estrogen or to another progestin/estrogen preparation.   |
| Problem: Hair loss  |  |
| Action  | Advice   |
| Consider changing to a non-hormonal method.                   | Women who experienced hair loss during previous pregnancies should consider avoiding the pill.   |
| Problem: Client develops market dark pigmentation on her face |  |
| Action  | Advice   |
| See Advice  | Inform client that pigmentation is likely to be permanent.   |
|   | Use sun blocking agent and avoid the exposure to the sun   |
|   | Client may stop the pills and change to a non-hormonal method.   |

**Table. 7: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| <b>Problem: Client wants to use the pill, but is afraid of the possibility of cancer</b>  |   |
|---|---|
| <b>Action</b>   | <b>Advice</b>   |
| See Advice  | Oral contraceptives have not been proven to cause any common cancer.<br><br>Oral contraceptives help to prevent two kinds of cancer: cancer of the ovaries and cancer of the endometrium. For breast and cervical cancer, some studies find that these cancers are more common among certain women who have used oral contraceptives. Other studies do not find this. More research is taking place |
| <b>Problem: Client wants to use the pill, but is afraid she may develop infertility</b>   |   |
| <b>Action</b>   | <b>Advice</b>   |
|   | Assure potential client that scientific studies show that contraceptive pills do not affect future fertility.   |
| <b>Problem: Client is breastfeeding</b>   |   |
| <b>Action</b>   | <b>Advice</b>   |
| See Advice  | Combined contraceptive pills decrease breast milk and therefore they should not be used in the first six months after childbirth and can be used if it is the only choice after the first six months.<br><br>It is better to use another contraceptive method that is more appropriate for postpartum lactating women.  |
| <b>Problem: Client will undergo major surgery</b>   |   |
| <b>Action</b>   | <b>Advice</b>   |
| See Advice  | Stop using the pills two weeks before surgery and use another method of contraception.  |
| <b>Problem: Client develops one of the following symptoms:<br/>Severe abdominal pain, severe chest pain, cough, dyspnea, severe headache, severe dizziness, numbness, blurring of vision speech problems, severe leg pain</b> |   |
| <b>Action</b>   | <b>Advice</b>   |
| See Advice  | These are dangerous symptoms that require the client to stop taking the pills, use another contraceptive method and be promptly referred for evaluation.  |
| <b>Problem: Client has varicose veins in lower limbs</b>  |   |
| <b>Action</b>   | <b>Advice</b>   |
| Provide her with the pill. Varicose veins do not contraindicate pill use.   |   |
| <b>Problem: Client has uterine fibroid (s)</b>  |   |
| <b>Action</b>   | <b>Advice</b>   |
| Continue using the pills, COCs have no affect on fibroids (s)   |   |
| <b>Problem: Client does not menstruate after she starts the injection (amenorrhea)</b>  |   |
| <b>Action</b>   | <b>Advice</b>   |
| Inform potential client before starting use that amenorrhea is a common side effect. It will not affect her general health (amenorrhea prevents blood loss and may help correct anemia).                                      | Only reassurance is required. (Menses will return some time after discontinuation although in may be delayed. Thus, the occurrence of pregnancy may be delayed. Injectable contraceptive do not cause infertility).   |
|   | Do not try to induce menses by drugs or hormones.   |
| <b>Problem: Client encounters occasional spotting</b>   |   |
| <b>Action</b>   | <b>Advice</b>   |
| Inform potential client beforehand that this is an expected side effect and inform her about Al-Azhar fatwa.  | Do nothing unless bleeding is excessive or spotting becomes unacceptable.   |

**Table 8: Continue: Management of Clinical Problems Associated with the Use of Contraceptives**

|   |   |
|---|---|
|   | Examine the cervix to exclude a local cause (e.g., erosion or polyp).   |
|   | If spotting is unacceptable, use the treatment strategy (see below). Treat for anemia.  |
|   | If spotting is unacceptable, use the treatment strategy (see below).  |
|   | Do not do D&C.  |
|   | Provide the client with information about the Al-Azhar fatwa that maintains that "estehada" (spotting and bleeding other than menstruation) need not prevent her from performing religious duties, such as praying or fasting.  |
| <b>Problem: Client complains of occasional excessive bleeding or unpredictable bleeding</b>   |   |
| <b>Advice</b>   | <b>Action</b>   |
| This is a possibility and the potential client should be informed about it before starting injectable use. (It is less common than amenorrhea and spotting).  | Curettage is not advisable and frequently will be of no benefit because the endometrium is already partly atrophic under the effect of the progestagens.  |
|   | Treat anemia.   |
|   | Consider other causes of bleeding<br>Treatment options include:   |
|   | Anti-prostaglandin drug (e.g. Ibuprofen, one tablet three times a day for five day)<br>OR<br>Oral contraceptive tablets for two cycles<br>OR<br>Ethinyl Estradiol tablets (20 meg) daily for 20 days<br>OR<br>Give next dose of DepoProvera early if bleeding occurs in last six weeks. |
|   | If bleeding is persistent or unacceptable after treatment, consider changing the method.  |
|   | If the bleeding is severe, refer to specialist for assessment.  |
| <b>Problem: Increase in weight</b>  |   |
| <b>Advice</b>   | <b>Action</b>   |
| The potential client should be informed about the possibility of this probable side effect. It is most likely due to eating more, aging or moving less. Advise her to exercise and reduce calorie intake. | If the weight increase is unacceptable, change to a non-hormonal method. There is no medical reason to discontinue DMPA for weight gain.  |
| <b>Problem: Breast fullness and tenderness</b>  |   |
| <b>Advice</b>   | <b>Action</b>   |
| Assure client that this is one of the method's known side effects.  | May discontinue or change method if problem is not tolerable.   |
| Advise client to wear a looser bra for comfort.   | Do breast exam.   |
| <b>Problem: Headache and dizziness</b>  |   |
| <b>Advice</b>   | <b>Action</b>   |
| Potential clients should be informed about the possibility of this frequent complaint beforehand.   | Measure blood pressure to exclude hypertension. (Note: DMPA does not cause hypertension.)   |
| Mild  | Severe  |
| Reassure client and advise her to occasionally use a mild analgesic (e.g. Paracetamol).   | Change to a non-hormonal method and if problem persists refer for further evaluation.   |

**Table. 9: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| Problem: Client comes late for her injection  |   |
|---|---|
| Advice  | Action  |
| Up to two weeks   | Up to two weeks   |
| DepoProvera (injection every three months) allows for occasional short delays in receiving the injection. However, women should always be instructed to keep appointments for the exact dates.  | Give her the injection.   |
| More than two weeks   | More than two weeks   |
| Depo-Provera (injection every three months) allows for occasional short delays in receiving the injection. However, women should always be instructed to keep appointments for the exact dates. | If the client has not had intercourse in past two weeks, may give injection.  |
|   | If the client has had intercourse in past two weeks, advise the client to use a backup contraceptive (condom or spermicides) and follow it with a pregnancy test in two weeks. If negative, give injection. |
| Problem: client stops injections, but menstruation is not regular (amenorrhea or irregular menses)  |   |
| Advice  | Action  |
| Explain to the client that this happens occasionally, and that it may persist for some time, until her body gets rid of the hormones.   | Do not treat with drugs or hormones   |
|   | Refer to Ob/Gyn specialist for further evaluation if problem persists for more than six months.   |
| Problem: Client does not get pregnant after stopping the injections   |   |
| Advice  | Action  |
| Inform potential users that this happens occasionally, and that it may persist for some time, until her body gets rid of the hormones.  | Do not treat with drugs or hormones.  |
|   | Refer to Ob/Gyn specialist for further evaluation if problem persists for more than six months.   |
| Problem: Pregnancy occurs while using injectable contraceptives   |   |
| Advice  | Action  |
| When DepoProvera is used correctly (i.e., every three months) as recommended, pregnancy rarely occurs. Injectable contraceptive methods are very effective in preventing pregnancy.             | Refer for antenatal care.   |
| Reassure client that children born to women using injectable contraceptives have no greater risk of fetal malformation than children born to women not using injectable.                        |   |
| Problem: Client develops hypertension   |   |
| Advice  | Action  |
|   | If the diastolic blood pressure is less than 100 mmHg (on repeated occasion), give instructions to the client to reduce salt and caffeine intake.   |
|   | If the diastolic blood pressure exceeds 110 mmHg (WHO Category3) stop the injections and change to a non-hormonal method. If between 100 and 109mmHg, strict follow-up is essential.                        |

**Table. 10: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| Problem: Client wants to use injection but concerned about cancer   |   |
|---|---|
| Advice  | Action  |
| DMPA has not been shown to cause cancer in humans; instead, it helps to prevent cancer of the endometrium and perhaps cancer of the ovaries. The WHO has declared DMPA safe, but some questions remain about whether DMPA might speed up the development of pre-existing breast cancer. Further studies are underway. |   |
| Problem: Client would like to use Implanon but is concerned about feeling pain during insertion   |   |
| Advice  | Action  |
| Assure client it is a minor surgery that takes 10-15 minutes and is done under local anesthesia and that she will feel little or no pain during insertion (only that of the anesthesia injection).  |   |
| Problem: Client would like to use Implanon but is concerned the capsules will move in her body  |   |
| Advice  | Action  |
| Assure her that the capsules are:<br>1. Put under the skin and do not change its position at all.<br>2. Not Visible and no one can observe that she is using them.  |   |
| Problem: Client would like to use Implanon but is concerned about future infertility  |   |
| Advice  | Action  |
| Explain that the Implanon capsule can be removed whenever she wishes or by the end of three years and that fertility immediately returns to normal after removal.   |   |
| Problem: Client would like to use Implanon but is concerned about the capsules interfering with doing her household activities  |   |
| Advice  | Action  |
| Assure her that the capsule does not cause pain and that household activities can be performed as usual the very next day after insertion (perhaps even the same day) and after removal.  |   |
| Problem: Client would like to use Implanon but is concerned about getting pregnant while using the method   |   |
| Advice  | Action  |
| Assure her that Implanon is a very effective method of contraception. The failure rate is well below 1%.  |   |
| Problem: Amenorrhea after insertion of Implanon   |   |
| Advice  | Action  |
| Potential clients be informed about the possibility of menstrual abnormalities including amenorrhea, although most women menstruate regularly with Implanon use, particularly after the first six months.   | Perform a pregnancy test only if there are other symptoms or signs of pregnancy |
| Assure the client that absence of menses does not harm the body and may even correct an already existing anemia.  |   |

**Table. 11: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| Problem: Amenorrhea after period of regular bleeding  |  |
|---|--|
| Advice  | Action   |
| Advise client this can occur and does not always signify the occurrence of pregnancy.   | Do a pregnancy test to exclude pregnancy.  |
| Problem: Spotting   |  |
| Advice  | Action   |
| Potential user should be informed about this possibility before insertion of Implanon.  | Reassure the client.   |
|   | Where indicated, examine the cervix to exclude a local cause, e.g., polyp, infection or cancer.  |
|   | Remind her about the Al Azhar fatwa that says this is estehada and that she can perform religious duties such as fasting and praying while spotting.   |
|   | If problem is persistent and client wishes treatment, the following options exist:<br>1. Anti-prostaglandin drug (e.g., Ibuprofen) one tablet three times a day for five days;<br>2. Oral combined contraceptive pills for two cycles.<br>3. Ethinyl Estradiol tablets (20 meg.) daily for days  |
| Problem: Bleeding (either menorrhagia or metrorrhagia)  |  |
| Advice  | Action   |
| Inform potential user about this possibility before insertion of Implanon.  | Provide iron therapy.  |
| Reassure and encourage the client.  | Treatment options include:<br>1. Anti-prostaglandin drug (e.g., Ibuprofen) one tablet three times a day for five days.<br>2. Oral combined contraceptive pills for two cycles<br>3. Ethinyl Estradiol tablets (20 meg.) daily for 20 days.<br>If bleeding is persistent or unacceptable after treatment, consider changing the method. |
|   | If the bleeding is severe, refer to an Ob/Gyn specialist.  |
| Problem: Headache   |  |
| Advice  | Action   |
| Inform potential user that this is a frequent complaint among Implanon users.   | Mild Headache  |
|   | A analgesics   |
|   | Severe Headache  |
|   | Refer user to a clinic equipped with physicians trained in Implanon removal to remove the capsule. (Do not attempt removal if you are not trained to do so.)   |
| Problem: Breast fullness and tenderness   |  |
| Advice  | Action   |
| Advise potential client that this is frequently encountered among Implanon users.   | If problem is unacceptable to client, discontinue  |
| Problem: Weight gain  |  |
| Advice  | Action   |
| Inform potential user that Implanon users can have a small but steady weight gain; however, most weight gain will be a result of aging, moving less or eating more. | If weight gain is marked or if client insists on removal, refer the client to a clinic where there are physicians trained in the removal procedure. (Do not attempt removal if you are not trained to do so.)  |

**Table. 12: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

|  |  |
|--|--|
| Encourage client to exercise and reduce calorie intake.  |  |
| <b>Problem: Hypertension</b>   |  |
| <b>Advice</b>  | <b>Action</b>  |
|  | If the systolic blood pressure exceeds 160 or the diastolic BP exceeds 100 mmHg on several occasions, the client should be advised to reduce salt and caffeine intake. If hypertension persists, refer client to internal medicine specialist to control BP and follow-up. (Do not remove the capsules). |
| <b>Problem: Client gets pregnant while using Implanon</b>  |  |
| <b>Advice</b>  | <b>Action</b>  |
| Assure her that there is no increased possibility of the fetus having congenital malformations because of exposure in-utero. | Refer client for removal of the capsules.  |
| <b>Problem: Local pain, tenderness, redness at the site of insertion</b>   |  |
| <b>Advice</b>  | <b>Action</b>  |
|  | 1. Treat with antibiotics<br>OR<br>2. Refer to a center where Implanon service is provided to exclude local infection.   |
| <b>Problem: Expulsion of the capsule</b>   |  |
| <b>Advice</b>  | <b>Action</b>  |
|  | Refer client to center providing Implanon services where decision will be made as to whether to insert another one or not.   |
| <b>Problem: Client uses Rifampin or anticonvulsant drugs while using Implanon</b>  |  |
| <b>Advice</b>  | <b>Action</b>  |
| Inform client that these drugs will have minimal effect upon effectiveness or side effects of method.                        | If there are significant problems with breakthrough bleeding, consider using a non-hormonal method.  |
|  | Observe closely for the occurrence of pregnancy.   |
| <b>Problem: Severe abdominal pain</b>  |  |
| <b>Advice</b>  | <b>Action</b>  |
|  | May need to refer for evaluation of pain.  |
|  | Need to consider:<br>1. Ectopic pregnancy<br>2. Pelvic inflammatory disease  |
| <b>Problem: Client asks to remove the Implanon capsule</b>   |  |
| <b>Advice</b>  | <b>Action</b>  |
| Counsel the client for the reason for removal.   | If the client insists on the removal or there is a medical indication, refer the client to a centre where Implanon services are provided. (Do not attempt removal if you are not trained to do so.)  |
| <b>Problem vaginal discharge</b>   |  |
| <b>Advice</b>  | <b>Action</b>  |
|  | Inoffensive smell  |
|  | See Chapter 21 Reproductive tract and Sexually Transmitted infections)   |
|  | Treat infection, if present.if no evidence of infection, reassure client that excessive discharge is due to the presence of the IUD  |

**Table. 13: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

|   |  |
|---|--|
|   | Offensive smell  |
|   | Associated with severe lower abdominal pain, tenderness and fever. (this may denote PID)   |
| <b>Problem: potential user would accept an IUD but is afraid of infertility</b>   |  |
| <b>Advice</b>   | <b>Action</b>  |
| Assure client that the IUD does not affect future fertility and that fertility returns quickly after removal  |  |
| <b>Problem: potential user would accept an IUD but is afraid of the IUD moving around in the body</b>   |  |
| <b>Advice</b>   | <b>Action</b>  |
| Assure client that the IUD cannot move from inside the uterus into any other parts of the body (i.e., heart, stomach)                               |  |
| <b>Problem: spotting</b>  |  |
| <b>Advice</b>   | <b>Action</b>  |
| For a few days before onset of menstruation   |  |
| Reassure the client that spotting is a common occurrence  |  |
| <b>Intermenstrual</b>   |  |
| Remind the client of the Al- Azhar fatwa that this is estehadas and should not prevent her from performing religious duties e.g praying and fasting |  |
| <b>Problem: Bleeding</b>  |  |
| <b>Advice</b>   | <b>Action</b>  |
| Menorrhagia   | Menorrhagia  |
| Reassure the client that this may occur in the first few post - insertion periods.  | If persistent: supply iron. Exclude other causes.  |
|   | If severe: remove the device.  |
|   | <b>Metrorrhagia</b>  |
|   | Give iron. Exclude other causes  |
|   | If severe and persists, remove the device.   |
|   | If persists after removal of device, refer to hospital for evaluation.   |
| <b>Problem: pain (lower abdominal)</b>  |  |
| <b>Advice</b>   | <b>Action</b>  |
| Slight pain after insertion   | Slight pain after insertion  |
| Advise client that pain usually disappears after a few hours or between one and two days.   | Give simple analgesics (e.g., aspirin or Ibuprofen )   |
|   | Severe pain during insertion   |
|   | Give analgesics  |
|   | Consider perforation at insertion.carefully examine client and refer if necessary  |
|   | Give client another appointment to examine the length of the stri ng after first cycle. If string gets shorter or disappears, it may denote uterine perforation, refer to specialist |
|   | <b>Severe pain after insertion</b>   |
|   | Refer client for testing to exclude possibility of ectopic pregnancy   |

**Table. 14: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| Problem: Dysmenorrhea or intermenstrual pain  |  |
|---|--|
| Advice  | Action   |
|   | Try one of the following:  |
|   | 1. Analgesics e.g., paracetamol  |
|   | 2. Acetaminophen   |
|   | 3. A prostaglandin inhibitor e.g., Ibuprofen.  |
|   | If severe and does not respond to above, remove the device   |
|   | Pain is severe   |
|   | Exclude ectopic pregnancy by referring client for diagnostic testing.  |
|   | Pain is colicky, recurrent   |
|   | Instruct the client to watch the thread carefully (it may be the beginning of expulsion of the device)   |
|   | Consider treatment with anti- prostaglandin medication (e.g., Ibuprofen)   |
| Problem: Amenorrhea   |  |
| Advice  | Action   |
|   | Examine client for length of the thread and signs of pregnancy.  |
|   | Do a pregnancy test if the thread becomes shorter or disappears or if there are signs suggestive of pregnancy  |
|   | Consider client's age.Is she menopausal?   |
| Problem: Pregnancy  |  |
| Advice  | Action   |
| Thread visible  | Thread visible   |
| Inform user that risk of abortion is about 50%  | Remove IUD gently  |
|   | Refer for prenatal care  |
|   | Thread not visible   |
|   | Refer to Ob/Gyn specialist for consultation who will likely recommend ultrasonic scan. (if the IUD is not present, denotes unnoticed expulsion. If the IUD is present, there is no increased risk of congenital malformations, but risk of abortion is 50%. this abortion is more likely to be septic, so increased attention and follow -up is needed ) |
| Problem: client wants to use an IUD, but does not want to run the risk of failure (or client wants to decrease possibility of pregnancy while using an IUD)                               |  |
| Advice  | Action   |
| Reassure the client that the IUD is a very safe method.<br>If she insists, she can combine it with periodic abstinence (safe period), or use of foam tablets (or condom ) at mid - cycle. |  |
| Problem: client cannot feel the thread  |  |
| Advice  | Action   |
|   | Look for signs and symptoms of possible pregnancy.   |
|   | Expose the cervix with a speculum:   |
|   | 1. If the thread is visible, be sure that the client knows the proper way of feeling the thread.   |
|   | 2. if there is excessive mucus discharge and a lacerated cervix, clean the cervix and look carefully for the thread in the depth of the cervical laceration.   |

**Table. 15: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

|   |  |
|---|--|
|   | 3. if there are no signs of pregnancy, have client use another method and evaluate after next menses   |
|   | 4. if the thread is still not seen, refer to specialist for an ultrasonic scan or x- ray, to exclude unnoticed expulsion.(if the device is found in the pelvis, attempts will be made to ascertain whether is location is intra -uterine or extra -uterine and appropriate measures will be taken for its removal)   |
| <b>Problem: client notices that the thread is getting shorter</b>   |  |
| <b>Advice</b>   | <b>Action</b>  |
|   | Examine carefully for signs of pregnancy and do a pregnancy test   |
|   | If the thread gets shorter or disappears, repeat the pregnancy test and refer to a specialist.   |
| <b>Problem: client notices that the thread is getting longer</b>  |  |
| <b>Advice</b>   | <b>Action</b>  |
|   | Expose the cervix and look for the following:  |
|   | 1. If the lower part of the plastic device is seen (partial expulsion), extract the device and if client desires, replace with another.  |
|   | 2. If not, recommend that client use an additional contraceptive (condom or spermicide ) as lower displacement of the IUD reduces protection against pregnancy. Refer client to a specialist for further evaluation  |
| <b>Problem: Husband feels discomfort or pain during sexual intercourse</b>  |  |
| <b>Advice</b>   | <b>Action</b>  |
|   | Expose cervix with a speculum and look for the following:  |
|   | 1. If thread is too short, change the device and cut the thread 5 cm from the cervix.  |
|   | 2. If the lower part of the plastic device is seen (partial expulsion), remove the device and insert another one.  |
|   | 3. If client desires, remove IUD and provide another contraceptive method.   |
| <b>Problem: client wants to replace the IUD with a new one to maintain effectiveness</b>  |  |
| <b>Advice</b>   | <b>Action</b>  |
| Explain to client that:<br>The Cu 380A device remains effective for at least 10 years, and Removal and reinsertion of another device may result in bleeding and / or infection and is resorted to only when absolutely necessary. |  |
| <b>Problem: forgot to use the condom OR condom ruptured</b>   |  |
| <b>Advice</b>   | <b>Action</b>  |
|   | If woman presents herself within 72 hours from unprotected intercourse, advise her to take one of the following three emergency contraception options:<br>1- take one tablet containing 0.75 mg of levonorgestrel (postenor )and repeat after 12 hours.<br>2- Take 25 tables of POP (all at once ) and repeat the same dose after 12 hours.<br>3- Take four tablets of COCs and repeat the same does after 12 hours. |
|   | If she presents herself within five days of intercourse:<br>1. Immediate insertion of Cu -T 380 AIUD<br>2. Refer to specialist for immediate follow -up  |

**Table. 16: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| Problem: condoms repeatedly rupture  |   |
|--|---|
| Advice   | Action  |
| Look at manufacture date on package, if more than five years old. Use more recently manufactured brands.   |   |
| Empty the teat of air before putting on the condom, and prolong the love -play until the vagina is wet; or |   |
| Use a lubricant (contraceptive foam, gel or cream ) but not oily lubricants                                |   |
| Problem: client wants to continue using the condom but would like to increase effectiveness                |   |
| Advice   | Action  |
| Condom slips during withdrawal   |   |
| Hold the open end during withdrawal.   |   |
| Problem: Spermicide cream is not available   |   |
| Advice   | Action  |
| Use another method, as the diaphragm alone is ineffective  |   |
| Problem: client feels pain or difficulty with urination while putting in the diaphragm                     |   |
| Advice   | Action  |
|  | Check the size of the diaphragm, client may need a smaller size.  |
|  | If this is a recurrent problem, use another method  |
| Problem: the diaphragm is displaced or expelled with straining or defecation by client                     |   |
| Advice   | Action  |
|  | Avoid using the diaphragm in cases of vaginal wall prolapse (use another method)  |
|  | Check the diaphragm size. may need a larger size diaphragm.   |
|  | Recheck the size of the diaphragm every few years and after delivery.   |
| Problem: client can not insert the diaphragm properly  |   |
| Advice   | Action  |
|  | Instruct client in the proper way of inserting the diaphragm, particularly her position during insertion (either squatting or putting one foot on a chair ) |
|  | Observe the client practicing insertion during clinical visit.  |
| Problem: client develops repeated dysuria and frequency of micturation                                     |   |
| Advice   | Action  |
| Change to another method and laboratory test a urine sample to exclude cystitis                            |   |
| Problem: client develops foul – smelling vaginal discharge   |   |
| Advice   | Action  |
| Advise client to remove the diaphragm six to eight hours after intercourse.                                | Examine the vagina to exclude ulceration of the vaginal wall. If present, change to another method.   |
| Problem: more than one intercourse is practiced during one night   |   |
| Advice   | Action  |
| Do not remove the diaphragm (keep it in place ) and apply a spermicide before every act of intercourse     |   |

**Table. 17: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

| Problem: client feels a sensation of heat in the vagina after inserting the tablet  |   |
|---|---|
| Advice  | Action  |
| Explain to client that this is due to the foaming reaction while the tablet is dissolving and that this sensation of heat does not denote inflammation or irritation. |   |
| Problem: the tablet does not dissolve in the vagina   |   |
| Advice  | Action  |
| Check that the tablet package is intact and check the expiration date of the tablets.   | See Advise  |
| Problem: client finds putting the tablet high up in the vagina difficult because of vaginal dryness   |   |
| Advice  | Action  |
| Instruct client to dip the tablet in a small amount of water, rapidly remove it and insert it in the vagina.  |   |
| Problem: Sometimes more than one sexual act takes place during one night  |   |
| Advice  | Action  |
| Use another tablet before every sexual act. Do not douche   |   |
| Problem: client is satisfied with the method, but wants to increase its effectiveness   |   |
| Advice  | Action  |
| Combine with coitus interruptus, the safe period or using condoms.  |   |
| Problem: Redness at the vulva and itching   |   |
| Advice  | Action  |
| Change to another method  | Advise client on alternative methods. Exclude infection   |
| Problem: client's husband complain of local irritation or of excessive moisture   |   |
| Advice  | Action  |
| Change to another method  | Advise client on alternative methods  |
| Problem: Wife does not like the method  |   |
| Advice  | Action  |
| Change to another method  |   |
| Problem: Husband cannot control himself   |   |
| Advice  | Action  |
| Change to another method  |   |
| Problem: client is satisfied with the method, does not want to change to a more effective method, but wants to increase effectiveness of this method                  |   |
| Advice  | Action  |
| Use a spermicide in addition  |   |
| Problem: Husband failed to withdraw   |   |
| Advice  | Action  |
|   | If wife presents herself within 72 hours from unprotected intercourse, advise her to take one of the following three emergency contraception options: |
|   | 1- take one tablet containing 0.75 mg of levonorgestrel (postenor )and repeat after 12 hours  |
|   | 2- take 25 tablets of POP (all at once ) and repeat the same dose after 12 hours.   |
|   | 3- take four tablets of COCs and repeat the same dose after 12 hours  |
|   | If she presents herself within five days of intercourse:  |

**Table. 18: Continue:Management of Clinical Problems Associated with the Use of Contraceptives**

|  |  |
|--|--|
|  | 1- Immediate insertion of CU- T380 A IUD         |
|  | 2- Refer to specialist for immediate follow - up |
| <b>Problem: Husband (couple) cannot abstain during the fertile days</b>  |  |
| <b>Advice</b>  | <b>Action</b>                                    |
| Change to another method<br>Or<br>If client wants to continue the method, she can have sexual intercourse during the fertile period while using condom, spermicides, or diaphragm. |  |
| <b>Problem: client would like to continue the method, but wants to increase the effectiveness</b>  |  |
| <b>Advice</b>  | <b>Action</b>                                    |
| Extend the dangerous period for few days before and after<br>And /Or<br>Use condom or spermicidas when sexual intercourse is practiced during these additional days.               |  |

**WHO Medical Eligibility Criteria for Starting Contraceptive Method**

The table on the following pages summarizes world health organization (WHO) medical eligibility criteria for starting contraceptive methods. These criteria are the basis for medical eligibility checklists in chapters 5 through 15.

**WHO Categories for Temporary Methods**

- WHO 1 can use the method. No restriction on use.
- WHO 2 can use the method. Advantages generally outweigh theoretical or proven risks. Category 2 conditions could be considered in choosing a method. If the client chooses the method, more than usual follow up may be needed.
- WHO 3 should not use the methods unless a doctor or nurse makes a clinical judgment that the client can safely use it. Theoretical or proven risks usually outweigh the advantages of the method. Methods of last choice, for which careful follow-up will be needed
- WHO 4 should not use the method. Condition represents an unacceptable health risk if method is used.

**Simplified 2 – Category System**

Where a doctor or nurse is not available to make clinical judgments, the WHO 4 - category classification system can be simplified into a 2- category system as shown this table:

**Table 19: WHO Categories for Temporary Methods**

| WHO Category | With Clinical Judgment   | With Limited Clinical Judgment |
|--------------|--|--------------------------------|
| 1            | Use the method in any circumstances  | Use the method                 |
| 2            | Generally use the method   |                                |
| 3            | Use of the method not usually recommended unless other, more appropriate methods are not available or acceptable | Do not use the method          |
| 4            | Method not to be used  |                                |

**Note:** in the table that follows, category 3 and 4 conditions are shaded to indicate the method should not be provided where clinical judgment is limited.

**WHO Categories For Female Sterilization And Vasectomy**

- Accept** No medical reason prevents performing the procedure in a routine setting.
- Caution** The procedure can be performed in a routine setting but with extra preparation and precautions.

**Delay** Delay the procedure. condition must be treated and resolved before the procedure can be performed. Provide temporary methods.

**Refer** Refer client to a center where an experienced surgeon and staff can perform the procedure

setting should be equipped for general anesthesia and other medical support. Provide temporary methods. (WHO calls this category "Special ")

**NOTE:** In the table that follows, Delay and Refer conditions are shaded.

**Tabl. 20: WHO Medical Eligibility Criteria for Starting Contraceptive Methods**

|  | Combined OCs | Progestin-only OCs | DMPA/NET EN | Implanon | TCu – 380AIUD |
|--|--------------|--------------------|-------------|----------|---------------|
| Pregnant   | NA           | NA                 | NA          | NA       | 4             |
| Age  |              |                    |             |          |               |
| Less than 18 (<20 for IUD)   | 1            | 1                  | 2           | 1        | 2             |
| 18 to 39   | 1            | 1                  | 1           | 1        | 1             |
| 40 to 45   | 2            | 1                  | 1           | 1        | 1             |
| Over 45  | 2            | 1                  | 2           | 1        | 1             |
| Smoking  |              |                    |             |          |               |
| Less than age 35   | 2            | 1                  | 1           | 1        | 1             |
| Age 35 and over  |              |                    |             |          |               |
| & light smoker (fewer than 15 cigarettes per day )                       | 3            | 1                  | 1           | 1        | 1             |
| & heavy smoker (15 or more cigarettes per day)                           | 4            | 1                  | 1           | 1        | 1             |
| High blood pressure (hypertension)                                       |              |                    |             |          |               |
| Systolic 140-159 or diastolic 90-99                                      | 3            | 1                  | 2           | 1        | 1             |
| Systolic ≥160 or diastolic ≥ 100   | 4            | 2                  | 3           | 2        | 1             |
| Adequately controlled hypertension where blood pressure can be monitored | 3            | 1                  | 2           | 1        | 1             |
| Past hypertension where blood pressure cannot be evaluated               | 3            | 2                  | 2           | 2        | 1             |
| Diabetes   |              |                    |             |          |               |
| Past elevated blood sugar levels during pregnancy                        | 1            | 1                  | 1           | 1        | 1             |
| Diabetes without vascular disease  |              |                    |             |          |               |
| Not treated with insulin   | 2            | 2                  | 2           | 2        | 1             |
| Treated with insulin   | 2            | 2                  | 2           | 2        | 1             |
| Diabetes with vascular disease or diabetes for more than 20 years        | 3/4          | 2                  | 3           | 2        | 1             |
| Multiple cardiovascular risks  | 3/4          | 2                  | 3           | 2        | 1             |

**Table 21: Continue:WHO Medical Eligibility Criteria for Starting Contraceptive Methods**

|  | Combined OCs | Progestin-only OCs | DMPA/NET EN | Implanon | TCu – 380AIUD |
|--|--------------|--------------------|-------------|----------|---------------|
| Thromboembolic disorder                                  |              |                    |             |          |               |
| Current thromboembolic disorder                          | 4            | 3                  | 3           | 3        | 1             |
| Past thromboembolic disorder                             | 4            | 3                  | 3           | 3        | 1             |
| Ischemic heart disease                                   |              |                    |             |          |               |
| Current ischemic heart disease                           | 4            | 2                  | 3           | 2        | 1             |
| Past ischemic heart disease                              | 4            | 2                  | 3           | 2        | 1             |
| Valvular heart disease                                   |              |                    |             |          |               |
| Without complications                                    | 2            | 1                  | 1           | 1        | 1             |
| With complications <sup>1</sup>                          | 4            | 1                  | 1           | 1        | 2             |
| Varicose veins   | 1            | 1                  | 1           | 1        | 1             |
| Superficial thrombophlebitism                            | 2            | 1                  | 1           | 1        | 1             |
| Major surgery  |              |                    |             |          |               |
| With prolonged immobilization or surgery on the legs     | 4            | 1                  | 1           | 1        | 1             |
| Without prolonged immobilization                         | 2            | 1                  | 1           | 1        | 1             |
| Stroke (past cerebrovascular accident)                   | 4            | 2                  | 3           | 2        | 1             |
| Headaches  |              |                    |             |          |               |
| Non migraine headaches, mild or severe                   | 1            | 1                  | 1           | 1        | 1             |
| Migraine without focal neurological symptoms             | 2            | 1                  | 2           | 2        | 1             |
| Less than age 35   | 2            | 1                  | 2           | 2        | 1             |
| Age 35 and older   | 3            | 1                  | 2           | 2        | 1             |
| Migraine with focal neurological symptoms <sup>2,3</sup> | 4            | 2                  | 2           | 2        | 1             |
| Vaginal bleeding patterns                                |              |                    |             |          |               |
| Irregular without heavy bleeding                         | 1            | 2                  | 2           | 2        | 1             |
| Irregular with heavy or prolonged bleeding               | 1            | 2                  | 2           | 2        | 2             |
| Unexplained abnormal vaginal bleeding                    | 2            | 3                  | 3           | 4        | 4             |
| Breast cancer  |              |                    |             |          |               |
| Current  | 4            | 4                  | 4           | 4        | 1             |
| Past, with no evidence of disease in last 5 years        | 3            | 3                  | 3           | 3        | 1             |
| Breast lump (undiagnosed)                                | 2            | 2                  | 2           | 2        | 1             |
| Benign breast disease                                    | 1            | 1                  | 1           | 1        | 1             |

**Table.22: Continue:WHO Medical Eligibility Criteria For Starting Contraceptive Methods**

|   | Combined OCs | Progestin-only OCs | DMPA/NET EN | Implanon | TCu – 380AIUD |
|---|--------------|--------------------|-------------|----------|---------------|
| Family history of breast cancer                               | 1            | 1                  | 1           | 1        | 1             |
| Cervical cancer (awaiting treatment )                         | 2            | 1                  | 2           | 2        | 4             |
| Endometrial cancer  | 1            | 1                  | 1           | 1        | 4             |
| Ovarian cancer  | 1            | 1                  | 1           | 1        | 3             |
| Benign ovarian tumors (including cysts )                      | 1            | 1                  | 1           | 1        | 1             |
| Pelvic inflammatory disease (PID)                             |              |                    |             |          |               |
| Past PID (no known current risk of STDs)                      |              |                    |             |          |               |
| Became pregnant since PID                                     | 1            | 1                  | 1           | 1        | 1             |
| Has not become pregnant since PID                             | 1            | 1                  | 1           | 1        | 2             |
| Current PID or in last 3 months                               | 1            | 1                  | 1           | 1        | 4             |
| Sexually transmitted disease (STDsu)                          |              |                    |             |          |               |
| Current STD (including purulent cervicitis)v                  | 1            | 1                  | 1           | 1        | 4             |
| STD in last 3 months (no symptoms persisting after treatmentv | 1            | 1                  | 1           | 1        | 4             |
| Vaginitis without purulent cervicitisv,w                      | 1            | 1                  | 1           | 1        | 2             |
| Increased risk of STDsx                                       | 1            | 1                  | 1           | 1        | 3             |
| Urinary tract infection                                       | -            | -                  | -           | -        | -             |
| HIV infection /AIDSu  |              |                    |             |          |               |
| HIV infected  | 1            | 1                  | 1           | 1        | 3             |
| High risk of HIV infection x                                  | 1            | 1                  | 1           | 1        | 3             |
| AIDS  | 1            | 1                  | 1           | 1        | 3             |
| Gallbladder disease   |              |                    |             |          |               |
| Current disease   | 3            | 2                  | 2           | 2        | 1             |
| Treated with medication                                       | 3            | 2                  | 2           | 2        | 1             |
| Without symptoms or surgically treated                        | 2            | 2                  | 2           | 2        | 1             |
| Past cholestasis (jaundice)                                   |              |                    |             |          |               |
| Related to pregnancy  | 2            | 1                  | 1           | 1        | 1             |
| Related to past combined oral contraceptive use               | 3            | 2                  | 2           | 2        | 1             |
| Viral hepatitis   |              |                    |             |          |               |
| Active disease  | 4            | 3                  | 3           | 3        | 1             |

**Table. 23: Continue:WHO Medical Eligibility Criteria For Starting Contraceptive Methods**

|   | Combined OCs | Progestin-only OCs | DMPA/NET EN | Implanon | TCu – 380AIUD |
|---|--------------|--------------------|-------------|----------|---------------|
| Carrier   | 1            | 1                  | 1           | 1        | 1             |
| Cirrhosis of the liver  |              |                    |             |          |               |
| Mild (compensated)  | 3            | 2                  | 2           | 2        | 1             |
| Severe (decompensated )   | 4            | 3                  | 3           | 3        | 1             |
| Liver tumors  |              |                    |             |          |               |
| Benign  | 4            | 3                  | 3           | 3        | 1             |
| Malignant   | 4            | 3                  | 3           | 3        | 1             |
| Uterine fibroids  | 1            | 1                  | 1           | 1        | 1             |
| Past ectopic pregnancy  | 1            | 2                  | 1           | 1        | 1             |
| Obesity (body mass index > 30)  | 2            | 1                  | 2           | 2        | 1             |
| Thyroid   |              |                    |             |          |               |
| Simple goiter   | 1            | 1                  | 1           | 1        | 1             |
| Hyperthyroid  | 1            | 1                  | 1           | 1        | 1             |
| Hypothyroid   | 1            |                    | 1           | 1        | 1             |
| Thalassemia (inherited anemia )   | 1            | 1                  | 1           | 1        | 2             |
| Trophoblast disease   |              |                    |             |          |               |
| Benign  | 1            | 1                  | 1           | 1        | 3             |
| Malignant   | 1            | 1                  | 1           | 1        | 4             |
| Sickle cell disease   | 2            | 1                  | 1           | 1        | 2             |
| Coagulation (blood clotting) disorders  | -            | -                  | -           | -        | -             |
| Iron deficiency anemia  |              |                    |             |          |               |
| Hemoglobin 7 g /d1-10 g/dl  | 1            | 1                  | 1           | 1        | 1             |
| Hemoglobin less than 7 g/dl   | 1            | 1                  | 1           | 1        | 2             |
| Epilepsy  | 1            | 0                  | 1           | 1        | 1             |
| Schistosomiasis   |              |                    |             |          |               |
| Without complications   | 1            | 1                  | 1           | 1        | 1             |
| With fibrosis of the liver  | 1            | 1                  | 1           | 1        | 1             |
| With severe fibrosis of the liver   | 4            | 3                  | 3           | 3        | 1             |
| Malaria   | 1            | 1                  | 1           | 1        | 1             |
| Drug interactions   |              |                    |             |          |               |
| Taking the antibiotic rifampin (rifampicine)or griseofulvin                                 | 3            | 3                  | 2           | 3        | 1             |
| Taking other antibiotics ae   | 1            | 1                  | 1           | 1        | 1             |
| Taking anticonvulsants for epilepsy   | 3            | 3                  | 2           | 3        | 1             |
| Allergy to latex  | -            | -                  | -           | -        | -             |
| Other drug use  |              |                    |             |          |               |
| Mood- altering drugs, lithium therapy, tricyclic antidepressants,ar anti -anxiety therapies | -            | -                  | -           | -        | -             |

**Table. 24: Continue:WHO Medical Eligibility Criteria For Starting Contraceptive Methods**

|   | Combined OCs | Progestin-only OCs | DMPA/NET EN | Implanon | TCu – 380AIUD |
|---|--------------|--------------------|-------------|----------|---------------|
| Parity  |              |                    |             |          |               |
| Nulliparous (has no children )  | 1            | 1                  | 1           | 1        | 1             |
| Parous (has children )  | 1            | 1                  | 1           | 1        | 1             |
| Severe dysmenorrhea (pain during menstruation )   | 1            | 1                  | 1           | 1        | 2             |
| Tuberculosis  |              |                    |             |          |               |
| Non pelvic  | 1            | 1                  | 1           | 1        | 1             |
| Pelvic  | 1            | 1                  | 1           | 1        | 4             |
| Endometriosis   | 1            | 1                  | 1           | 1        | 1             |
| Anatomical abnormalities  |              |                    |             |          |               |
| Distorted uterine cavity  | -            | -                  | -           | -        | 4             |
| Other abnormalities not distorting the uterine cavity and not interfering with IUD insertion an | -            | -                  | -           | -        | 2             |
| Past toxic shock syndrome   | -            | -                  | -           | -        | -             |
| Breastfeeding   |              |                    |             |          |               |
| Less than 6 weeks after childbirth  | 4            | 3                  | 3           | 3        | -             |
| 6 weeks to 6 months after childbirth (fully or almost fully breastfeeding )                     | 3            | 1                  | 1           | 1        | -             |
| 6 months or more after childbirth   | 2            | 1                  | 1           | 1        | -             |
| Postpartum (non breastfeeding women )   |              |                    |             |          |               |
| Less than 21 days after childbirth  | 3            | 1                  | 1           | 1        | +             |
| 21 or more days after childbirth  | 1            | 1                  | 1           | 1        | +             |
| Post abortion   |              |                    |             |          |               |
| First trimester   | 1            | 1                  | 1           | 1        | 1             |
| Second trimester  | 1            | 1                  | 1           | 1        | 2             |
| After septic abortion aq  | 1            | 1                  | 1           | 1        | 4             |

**MOHP references**

MOHP, Sector for Population and Family Planning, (2004); "National Standards of Practice for Family Planning and Reproductive Health Clinical Services Delivery".

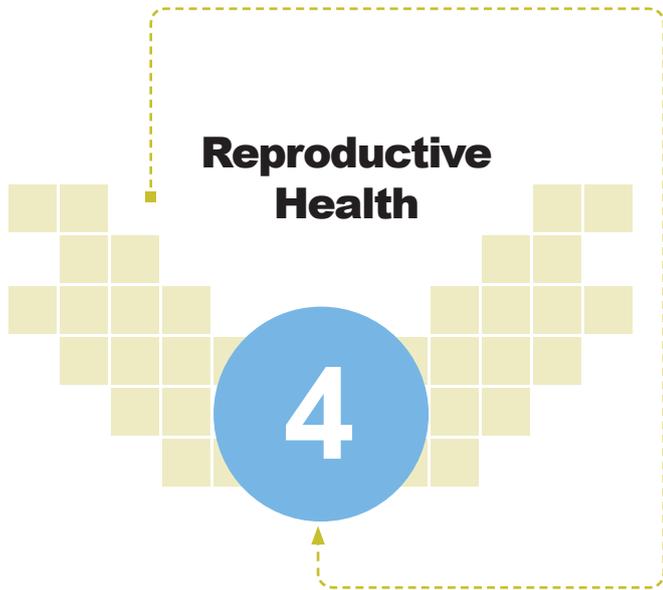
MOHP, UNFPA, (2004); "Support to Reproductive Health Services Project: Protocols for Primary Health Care Physician Service Providers". MOHP Quality Improvement Directorate; "Clinical Practice Guidelines Dissemination Workshop: Obstetrics and Gynecology".

**Other References**

WHO, (2000); "Medical Eligibility Criteria for Contraceptive Use" Second edition.

Johns Hopkins Population Information Program, WHO, USAID, (2001); "The Essentials of Contraceptive Technology: A handbook for Clinic Staff".

NB: The present guidelines does not replace the National Standards (First Reference) which should be available in the clinic.





## Reproductive Health

### Definitions

Reproductive health, is "a state of complete physical, mental and social well being, not merely the absence of disease or infirmity, in all matters relating to reproductive system and its functions and processes". It is not limited to a woman's child bearing years and thus addresses the reproductive health concerns of adolescents as well as of those beyond their reproductive years.

Reproductive health implies that people are able to have a satisfying sex life, the capability to reproduce and the freedom to decide if, when, and how often to do so. It also enables women to go safely through pregnancy and child birth and provides couples with the best chance of having a healthy infant.

### A comprehensive approach to reproductive health considers the following components:

- Safe motherhood: prenatal care, safe delivery, essential obstetric care (EOC), newborn care, postnatal care and breast feeding;
- Promotion of child health and gender equality;
- Promotion of adolescent health;
- Elimination of harmful practices for girls and women e.g., female genital mutilation (FGM e.g., female circumcision), premature marriage, and domestic and sexual violence against women;
- Sexual health, information and counseling;
- Family planning, information and services;
- Prevention and management of complications of abortion;
- Prevention and management of infertility in both men and women;
- Prevention and management of reproductive tract infections;
- Care of women at middle life / menopause;
- Prevention and management of sexually transmitted diseases;
- Management of non-infectious conditions of the reproductive system, complications of female genital mutilation and other gynecological morbidities and reproductive health problems such as those associated with menopause, menstrual disorders, cervical

cell changes, genital prolapse....

- Prevention and management of reproduction related disorders such as hypertension, anemia, chronic energy deficiency (CED), and obesity.

### Note

#### Most of these topics are mentioned in separate sections of these guidelines

Comprehensive reproductive health

- follows a life cycle approach
- considers bio-psycho-social and spiritual aspects of health

Women's Health, refers to all promotive, preventive and curative activities directed to women at all stages of their life cycle. Considering the holistic approach to health from the physical, mental/psychological, spiritual, and social aspects, women health is the product of several interacting factors including - in addition to the biological factors and reproduction - social and cultural factors, the status of women in the community, and discrimination against women.

### Working With The Community

Identify community organizations and opportunities to support girls and women, to provide bio-psycho-social care

To meet the health needs of women we need to empower women; improve their status in the community; and to achieve equality and equity based on harmonious partnership between men and women and enable women to realize their full potentials.

## Early Detection of Cancer Breast and Cancer Cervix

### Cancer Breast

Cancer breast is the most common type of cancer among females.

### Risk Factors for Cancer Breast

- Family history
- Menstruation lasting more than 40 years, beginning before 12 years or lasting after 55 years
- Hormonal therapy

- Obesity
- Smoking
- Previous uterine cancer
- First pregnancy after 30, or no pregnancy

### Examinations

Mammography is the most specific and evidence-based screening test for breast cancer. Although breast-self examination is not recommended in some countries, yet in Egypt we still rely on

- Breast self-examination
- Annual examination by the physician

### Breast Self- Examination (BSE)

- Inform the client about the importance of breast self-examination
- Teach the client the technique for breast self-examination
- Let the woman demonstrate the technique to ensure that she is exploring every part of the breast and underarm areas
- BSE is done monthly on a specific day of the month
- Ask the mother to come to the FHU as soon as she feels or sees any abnormality; but assure her and ask her not to panic, abnormalities may be benign.

### Examination By The Physician

#### Inspection:

- The Physician must Examine the clients Breast annually.
  - Refer client to a MOHP hospital if needed
- Explain the procedures to the client, and ask her to undress to the waist and stand relaxed.
- Ask the client to put her hands on her waist, and to push inwards to contract the chest muscles.
- Inspect both breasts for any puckering, abnormalities of the skin, change in the nipple such as swelling or retraction, asymmetric appearance or nipple discharge.
- While the client lies on her back, inspect breasts to detect any abnormalities.

#### Palpation:

- Palpate the breast tissue for any Breast masses as well as the axilla and supraclavicular area

for any enlarged lymph nodes.

- Be sure that all parts are felt carefully.
- Milk the nipple after massage of the areola medially to identify any fluid discharge.
- Describe as none, clear, milky, pinkish or dark- bloody color.
- If any abnormality is detected by examination, refer to specialist for mammography.

### Cancer Cervix

#### Risk factors

- Early marriage and start of sexual life
- Clinical history of infection by human papilloma virus or the presence of condylomata acuminata
- Husband having more than this wife

### Detection Of Suspect Cervix

#### Inspection After

- Applying acetic acid 3-5% or
- painting with a 2% aqueous solution of iodine

#### The procedures:

MOHP, Sector for Population and Family Planning, (2004); "National Standards of Practice for Family Planning and Reproductive Health Clinical Services Delivery".

- Carefully explain the procedure and the reason for doing it to the client.
- Put client in the lithotomy position.
- Good visualization is essential, direct the light source to the genital area.
- Observe and record any abnormal findings in the external genitalia.
- Lubricate the speculum with warm water and insert it into the vagina.
- Open the speculum and adjust the light source so as to get a clear view of the cervix.
- If there is excess mucus or discharge, clean it with a cotton swab soaked in normal saline solution.
- Observe any abnormal findings.
- Apply acetic acid ( 3%-5%) to the cervix, then dry the cervix and inspect it.
  - Abnormal areas stain white

- o Normal areas do not stain white
- Or paint the cervix with a 2 % aqueous solution of iodine.
  - o Abnormal areas look white
  - o Normal areas stain brown

## **Pap Smears**

- Refer clients with suspect cervix
- Advice for annual screening after the age of 30, and every two years before that, if available.

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### **MOHP references**

MOHP, Sector for Population and Family Planning, (2004); "National Standards of Practice for Family Planning and Reproductive Health Clinical Services Delivery".

MOHP, UNFPA, (2004); "Support to Reproductive Health Services Project: Protocols for Primary Health Care Physician Service Providers".  
MOHP Quality Improvement Directorate; "Clinical Practice Guidelines Dissemination Workshop: Obstetrics and Gynecology".

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AVSC International (2000); "Sexually Transmitted Infections and other Reproductive Tract Infections (STIs/RTIs): Counseling Reference Cards: Syndromic Management"

AVSC International (2000); "Sexually Transmitted Infections and other Reproductive Tract Infections (STIs/RTIs): Counseling Reference Cards: Etiologic Management"

WHO, IPPF, AVSC international (1997); "Medical and Service Delivery Guidelines for Family Planning;" Second Edition

Sultanate of Oman, Ministry of Health, STD Control Programme, Directorate General of Health Affairs, (1998); STD Case Management, The Syndromic Approach for Primary Health Care Settings, Quick Reference Chart.

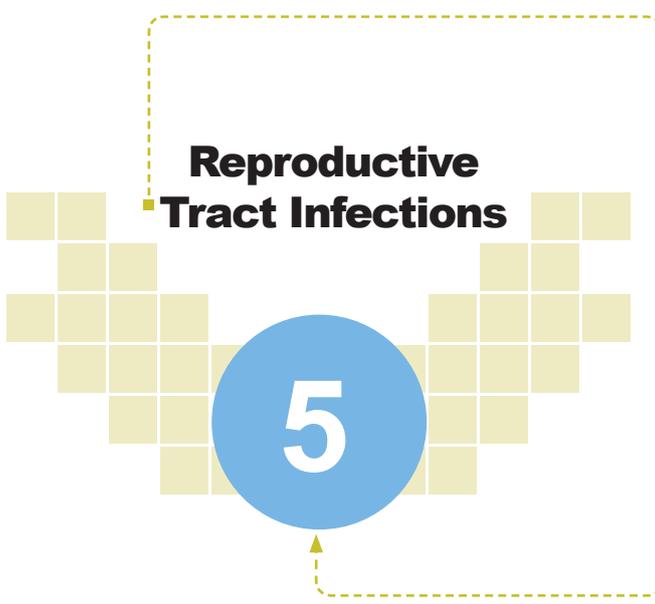
STD/UTI

MOHP, Sector for Population and Family Planning, (2004); "National Standards of Practice for Family Planning and Reproductive Health Clinical Services Delivery".

### **Additional Reference**

MOH Sultanate of Oman, Directorate General of Health Affairs STD control Programme, 1998 "STD Case Management: The Syndromic Approach for PHC Setting, Quick Reference Chart"





**Reproductive  
Tract Infections**

5



## Reproductive Tract Infections

### Pelvic Inflammatory Disease (PID)

#### Definition

Infection of the upper genital tract. It may be acute, chronic or silent. Infection may involve the uterus (endometritis), the fallopian tubes (salpingitis), and/or ovaries (oophoritis).

#### Presentation of The Disease:

- Asymptomatic / accidentally discovered while investigating for infertility
- Pelvic pain sometimes very severe
- Pelvic mass

#### Associated Symptoms:

- Sudden high fever, or low grade intermittent fever.
- General symptoms: nausea, vomiting, lack of appetite, feeling of weakness, tiredness, depression, lower back or leg pain.
- Foul discharge from the vagina

- Pain or bleeding during or after intercourse
- Irregular bleeding or spotting
- Increased menstrual cramps / dysmenorrhea
- Frequent urination, dysurea, inability to empty the bladder.
- Pain around the kidney or liver

#### Complications

Short term complications include tubo-ovarian abscess and perihepatitis (Fitz-Hugh-Curtis syndrome).

Long term complications include chronic pelvic pain, ectopic pregnancy and tubal infertility.

#### Risk Factors

- PID usually starts after marriage.
- More common <30 years of age.
- Douching
- Instrumentation
- IUD

PID should be considered in the differential diagnosis of pelvic pain and pelvic mass

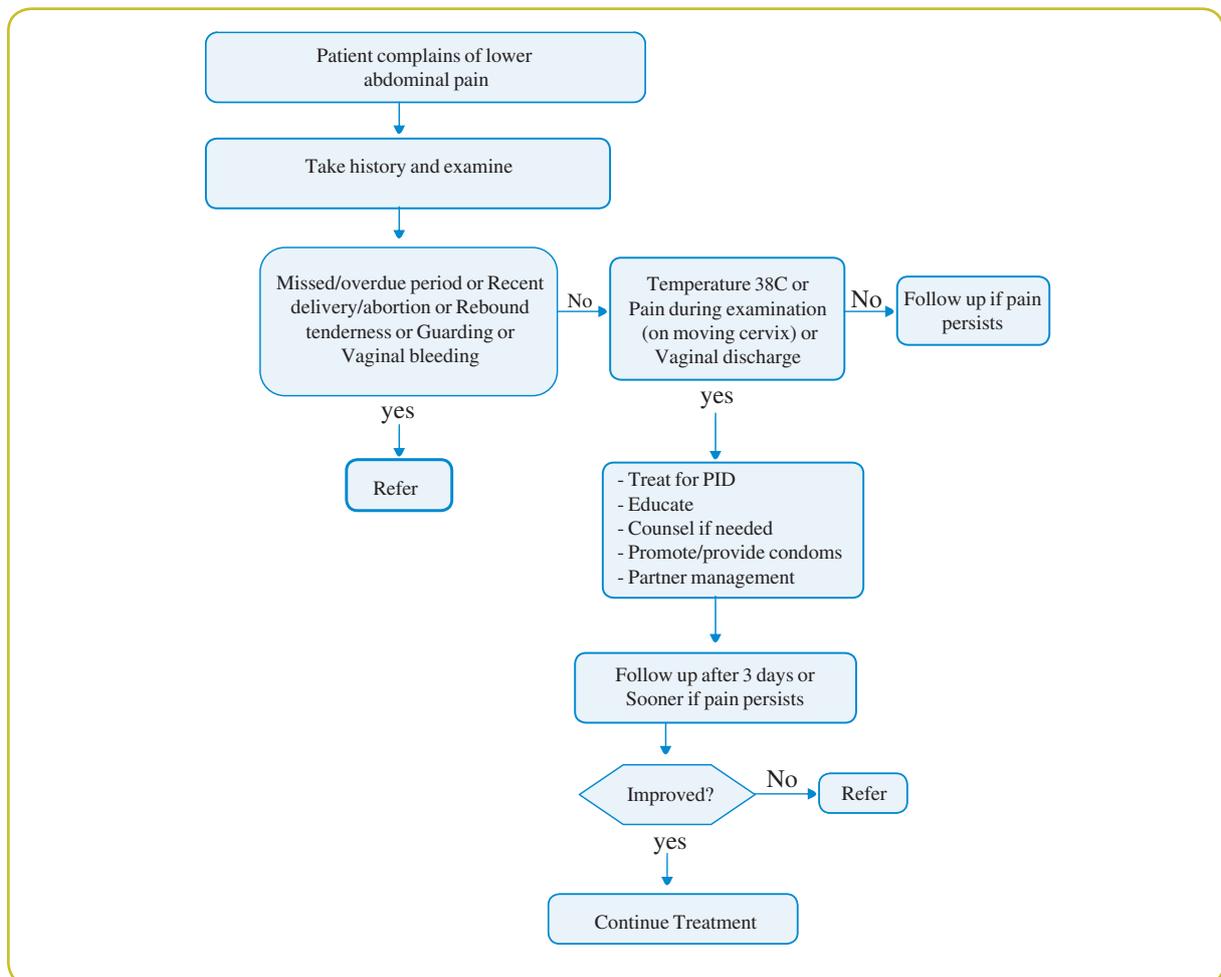


Figure "3": Flow -Chart Diagram for Management of Lower Abdominal Pain Syndrome "PID"

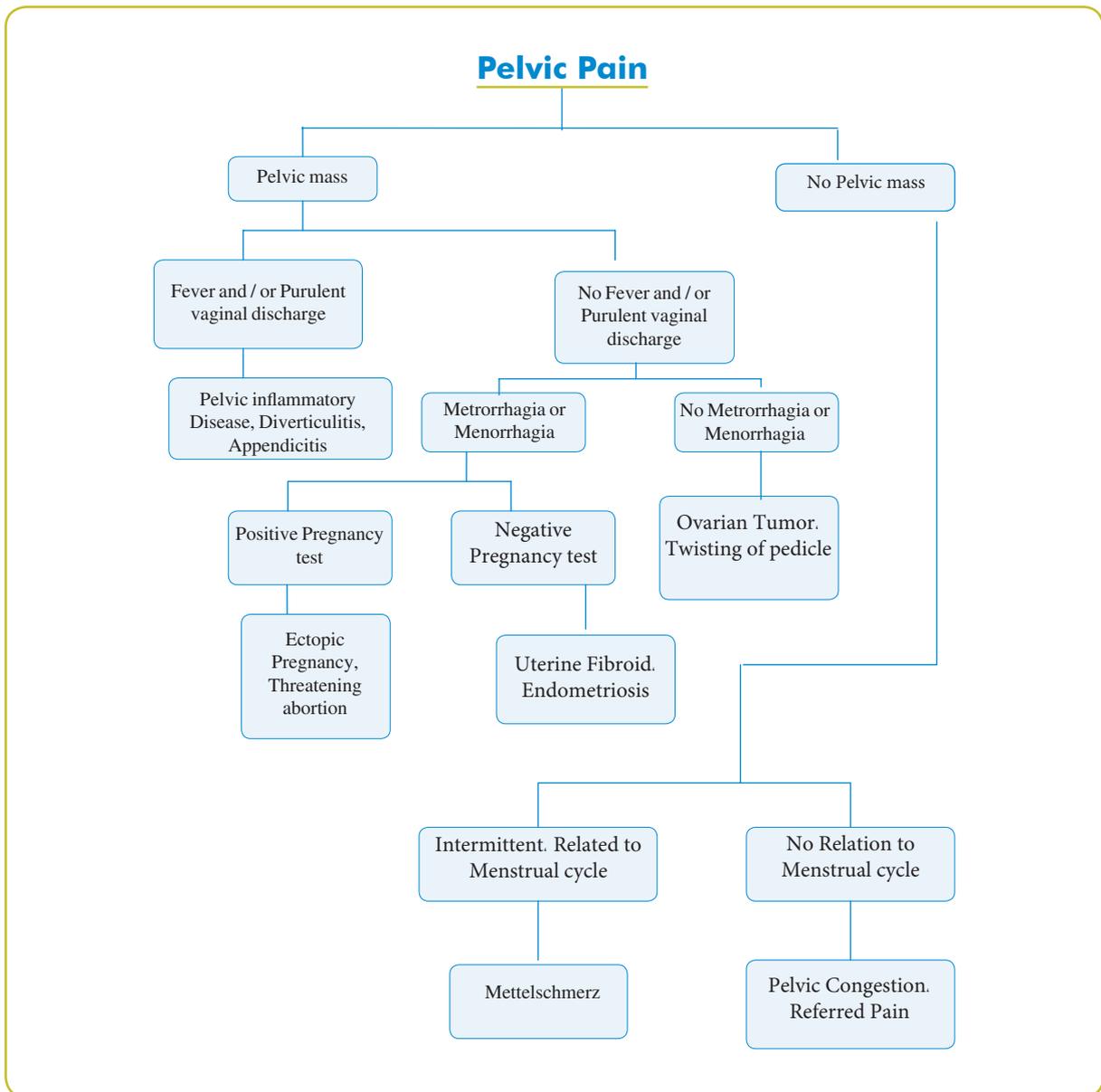


Figure "4": Flow -Chart Diagram for Management of Pelvic Pain

**Most Common Causative Agents:**

1. Chlamydia Trachomatis (CT)
2. Neisseria Gonorrhoea (NG)
3. Streptococci
4. Mycoplasma
5. Other anaerobic organisms

**Diagnosis**

- History of suggestive symptoms or risk factors

**Management**

- Refer to specialist to
  - o Receive proper antibiotic for 14 days

- o Remove IUD after antibiotic treatment has been established
- Inpatient management
  - o Patient is pregnant
  - o Severe illness, nausea, vomiting, or high fever
  - o Tubo-ovarian abscess
  - o Surgical emergencies cannot be excluded (e.g. appendicitis)
- Treat the husband
- Follow up the instructions of the specialist to assure achievement of cure

**Treatment of P.I.D****For Gonococcal Infection:**

Ciprofloxain 500 mgm in a single oral dose **or**  
 Ceftriaxone 250 mgm I.M., single dose **or**  
 Sulfamethoxazole 800 mgm /  
 Trimethoprim 160 mgm 5 tabs orally once a day  
 × 3 days

**PLUS****For Chlamydial Infection:**

Doxycycline 100 mgm orally BID × 7 days, **or**  
 Tetracycline 500 mgm orally QID x 7 days, **or**  
 Erythromycin 500 mgm orally QID x 7 days.

**PLUS****For Anaerobic Bacterial Infection:**

Metronidazole 400-500 mgm orally B.I.D.  
 14 days.

**Vaginal Discharge****Note**

- Give complete treatment, e.g. if patient complains of vaginal discharge, give treatment for gonorrheal, chlamydial, trichomonial and fungal infections
- Use single dose therapy when it is applicable / available
- Pregnant and lactating mothers should never receive: Tetracycline, Doxycycline, Ciprofloxacin or Metronidazole

**Vaginal Discharge****I. Disease Description and Identification**

- Most common infections in Egypt are: Candida, Trichomonas, Bacterial Vaginosis.
- Vaginal discharge is considered normal when it is colorless or white, has no odor, and causes no itching.
  - o Vaginal discharge increases around the time of ovulation and during pregnancy.
- Risk factors for vaginal infections are:
  - o Diabetes
  - o Pregnancy
  - o Use of oral contraceptive pills (oestrogens)

- o Use of IUDs
- o Active sexual life (multiple partners)
- o Immunosuppression: Steroids, Drugs, Immuno-suppressants, HIV, etc.
- o Frequent vaginal douches can lead to chronic infections
- Local lesions of the genital tract such as cervical and endometrial polyps, chlamydial and gonorrheal infections can lead to vaginal discharge.

**II. Diagnosis/Evaluation****A. History**

Ask patient about:

- Characteristics of discharge
  - o Amount of discharge (Scanty, Profuse, Excessive)
  - o Color of discharge (White, Yellow/ Gray, Yellow white)
  - o Consistency of discharge: (Curd like, Frothy, Mucopurulent)
  - o Odor of discharge such as: (No odor, Fishy, Bad odor)
  - o Relation of discharge to menstrual cycle.
  - o Itching (vaginal and vulval soreness).
  - o Lower abdominal pain, dysuria, dysparunia.
- Menstrual History:
  - o Intermenstrual bleeding
  - o Postcoital bleeding
  - o Dysmenorrhea
  - o Dysparunia
  - o Menorrhagia
- Urinary symptoms: Dysuria
- Medical History:
  - o Pregnancy
  - o Pain in joints (arthritis in complicated Gonorrhea)
  - o Drugs: Use of Antibiotics, Contraceptive pills, Steroids and immunosuppressants
  - o Diabetes
- History of STD (sexually transmitted disease) from husband

**B. Physical Examination**

- General Examination:

- o Check eyes for conjunctivitis (Chlamydia, Gonorrhoea)
- o Mouth and nails (Moniliasis)
- o Skin rash for complicated Gonorrhoea
- Abdominal examination check for:
  - o Tenderness
  - o Abdominal mass
  - o Pregnancy
- Inspect of vulva and perineum for:
  - o Redness, warts or ulcers
  - o Evidence of scratching
- **Speculum Examination:**
  - o Check for discharge using the following table:

**Table. 25: D.D of Vaginal Discharge**

| Amount      | Profuse   |             | Scanty      |
|-------------|---|-------------|-------------|
| Color       | Yellow/Grayish                                  |             | White       |
| Consistency | Homogeneous                                     | Frothy      | Curd like   |
| Odor        | Bad odor specially noticeable after intercourse | Fishy       | No odor     |
| Associated  |   | Dysuria     | Itching     |
| Diagnosis   | Bacterial vaginosis                             | Trichomonas | Candidiasis |

- **Check Cervix for**
  - o Normal appearance
  - o Bleeding on touch
  - o Nabothian follicles
  - o Discharge

• **Bimanual examination:**

- o Check for tenderness on moving the cervix

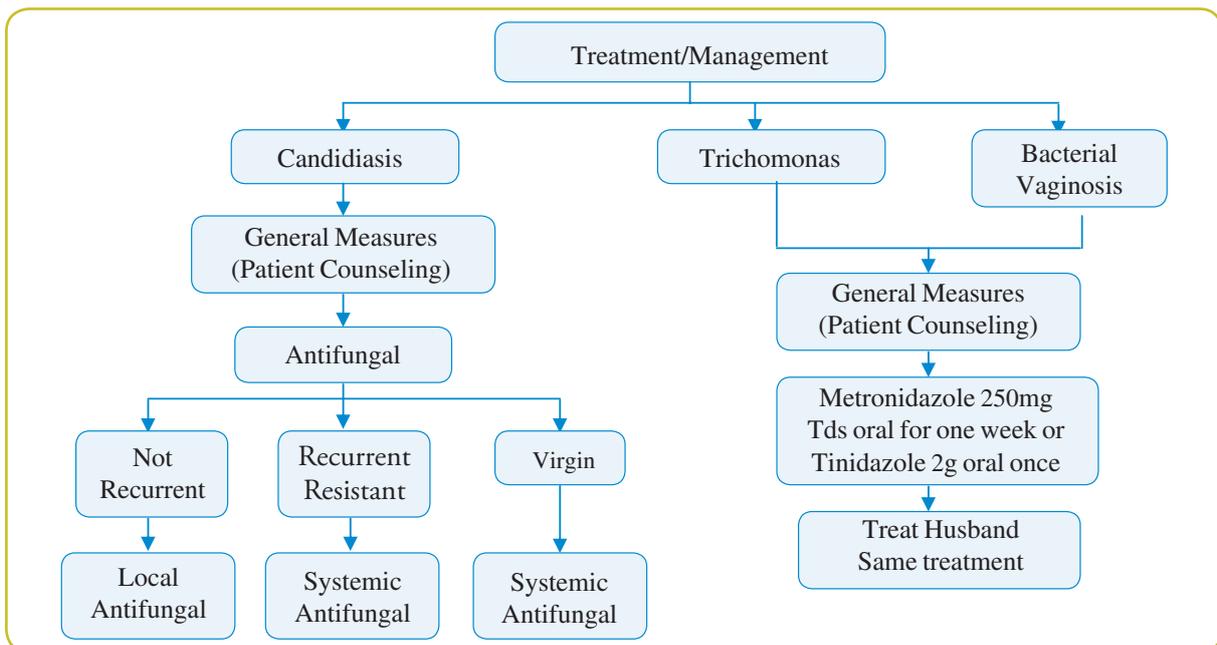
**C. Diagnostic Tests**

- The most common tests that allow for further confirmation of the diagnosis are:
  - o PH of discharge
  - o Amine test:
- Mix vaginal secretions with a drop of 10% KOH fishy amine odor may indicate bacterial vaginosis and sometimes Trichomonas
- Other tests that may confirm diagnosis (if available):
  - o Wet film. Check hyphae (candidiasis)
  - o Gram Stain: check for pear shaped organisms and jerky movement (trichomoniasis) and clue cell (bacterial vaginosis).

**Table.26: Confirmatory Tests for D.D of Vaginal Discharge**

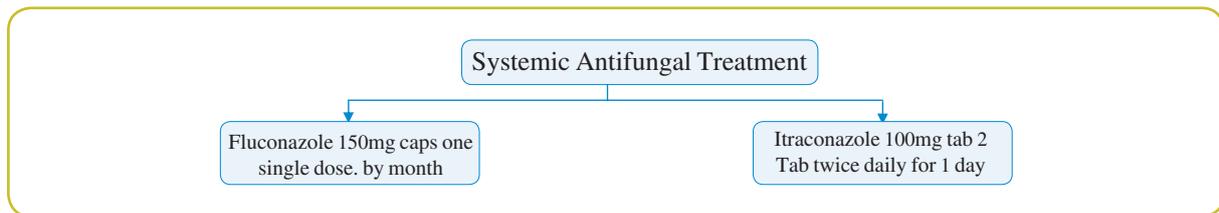
| Confirmation of Diagnosis |                     |                        |             |
|---------------------------|---------------------|------------------------|-------------|
| PH                        | Alkaline 4.5-5.5    | Alkaline 4.5-5.5       | Acidic      |
| Microscopy Saline         | Clue cells          | Flagellated Pear shape | Hyphae      |
| Amine test KOH 10%        | May be positive     | Positive               |             |
| Diagnosis                 | Bacterial vaginosis | Trichomonas            | Candidiasis |

**III. Treatment/Management**



**Figure "5": Flow -Chart Diagram for Management of Vaginal Discharge**

## Treatment of Candidiasis



### Treatment During Pregnancy

- Avoid systemic antifungals, tetracyclines, or 4 Quinolons
- Avoid metronidazole/ tinidazole in first trimester if possible
- Treat Husband if Trichomonas, treat or refer if Chlamydia, Gonorrhea, or other STD in wife

### Patient Counseling

- Do not have sex if there is an active infection
- Do not share towels, specially if there is infection
- Wash hands to avoid transfer infection to, e.g. eyes or mouth
- Avoid perfumes and soaps as these may make skin prone to infection
- Wipe from front to back after going to the toilet
- Avoid nylon underwear, cotton is better
- Hygienic practices during menstruation (boil cloths or use disposable protection)
- Avoid vaginal douching as a method of routine hygiene
- Importance of including husband in visits and treatment in case of STD

### Referrals

Refer the patient and the husband to an OB/Gyn specialist if:

- Infection persists and does not respond to treatment, or
- If the infection is recurrent

### Bacterial Vaginosis

Source QI Directorate MOHP reference p5-6

### Bacterial Vaginosis

#### 1. Definition:

Apolymicrobial infection of the vagina, associated with Gardnerella vaginalis, other newly found anaerobes such as bacteroids

#### 2. Pathogenesis

- Bacterial vaginosis (P.V.) describe a condition resulting from an overgrowth of both anaerobic bacteria and G. vaginalis.
- P.V. is associated with sexual activity but not considered exclusively an STD.

#### 3. Clinical Presentation

- Approximately 40% of vaginal infections are a result of bacterial vaginosis;
- Asymptomatic in about 50% of women
- P.V. may be diagnosed by use of clinical and Amine test
- Clinical criteria require three of the following signs or symptoms:
  - o Agrayish-white, homogenous, malodorous discharge that may be scant or profuse, that adheres to the vaginal walls;
  - o The bad odor is more noticeable postcoital.
  - o PH of vaginal find >4.5;
  - o The presence of clue cells on microscopic exam;
  - o Positive Amine test (Whiff test) A fishy odor of vaginal discharge before or after addition of 10% KOH
- Because organisms do not invade vaginal wall, gross vulvitis and vaginitis do not occur.

#### 4. Diagnosis/Evaluation

##### I. History

- Question about presence of discharge, its amount, colour, consistency, odor and associated symptoms

- Ask if woman uses frequent douching to control odor

## II. Physical Examination

- Examine introitus for homogenous discharge
- Do pelvic exam and look for homogenous discharge coating vaginal walls; note odor for characteristic foul, fishy odor

## III. Differential Diagnosis

- Other common cause of vaginitis - trichomoniasis and vulvovaginal candidiasis
- Common causes of cervicitis - Chlamydia and gonorrhea

## IV. Diagnosis Tests

- Obtain sample of vaginal secretions from upper vagina (high vaginal swab) on a dry swab and apply to pH paper. In bacterial vaginosis, pH of vaginal secretions is >4.5. (Normal pH of vagina is 3.5-4.5.)
- Microscopic examination of slide containing vaginal secretions mixed with saline show clue cells.
- Vaginal fluid have a fishy odour before or after being mixed with a drop of 10% KOH (positive Whiff test).

## 5. Plan/Management

- The principle goal of therapy is relieve symptoms; thus, only women with symptomatic disease require treatment
- Tinidazole 2g oral single dose or metronidazole 500 mg orally bid x 7 days; OR
- Alternative: Clindamycin, 2% one full applicator 5 g intravaginally at night for 7 days
- Treatment during pregnancy: Clindamycin vaginal cream (sa, above) is the preferred treatment for P.V. during the first trimester; during the 2nd and 3rd trimesters, vaginal metronidazole tablets or clindamycin cream may be used
- Routine treatment of sex partners is not recommended
- Follow Up: None indicated; recurrence of P.V. is common; use alternative treatment regimens for treatment of recurrent disease.

## Trichomoniasis

### Trichomoniasis:

1. **Definition:** Infection of the vagina by *Trichomonas vaginalis*. may also involve Skene's ducts and lower urinary tract in women, and the lower genitourinary tract in men.

2. **Pathogenesis:** *Trichomonas vaginalis*, a unicellular flagellated protozoan, this is a primarily sexually transmitted disease, but may also be bad hygiene (towels, swimming pools)

### 3. Clinical Presentation:

- Infection is frequently asymptomatic . If symptomatic, symptoms are usually worse immediately after menstruation and during pregnancy.
- Cardinal symptom is a pale- yellow discharge that varies in amount but usually copious, may be frothy, and has a fishy odor.
- Diffuse edema and redness is usually apparent in vaginal tissue; the cervix may be inflamed and friable, Rarely, punctuate lesions on cervix give a " strawberry " appearance.
- Flagellated protozoa are seen in wet prep of vaginal secretions have a pH of >4.5.
- Uretheritis and prostatitis may be seen in the male, almost 80% of men harboring the organism are asymptomatic.

### 4. Diagnosis / Evaluation

#### History

- Question about presence of discharge, its amount, color, consistency, odor and associated symptoms.
- Ask if menstruation makes symptoms worse.
- In male, question about dysuria.

### 5. Physical Examination

- examine external genitalia for discharge pooling at introitus or posterior fourchette
- do pelvic exam to determine if vagina has erythema, edema.
- Note amount, color, consistency and odor of discharge, examine cervix for erythema, discharge.

### 6. Differential Diagnosis

- other common cause of vaginitis - Bacterial vaginosis and Vulvovaginal candidiasis.
- Common causes of cervicitis - Chlamydia and Gonorrhoea.

### 7. Diagnostic Tests

- Obtain sample of vaginal secretions from upper part of the vagina ( high vaginal swab) on a dry swab and apply to PH Paper. In Trichomoniasis, pH of

the vaginal Secretions is > 4.5 ( normal pH of the Vagina is 3.5-4.5 ).

- Microscopic examination of slide containing vaginal secretions mixed with saline solution shows organisms with whip - like flagellae that are motile ( Jerky movements )
- In men, collect the first 5-30 ml of an early morning specimen of urine, examine under microscope for trichomonades.

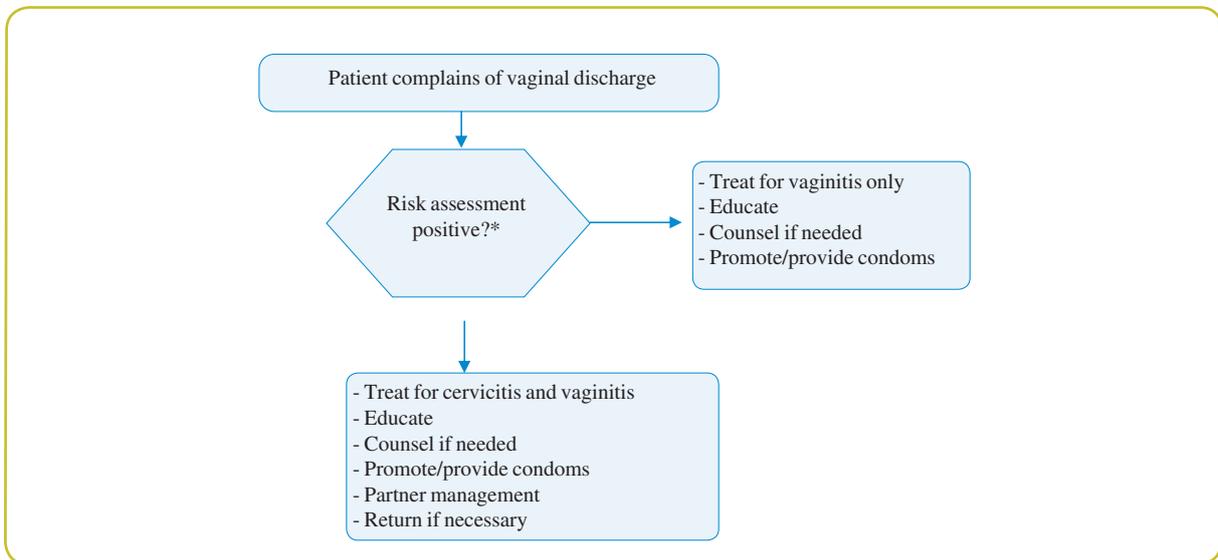
**8. Plan/Management**

- Treatment of choice is Tinidazole 2 gm orally in a single dose.
- Alternative: Metronidazole 500 mg

twice daily for 7 days

- If treatment failure occurs with either regimen retreat with metronidazole 500 mg twice daily for 7 days
- Treatment during pregnancy : Metronidazole is contraindicated in the first trimester of pregnancy, and its safety in the last 2 trimesters has not been established.
- Sexual partners should be treated with either single dose or 7 day regimen if single dose regimen fail.
- Follow up: None indicated.

**Vaginal Discharge Syndrome**



**Figure "6": Flow- Chart Diagram for Management of Vaginal Discharge Syndrome**

\*Partner symptomatic or any 2 of:

- Age < 21 years
- New partner in the past 3 months
- Single > One partner

**Treatment of Vaginal Discharge**

**For Gonococcal Infection:**

Ciprofloxacin 500 mgm in a single oral dose  
or

Ceftriaxone 250 mgm I.m., single dose OR

Sulfamethoxazole 800 mgm /

Trimethoprim 160 mgm (Co-Trimoxazole) 5 tabs state once a day x 3 days.

**PLUS**

**For Chlamydial Infection:**

Doxycycline 100 mgm orally BID x 7 days,  
or

Tetracycline 500 mgm orally QID x 7 days,  
or

Erythromycin 500 mgm orally QID x 7 days.

**PLUS**

**For Trichomoniasis:**

Metronidazole 2 g as a single oral dose to be taken at eh clinic under supervision.

or

Metronidazole 400-500 mgm bid x 7 days -

If single dose is not effective.

**PLUS**

**For Candidiasis:**

Nystatin 100000 units (one pessary) inserted into the vagina once a day x 14 days.

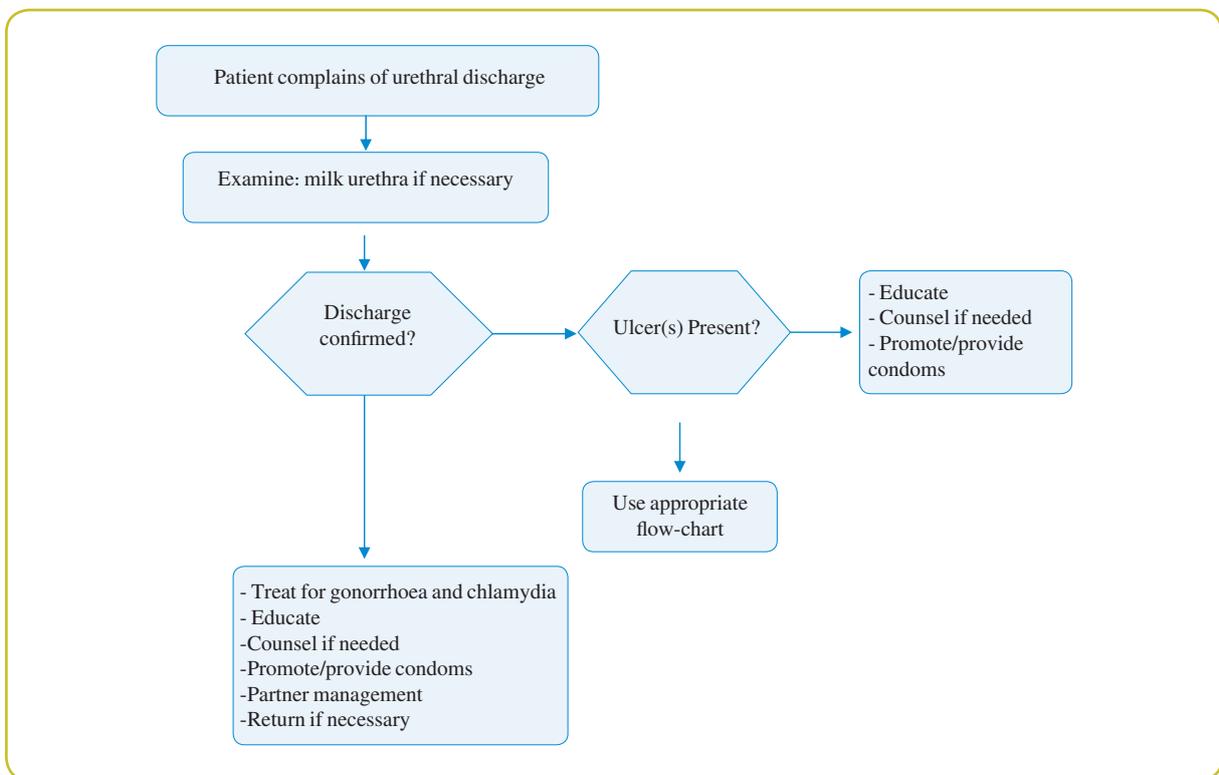
or

Clotrimazole 500 mgm pessary inserted into the vagina once only.

**General Notes**

1. Tetracycline, Doxycycline and Ciprofloxacin should not be used during pregnancy and lactation.
2. Metronidazole should not be used during pregnancy and lactation.
3. Use single dose therapy when it is available.
4. Give complete treatment, eg. If patient complains of vaginal discharge, give treatment for gonococcal, chlamydial, trichomonal and fungal infections.

**Urethral Discharge Syndrome**



**Figure "7": Flow -Chart Diagram for Management of Urethral Discharge**

**Treatment of Urethral Discharge**

**For Gonococcal Infection:**

Ciprofloxacin 500 mgm in a single oral dose

or

Ceftriaxone 250 mgm I.m., single dose OR

Sulfamethoxazole 800 mgm /

Trimethoprim 160 mgm 5 tabs orally once a day x 3 days.

**PLUS**

**For Chlamydial Infection:**

Doxycycline 100 mgm orally BID x 7 days,

or

Tetracycline 500 mgm orally QID x 7 days,

or

Erythromycin 500 mgm orally QID x 7 days.

### Scrotal Swelling

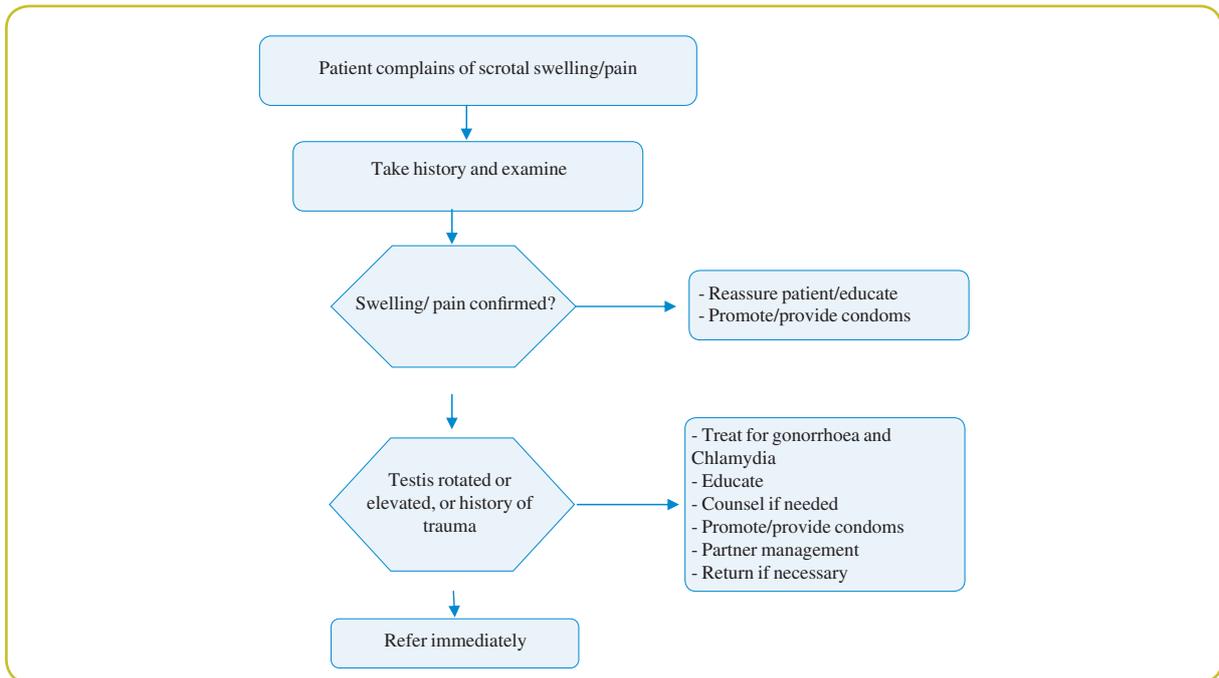


Figure "8": Flow –Chart Diagram for Management of Scrotal Swelling

### Treatment of Scrotal Swelling

**For Gonococcal Infection:**

Ciprofloxacin 500 mgm in a single oral dose  
 or  
 Ceftriaxone 250 mgm I.m., single dose OR  
 Sulfamethoxazole 800 mgm /  
 Trimethoprim 160 mgm 5 tabs orally once a day x 3 days.

**PLUS**

**For Chlamydial Infection:**

Doxycycline 100 mgm orally BID x 7 days,  
 or  
 Tetracycline 500 mgm orally QID x 7 days,  
 or  
 Erythromycin 500 mgm orally QID x 7 days.

### Genital Ulcer Syndrome

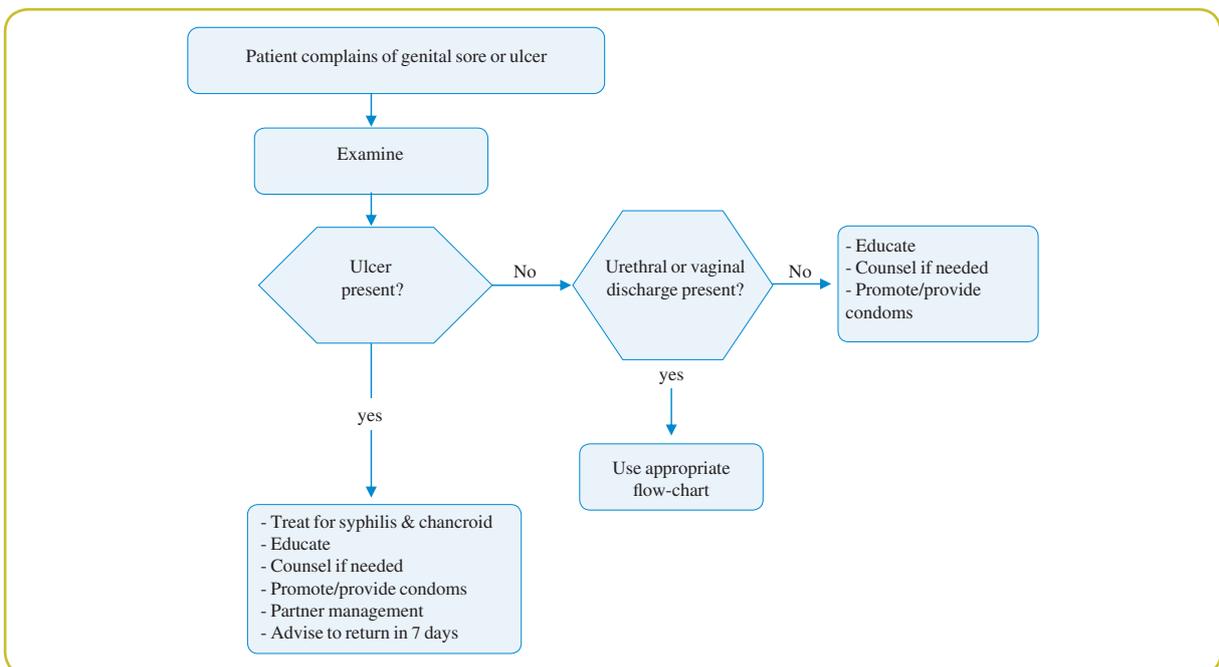


Figure "9": Flow –Chart Diagram for Management of Genital Ulcer Syndrome

**Treatment of Genital Ulcer**

**For Syphilis:**

Benzathene penicillin 2.4 million units, i.m. in a single dose (half dose to each buttock).

For non-pregnant patients who are allergic to penicillin use;

Doxycycline 100 mgm orally BID x 15 days  
or

Tetracycline 500 mgm orally QID x 15 days

For pregnant patients, who are allergic to penicillin, use erythromycin 500 mgm orally QID x 15 days.

**PLUS**

**For Chancroid**

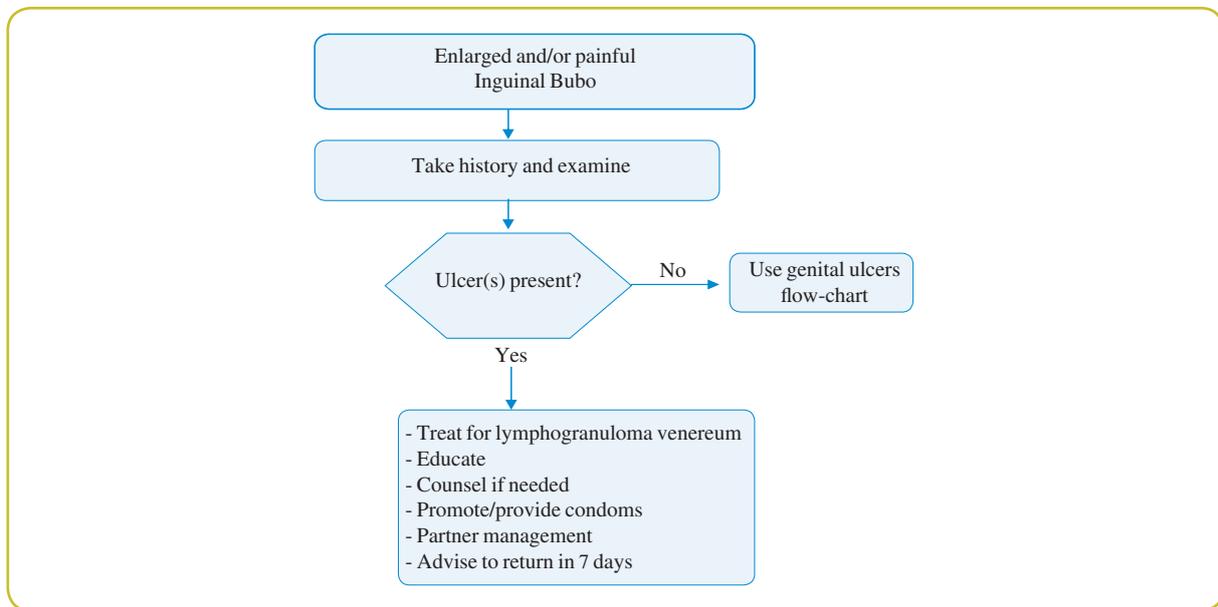
Ciprofloxacin 500 mgm in a single oral dose  
or

Ceftriaxone 250 mgm I.m., single dose OR  
Erythromycin 500 mgm orally QID x 7 days  
or

Sulfamethoxazole 800 mgm /

Trimethoprim 160 mgm one tab.BID x 7 days

**Inguinal Bubo**



**Figure "10": Flow –Chart Diagram for Management of Inguinal Bubo**

**Treatment of Inguinal Bubo**

Doxycycline 100 mgm orally BID x 7 days,  
or

Tetracycline 500 mgm orally QID x 7 days,  
or

Erythromycin 500 mgm orally QID x 7 days.

- Suspect the case.
- Refer for investigations.
- Counsel the patient.
- Counsel the Contacts.
- Refer the spouse for testing.

**Human Immune Deficiency Virus Infections**

( HIV /AIDS )

The Role of the Family Physician is:

**Introduction:**

HIV and AIDS are important public health threats to Egypt as there are various risk factors which favor the potential spread of HIV infection within the country. Surveillance of HIV infection

is the best way to forecast the future impact of AIDS patients on national health resources.

### **A- Case Definition in Adults:**

AIDS is defined as any patient who has at least 2 of the major and 1 of the minor signs listed below. The patient must not have any other known cause of immune suppression.

#### **Major Signs:**

- Weight loss at least 10% of body weight
- Chronic diarrhea for more than 1 month
- Prolonged fever more than one month (intermittent or constant)

#### **Minor Signs:**

- Persistent cough more than 1 month
- Generalized pruritic dermatitis
- An episode of Herpes Zoster
- Oro-pharyngeal candidiasis
- Chronic progressive and disseminated Herpes Simplex infection
- Generalized lymphadenopathy

The presence of generalized kaposi's sarcoma or cryptococcal meningitis are sufficient by themselves for the diagnosis of AIDS

### **B- Case Definition of AIDS in Children:**

- At least two major signs and
- At least two minor signs and
- Absence of known cause of immune suppression (such as malnutrition)

#### **Major Signs:**

- Weight loss or abnormally slow growth
- Chronic diarrhea for more than one month
- Prolonged fever for more than one month
- Generalized lymphadenopathy
- Oro-pharyngeal candidiasis

#### **Minor Signs**

- Repeated common infections
- Persistent cough for more than one month
- Generalized dermatitis

- Confirmed maternal HIV infection

**Note:** T.B and HIV infections are often found together.

### **Confirmed Case:**

#### **A laboratory Confirmed Case with:**

- HIV positive serology (ELISA, two separate specimens)
- Confirmation by Western blot at the Central Laboratory

#### **Actions to Be Taken:**

**For Cases:** The patient should be informed about his/her HIV status and provided counseling regarding options for medical treatment, prevention of transmission to others and testing of contacts. AIDS cases should be referred to governorate fever hospitals for medical management.

**Counseling for Contacts:** Confidential HIV testing and counseling should be offered to sexual partners of patients with HIV infection. Follow up for the patient and spouse/sexual partner is recommended every 3 months by staff from the AIDS Program.

**Counseling for Household Members:** AIDS is not transmitted through daily activities, handshaking, foods, drinks, cough sneezing or toilet seats.

It is not transmitted by insects.

You can live safely with an AIDS patient provided you are not engaged in unprotected sex.

**For Health Care Workers:** universal precautions are based on the assumption that the body fluids can carry HIV or other blood borne diseases. Here are some rules we should follow when tacking universal precautions:

**Cover Cuts:** If we have cuts or open sores on the skin, they should be covered with a plastic bandage.

**Wash Your Hands:** Hands should be washed with soap and hot water after contact with blood or other body fluids, after going to the bathroom, before preparing or eating food, and after removing latex gloves.

**Clean Up:** Spills of blood or other body fluids should be cleaned up with a fresh mixture of household bleach (1 part) and water (9 parts). Paper

towels should be used and disposed of in a plastic garbage bag. Remember to wear latex gloves when cleaning up.

**Wear Gloves:** Gloves should be worn once and disposed of in a plastic garbage bag. Small plastic bags may be used instead of gloves, if necessary. While gloves are highly recommended, all of us should also keep in mind that intact skin is an excellent barrier against HIV, as the virus can not penetrate the skin in the absence of an open wound. If the skin is exposed to blood, we should wash it as soon as possible with soap and hot water.

Health care workers who sustain a needle stick injury from an HIV - infected patient should be counseled about the risk of infection (3 cases / 1000 needle sticks). They should be offered serologic testing at periodic intervals over the following 12 months.

**Wash Clothes:** Soiled items should be stored in sealed plastic bags. We should wash soiled clothing separately in hot soapy water and dry it in hot dryer, or have it dry - cleaned.

**Dispose of Garbage:** Use caution when disposing of waste that may contain infected materials or used needles. Discard materials soiled with blood or other body fluids in a sealed plastic bag.

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