

FEDERAL GOVERNMENT OF NIGERIA

**Federal Ministry of Health**

Department of Family Health  
Reproductive Health Division

***Standard of Practice on  
Obstetric Fistula in Nigeria  
Nurses' Version***

*December, 2011*



# FOREWORD

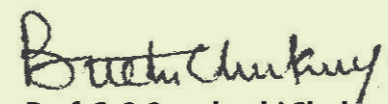
## FOREWORD

**O**bstetric Fistula (OF) particularly Vesico-vaginal Fistula (VVF) is a major public health problem in the developing world. In Nigeria, it is estimated that about 400,000 to 800,000 women are living with the problem and about 20,000 more women develop obstetric fistula every year. Currently, there are twelve dedicated centres offering surgical care to less than 4000 fistula women annually at different levels of expertise. At this rate it will take about 100 years just to deal with the backlog, ignoring new cases. With renewed global attention to the problem of obstetric fistula championed by UNFPA and Fistula Care Project in line with the National Strategic Framework and Plan for VVF Elimination in Nigeria, surgical management and rehabilitation of women with fistula will become central in addressing the obstetric fistula problem. It is therefore, obvious that there is a need to intensify training of more Surgeons and other health workers that will deal with the backlog and provide care closer to the women silently suffering from obstetric fistula. Besides training, there is also the

issue of quality of care and hence the need for a standardized clinical protocol.

The goal of this document is to provide a standard reference material that can be used to train health workers and also guide them in the provision of holistic, respectful, simple, affordable, quality and evidence-based care for obstetric fistula patients that will guarantee improved quality of life for these women and their families.

I therefore, approve the use of this document which has been carefully articulated by the VVF Technical Working Group with the hope that it will ensure good quality and uniformity in the care of women with obstetric fistula in Nigeria.



**Prof. C. O Onyebuchi Chukwu**  
Honourable Minister of Health  
March, 2012.

# ACKNOWLEDGEMENT

## ACKNOWLEDGEMENT

**T**he Department of Family Health of the Federal Ministry of Health wishes to express sincere gratitude to the various individuals and organizations that contributed and participated actively in the development of the Standard of Practice for Obstetric Fistula in Nigeria, Doctors Version.

Special appreciation goes to the members of the National Technical Working group under the leadership of Dr Jonathan Karshima, for initiating the process, the result of which forms the bedrock of this document. Our thanks also go to UNFPA for their financial support and other efforts to end fistula in Nigeria.

Very importantly we wish to appreciate the contributions of Dr. Kees Waaldijk, Dr Isah Adamu, Dr. Ocheke Amaka, Dr. Sunday Adeoye, Dr. J. T Mutihir, Dr. J. H Kigbu and Dr Y. B Ubam for their technical input during the finalization process.

Finally, appreciations to the following technical officers of the Reproductive

Health Division whose immense contributions and dedication led to the production of this document: Dr. Adeniran Bose, Dr. Kayode Afolabi, Dr. Chris Osa. Isokpunwu, Mrs. Oluyomi O, Dr Oyinbo Manuel, Dr. Ortonga G. I, Dr. Okara Dogara and Mrs Hannatu Bello.



Dr. B. Okoeguale  
Director, Family Health Department.

# TABLE OF CONTENT

## TABLE OF CONTENT

<b>CHAPTER ONE: INTRODUCTION</b>	7
1.1 Introduction	7
1.2 GOALS	8
1.3 PURPOSE AND SPECIFIC OBJECTIVES	8
1.3.1 SPECIFIC OBJECTIVES	8
<b>CHAPTER TWO: OVERVIEW OF OBSTETRIC FISTULA</b>	9
2.1 DEFINITION	9
2.2 HISTORICAL BACKGROUND	9
2.3 ROLE OF THE NURSE IN CARE OF FISTULA PATIENTS	9
2.3.1 Reception	9
2.3.2 History taking	9
2.3.3 Observation	10
2.4 MAGNITUDE OF THE PROBLEM	10
2.5 THE DILEMMA OF THE FISTULA CLIENT	10
2.6 WOMANHOOD AND GENDER ISSUES	10
2.7 THE SCOPE OF NATIONAL STRATEGIC FRAMEWORK FOR ELIMINATION OF OBSTETRIC FISTULA	10
2.7.1 Advocacy	10
2.7.2 Social mobilisation	11
2.7.3 Human resource development	11
2.7.4 Infrastructural development	11
2.7.5 Research	11
2.7.6 Monitoring and evaluation	11
2.7.7 Coordination and management	12
2.8 PUBLIC HEALTH VIEW OF OBSTETRIC FISTULA	12
2.9 PREVENTION OF OBSTETRIC FISTULA	12
<b>CHAPTER THREE: PATHOLOGY OF OBSTETRIC FISTULA</b>	13
3.1 BASIC SCIENCE RELATED TO OBSTETRIC FISTULA	13
3.1.1 Anatomy of the Pelvis	13
3.1.2 Basic Physiology of urination	13
3.1.3 Physiology of menstruation	13
3.1.4 Physiology of defaecation	14
3.2 CAUSES OF OBSTETRIC FISTULA	14

3.2.1	Direct Causes	14
3.2.2	Indirect causes	14
3.3	PATHOTHOLOGY AND PATHOPHYSIOLOGY	14
3.3.1	Pressure Necrosis	14
3.3.2	Iatrogenic Injuries	15
3.3.3	Psychological Injuries	15
3.3.4	Social Injuries	15

#### CHAPTER FOUR: PREOPERATIVE CARE OF OBSTETRIC FISTULA PATIENT

	16	
4.1	DIAGNOSIS OF OBSTETRIC FISTULA (MEDICAL AND SOCIAL EVALUATION)	16
4.1.1	Clinical History	16
4.1.2	Physical Examination	16
4.2	PRE – OPERATIVE CARE	16
4.2.1	Counseling	16
4.2.2	Adoption/orientation procedure	16
4.2.3	Bowel Preparation	16
4.2.3	Movement to the theatre	16

#### CHAPTER FIVE: SURGICAL NURSING CARE OF PATIENT

5.1	ANAESTHESIA:	17
5.1.1	Definition:	17
5.1.2	Type	17
5.1.3	Fasting	17
5.1.4	Nursing intervention for anaesthetic care	17
5.2	PERI – OPERATIVE CARE:	17
5.2.1	Lighting	18
5.2.2	Water supply and scrub area	18
5.2.3	Provision for secretariat:	18
5.2.4	Human Resource	18
5.2.5	FieldExposure/Lighting	18
5.2.6	Patient positioning in relation to routes of repair	18
5.2.7	Transfer of patient to the ward	18
5.2.8	Team Position ..... Error! Bookmark not defined.	
5.3	INSTRUMENTS	19

#### CHAPTER SIX: POST-OPERATIVE CARE OF OBSTETRIC FISTULA PATIENT

	Error! Bookmark not defined.	
6.1	POST-OPERATIVE CARE	20

6.2	DISCHARGE PROCEDURE	21
6.3	FOLLOW- UP VISITS	21
6.4	COMPLICATIONS OF SURGICAL TREATMENT OF OBSTETRIC FISTULA (Prevention, identification and management)	22
6.4.1	Intra- operative	22
6.4.2	Delayed Complications	22
6.4.3	Wound infection:	22
6.4.4	Catheter Problems	22
6.4.5	Forgotten Materials	23
6.4.6	The Wet Bed	23
6.4.7	The Moody Patient	23
6.4.8	Death	23
6.5	LATE COMPLICATIONS	23
6.5.1	Failed Repair	23
6.5.2	Patient still wet	24
6.5.3	Amenorrhoea	24
6.5.4	Dyspareunia	24
6.5.5	Pelvic pain/Secondary Fistula	24
6.5.6	Urethral Stricture	24
	<b>CHAPTER SEVEN: INFECTION PREVENTION</b>	25
7.1	DEFINITION	25
7.2	METHOD OF INFECTION CONTROL .	25
7.2.1	Clinic	25
7.2.2	Ward	25
7.3	MATERIALS FOR PROTECTIVE BARRIERS	26
	<b>CHAPTER EIGHT: DOCUMENTATION AND TRAINING</b>	27
8.1	DATA COLLECTION	27
8.1.1	Definition	27
8.1.2	Clinical	27
8.1.3	Follow up:	27
8.1.4	Social	27
8.2.	DEFINITION OF COMPETENCE	28
8.3.	PRACTICUM/CLINICAL	28
8.4	APPENDICES	28
8.4.1	Minimum equipment requirement	28
8.4.2	Consumables	28
8.4.3	Drugs and medication	29
8.5	GLOSSARY	29

# CHAPTER ONE

## INTRODUCTION

In a country where there is high and increasing morbidity, illiteracy, ignorance, inaccessibility to health care services, serious ailments such as obstetric fistula (OF) will abound. This is true with Nigeria where OF has become a major health problem and the need therefore, to train more health personnel – surgeons, nurses and other health care providers cannot be over emphasized.

It is on this platform that a National Standard of practice and training curriculum is being developed to ensure uniform training and approach to care of this group of people

In Nigeria, it is estimated that between 400, 000 to 800, 000 women are living with the problem and about 20, 000 more women developing it every year. Currently there are about twelve centres offering surgical care to about 3000 fistula women per year at different levels of expertise. At this rate it will take about 100 years just to deal with the backlog, ignoring new cases. With renewed global attention to the problem of OF championed by UNFPA and in line with the National Strategic Framework and Plan of VVF Eradication in Nigeria, surgical management and rehabilitation of the fistula woman will become central in addressing the OF problem.

It is therefore, obvious that there is a need to intensify training of more surgeons and

other health workers that will deal with the backlog and take care nearer to the silent suffering fistula woman. Besides training, there is also the issue of quality of care and hence the need for a standardized clinical protocol.

FMOH in collaboration with UNFPA, organized a retreat that brought senior nurses from the different VVF centres and institutions to harmonize practices in the nursing care of fistula patients. The Standard of Practice is expected to ensure uniformity in the care of fistula clients in the country and also serve as a guide for collaboration with interested partners in fistula related clinical work in Nigeria.

### 1.2 GOALS

The goal of the SOP is to provide a standard document that can be used to train health workers and also guide them in the provision of holistic, respectful, simple, affordable, quality and evidence-based care to the fistula clients that will guarantee improved quality of life for them and their families at the specialized fistula centres and secondary facilities.

### 1.3 PURPOSE AND SPECIFIC OBJECTIVES

The purpose of the SOP is to provide a platform for definition and development of a document that will serve as a National Standard of Practice for clinical care of fistula patients in Nigeria.

### 1.3.1 SPECIFIC OBJECTIVES

- a) To capture the views of nurses doing VVF work in Nigeria and share experiences on VVF patient care.
- b) To review existing practices, challenges and lessons learned at various VVF treatment centres.
- c) To define and document best practices in the treatment and management of VVF.
- d) To develop a Standard of Practice for nursing care for fistula patients in Nigeria.

The intention is to involve key clinical actors in the care and management of fistula clients in Nigeria and the bigger relevant bodies in identifying, discussing, agreeing and documenting evidence-based best practices in the clinical

management of fistula patients that will guarantee quality services in a manner that is respectful, safe, simple and affordable in the context of a low resource economy.

The topics covered range from overview of obstetric fistula, the magnitude of the problem, the fistula client in post-operative care, the definition of competence and appendices.



# CHAPTER TWO

## OVERVIEW OF OBSTETRIC FISTULA

### 2.1 DEFINITION

Obstetric fistula (OF) is an abnormal communication between the female genital tract and the lower urinary tract and/or the lower gastro-intestinal tract through which the patient uncontrollably leaks urine and/or faeces through the vagina. The commonest of the fistulas is the vesico-vaginal fistula (VVF).

### 2.2 HISTORICAL BACKGROUND

The oldest evidence of VVF was found in the examination of the mummified body of Queen Henherit, the wife of an Egyptian ruler around 2050 BC.

Avicenna, a Persian physician made the connection between obstructed labour and vesico-vaginal fistula in the 11th century. He noted that the condition was not curable and remained so until his death. However, it was not until 200 years later that the first VVF was repaired in United States of America.

Dr. John Peter Mattaver of Virginia documented successful closure of vesico-vaginal fistula using wire suture in his letter to Boston Medical and Surgical Journal in 1838.

In Nigeria, it is estimated that between 400,000 to 800,000 women are living with the problem and about 20,000 more women develop it every year. Currently

there are about twelve centres offering surgical care to about 3000 fistula women per year at different levels of expertise.

### 2.3 ROLE OF THE NURSE IN CARE OF THE FISTULA PATIENT

#### 2.3.1 Reception

#### 2.3.2 History taking

This should include biodata, length of incontinence, onset of leakage, duration of labour, place of delivery, mode of delivery, sex of infants, condition of infants, years of marriage, and history of previous operation, type of operation and number of surgeries. History of other morbidities during pregnancy, labour and delivery. Presence and duration of foot drop and whether there is also incontinence of faeces or flatus.

#### 2.3.3 Observation

Physical examination from head to toe, temperature, pulse, respiration and blood pressure. Total Nursing Care (involving personal hygiene, nutritional, social, psychological etc).

### 2.4 MAGNITUDE OF THE PROBLEM

Obstetric Fistula is a major health problem in Nigeria which requires prompt and adequate attention and intervention. There is a steady increase in the incidence

of OF resulting from ignorance, poverty harmful traditional practices, attitudes of health care providers and religious beliefs.

## **2.5 THE DILEMMA OF THE FISTULA WOMAN**

The victims are usually young and illiterate, commonly below age 20. They are usually stigmatised, depressed, anxious, rejected, dejected and irritable. Most of them end up being separated or divorced. This leaves victims' employment in jeopardy and creates the risk of malnutrition and urinary tract infection (UTI).

## **2.6 WOMANHOOD AND GENDER ISSUES**

In most cases nurses see the patient first before any other health personnel in the hospital. Womanhood is faced with challenges such as menstruation, pregnancy, child birth, breast feeding, segregation and menopause.

Based on the relationship established the nurse is in a better position to make this condition known to the patient.

## **2.7 THE SCOPE OF NATIONAL STRATEGIC FRAMEWORK FOR THE ELIMINATION OF OBSTETRIC FISTULA.**

### **2.7.1 Advocacy**

Advocacy will aim at securing the highest level of commitment and support of political leaders and other stakeholders. Such commitment would provoke a broad-based interest, attract policy and legislative support, provide funds and other resources

and create an enabling environment for the implementation of the relevant prevention, control and rehabilitation interventions.

### **2.7.2 Social Mobilisation**

Social mobilization activities would embrace the behaviour change communication (BCC) strategy to promote the elimination of VVF through linking of all relevant segments of the society – civil society organizations (CSOs), Private and Public Sectors, Communities and Individuals for positive changes in support of women/girl-child education and empowerment.

### **2.7.3 Human Resource Development**

The needed human resources for the prevention, care and rehabilitation of VVF patients have to be developed using competency-based training curricula. Various categories of health workers would need to be trained and they include: doctors, nurses and social workers. They would also require the provision of the necessary equipment, supplies and infrastructure for effective functioning.

### **2.7.4 Infrastructural Development**

Non-availability or inadequate facilities have been identified as major impediments to the provision of effective services for the management and rehabilitation of VVF patients. Therefore, institutional strengthening by establishment and expansion of VVF centres/dedicated VVF theatres and

facilities, provision of equipment, materials and supplies will improve the quality of care and contribute to the clearing of VVF backlog.

#### **2.7.5 Research**

A national community based research is urgently needed to determine the magnitude, distribution and epidemiological determinants of VVF to inform proper planning.

#### **2.7.6 Monitoring and evaluation**

Monitoring of programmes and interventions will ensure that policies are complied with, ethical issues are respected and that all efforts are directed towards achieving the goal of this strategic plan. It will also support cross-fertilization of ideas, thereby enhancing the quality of care and maximizing resources.

Evaluation of fistula work across the country will assess the level of performance of all activities against desired objectives of the interventions and that of the strategic plan. Conventionally, evaluation is carried out at mid-term and at the end of the plan period.

#### **2.7.7 Coordination and Management**

Coordination between relevant ministries, partners, training and VVF repair centres and non-governmental organizations involved in VVF repair is a key strategy for resource mobilization and utilization, synergy creation and efficient programme implementation.

### **2.8 THE PUBLIC HEALTH VIEW OF FISTULA PROBLEM**

Can be through the following perspectives

1. Prevention
2. Early detection and intervention
3. Initiation of community based care
4. Promotion and maintenance of continuity of care
5. Motivation of health personnel
6. Training of TBAs.

### **2.9 PREVENTION OF OBSTETRIC FISTULA**

The goal is to make available and accessible emergency obstetric care during labour and delivery:

Reproductive health/safe motherhood should be through

- Good health education
- Good antenatal care
- Training of more midwives to work in the community

Prevention of obstructed labour by the use of partograph for timely and appropriate interventions Women empowerment- women should be allowed to take decision on issues affecting their health.

Human rights and legislations – women should be allowed to exercise their rights  
Advocacy and leadership development: Visit to community leaders, religious leaders, political leaders, leaders of various associations and organizations to solicit for their support in the eradication of OF.

# CHAPTER THREE

## PATHOLOGY OF OBSTETRIC FISTULA

### 3.1 BASIC SCIENCE RELATED TO OBSTETRIC FISTULA

#### 3.1.1 Anatomy of the Pelvis

The female bony pelvis comprises of ischium, ilium, pubis, the sacrum and the coccyx. It is further subdivided into 3 parts; the inlet, cavity and outlet.

In the pelvic cavity, we have the following structures; uterus, vagina, urinary bladder and ureters, uterus and its appendages, the sigmoid colon, rectum, anus and the anal sphincters, blood supply and venous return for these structures.

#### 3.1.2 Basic Physiology of Urination –

Urination is a reflex act which may be voluntarily controlled. As the bladder fills, the internal sphincters, under the control of the sympathetic nerves remain closed. The detrusor muscle relaxes and there is increase in the volume of urine until the volume reaches about 300mls, then the increasing pressure stimulates and stretches the receptors in the bladder walls where impulses from the parasympathetic nerve cells carry signals to the detrusor muscles causing it to contract. At the same time the internal and external sphincter muscles relax and urine is voided.

#### 3.1.3 Physiology of Menstruation

Menstrual cycle is the series of events which occurs in the endometrium between the first day of one menstrual period and the first day of the next which is usually about 28 days. Menstruation is the loss of blood from the uterine cavity through the vagina due to the shedding of the lining of the uterus as a result of low hormonal level to keep it in place and this usually lasts 3 – 7 days.

The menstrual cycle consists of 3 phases:

- a) **Proliferative phase:** - This is when the endometrium increases in size under the effect of oestrogen from the ovaries.
- b) **Secretory phase** – This is when the endometrium is mainly under the influence of oestrogen and progesterone in preparation for a possible pregnancy.
- c) **Menstrual phase** – During which the lining of the uterus is shed off with bleeding.

#### 3.1.4 Physiology of Defaecation

The end product of the food we eat after absorption and assimilation is contained in the large intestine (the colon). Defaecation occurs when the peristaltic movement of the colon pushes the content down to the rectum stimulating the internal and external sphincter relaxation by a voluntary act.

## 3.2 CAUSES OF OBSTETRIC FISTULA

### 3.2.1 Direct Causes

- 1) Prolonged obstructed labour
- 2) Destructive operation
- 3) Female genital cutting
- 4) Carcinoma (of the cervix, bladder or rectum)
- 5) Radiation treatment
- 6) Congenital vaginal malformations
- 7) Trauma, including rape

### 3.2.2 Indirect Causes

- 1) Risk factors of obstructed labour: These are factors that can lead to disproportion between the size and shape of the birth canal and the baby like early marriage/childbearing, short stature from girl childhood malnutrition resulting into stunted growth.
- 2) Poor obstetric management
- 3) Poor education
- 4) Poor infrastructures
- 5) Delay in decision making
- 6) Religious beliefs
- 7) Cultural/traditional taboos

## 3.3 PATHOPHYSIOLOGY

### 3.3.1 Pressure Necrosis

The fetal head is too big or presents abnormally and gets stuck inside the birth canal and the soft tissues are compressed between the hard foetal skull and the hard maternal pelvic bones. If this is not relieved within the shortest possible time by caesarean section, blood supply is cut off,

tissue necrosis (tissue death) occurs and a fistula develops

### 3.3.2 Iatrogenic Injuries

It's a man-made injury from surgical intervention e.g. instrumental delivery, craniotomy, symphysiotomy and hysterectomy.

### 3.3.3 Psychological Injuries

These are the injuries that affect the state of the patient's mind such as depression, withdrawal syndrome and aggressive or outright hysteria.

### 3.3.4 Social Injuries

These are negative effects of the OF on the patient resulting in less relationship and interaction with the public or significant others.

Obstructed labour Injury Complex:- These are a range of problems associated with the obstructed labour such as foot drop, VVF, RVF, cessation of menstruation, etc.

# CHAPTER FOUR

## PRE-OPERATIVE CARE OF PATIENTS WITH OBSTETRIC FISTULA

### 4.1 DIAGNOSIS OF OBSTETRIC FISTULA (MEDICAL AND SOCIAL EVALUATION)

#### 4.1.1 Clinical History

Name, address, age, parity, marital status, religion, history of pregnancy, labour and delivery. Is she still menstruating? Previous surgery for the fistula: note type and number of times.

#### 4.1.2 Physical Examination

Height, gait, anaemia, nutritional status, general cleanliness, foot drop, smell of urine

Diagnosis and treatment of other comorbidities like malaria, anaemia, hypertension, etc. Treatment can be symptomatic.

Physiotherapy for foot drop,

### 4.2 PRE-OPERATIVE CARE

#### 4.2.1 Counselling

Counsel the fistula patient, her family and obtain consent for care.

Admission procedure: the patient comes some days before surgery for nutritional evaluation and rehabilitation. If there is malnutrition it should be corrected before surgery is performed.

#### 4.2.2 Adoption/orientation procedure

Introduce patient to other patients, familiarize them with the hospital environment and facilities to be used such as toilet and bathroom.

#### 4.2.3 Bowel Preparation

Soap enema is given twice a day to clear the rectum. This should be done with caution for patients with RVF.

#### 4.2.3 Movement to the theatre

By stretcher or wheel chair.

# CHAPTER FIVE

## SURGICAL NURSING CARE OF PATIENT

### 5.1 ANAESTHESIA:

#### 5.1.1 Definition:

Administration of drugs which desensitizes part or the whole body for the benefit of carrying out a surgical/medical intervention.

#### 5.1.2 Types

It could be regional or general

Regional anesthesia include –

Local and Spinal

It doesn't require special equipments

It is easy to learn

It needs close monitoring –

Pre operative– B/P 5 minutes, 10 minutes

Intra operative– B/P 5 minutes, 10 minutes

Post operative– B/P 5 minutes, 10 minutes

Keep head up at the beginning and after 10 minutes the patient can be positioned

Does not require electricity, it is safe and cheap

Therefore spinal anesthesia with a long acting agent such as 5% bupivacaine, is the method of choice for OF repair.

Counseling and pre-operative review:

Prepares the patient on the nature of the anesthesia/procedure and further review and monitor vital signs.

Reassure the patient.

#### 5.1.3 Fasting

No pre-medication unless necessary

No food a night before surgery, oral fluids should be encouraged

#### 5.1.4 Nursing Intervention for Anaesthetic Care

Vital signs (TPR, B/P)

Reassure the patient

### 5.2 PERI-OPERATIVE CARE:

The operating room should be set up to the average standard.

There must be a hydraulic table that is adjustable and has shoulder and leg support.

#### 5.2.1 Lighting

The theatre should have good and adequate lighting.

#### 5.2.2 Water Supply and Scrub Area

Adequate water supply

Theatre outfits and towels/drapes, gowns, towels – should be sterilized

Operating Instruments and Supplies – Autoclave and sterilizing equipment including other instruments required (see the checklist).

#### 5.2.3 Provision for Secretariat:

Data collection – This is important in order



to evaluate the result, compare them with other centres, and for research work. Efforts should be made to write down all patient's data.

#### 5.2.4 Human Resource

Includes: a surgeon, scrub nurse, circulating nurse, theatre attendant and anesthetist.

#### 5.2.5 Field Exposure/Lighting

Provide adequate exposure of the operation site and focus light directly on the exposed area. Drape the site of the operation.

Patient movement should be on trolley or wheel chair.

#### 5.2.6 Patient positioning in relation to routes of repair

- 1) Trans-vaginal repair- the nurse positions the patient on table as mentioned above and ensures that the instruments are placed appropriately for vaginal surgery.
- 2) Trans-abdominal repair- the nurse stays on the right and the instruments should be as for abdominal surgeries.

#### 5.2.7 Team Position

The assistant nurse should be by the right hand of the surgeon and other team members should take other positions.

#### 5.2.8 TRANSFER OF PATIENT TO THE WARD

Patient should be kept in the recovery room or a post-operative bed for 30 minutes – 1 hour for observation of vital

signs, and monitoring of urine output to ensure that the catheter is draining well. The patient must be on IV fluids, but this depends on the patient's condition.

#### 5.3 INSTRUMENTS

- Trolley for placement of instruments 2
- Sponge forceps for disinfecting operation area 2
- Self – retaining weighted Auvard Speculum 1
- Pair of sharply curved THOREX Scissors 1
- Pair of slightly curved long dissecting scissors 1
- Pair of curved scissors to cut sutures 2
- Sharp Descamps Aneurysm Needle 1
- Slender Allis Clamps 4
- Mosquito Artery Forceps- 4 (10cm long/curved)
- Long slender artery forceps-4 (20cm long/curved)
- Slender Needle Holder 1
- Robust needle holder 1
- Slender toothed tissue forceps 1
- Calibrated (up to 25cm) uterine sound 1
- Set of metal dilators from #3 through #16 1
- Metal bladder flushing syringe of at least 50 – 100ml
- Metal kidney bowls for pre- and post-operative use.
- OTIS urethrotome



The theatre should have adequate Operating Pack (OP) of instruments to be used in each repair (each patient should have her pack) to reduce the spread of HIV/AIDS and other infections.

# CHAPTER SIX

## POST-OPERATIVE CARE OF PATIENT WITH OBSTETRIC FISTULA

### 6.1 POST OPERATIVE CARE

1. Monitor vital signs 1/2 hourly over four hours, 2 hourly over 8 hours and thereafter, 6 hourly.
2. Ensure generous intake of water, not less than 6 litres per day. The water can be flavoured if the patient desires.
3. Monitor urine output hourly. Urine should be at least 4000 ml in 24 hours and completely clear.
4. Catheter care: This is critical and very important.  
Usually size 16 or 18 Fr Foley's Catheter is used. The bigger size is better to allow free urine drainage. The catheter can be anchored by a stitch or held in place with a adhesive strap.  
Check catheter drainage and if it is blocked flush it or change it.  
Make sure the patient does not lie on the catheter or get it kinked. When it is blocked, irrigate it with normal saline solution using a bladder syringe. Adequate intake of fluids (water) not less than six litres per day keeps the urine clear and cleanses the catheter. Less intake of water produces sludge and can get the catheter blocked.  
Keep the catheter for 2 weeks, but do not hesitate to keep it longer if there is reason to do so. The duration of the catheter drainage should be as directed by the surgeon. When the

catheter is removed, observe the patient in the centre for another two days and if possible do dye test check before discharge.

There is no need for routine prophylactic antibiotics unless there is a specific reason for it.

5. Give haematinics like fersolate and folic acid one tablet each daily
6. Remove the vaginal pack after a day (24 hours) and do it carefully otherwise the patient may start bleeding.
7. Episiotomy sutures should be removed after 7 – 10 days if non-absorbable suture material was used.
8. Pain relief should be administered as prescribed by the surgeon.
9. Ambulation, Feeding, Baths, Perineal and Wound Care: Patients can be allowed full mobilization on the morning following surgery (this is after at least 24 hours).

### Feeding

Regular diet is allowed right from the operative day as the patient tolerates. Monitor patients' feeding to ensure that they are getting a balanced diet. Patients who had rectal fistula repair should be on

light food of low residue like enriched pap and rice with stew with no meat or vegetables. They should have a high fluid intake to reduce faecal bulk for five days. Liquid paraffin 15 mls daily can help in softening the stool where there is constipation.

Patients should bath every day. Teach them and encourage personal hygiene. Quite often the patients can be encouraged to dress their hair among themselves.

Do perineal and wound care in the form of sitz bath 2 – 3 times a day and daily wound dressing.

## 6.2 DISCHARGE PROCEDURE

### Counselling

Pre-discharge counselling of patients should involve the husband and other family members where available.

Instructions should be on:

- The presumed cause of the fistula.
- Avoiding coital activity for 6 months after the operation.
- When to return for follow – up care: at 4 weeks and 12 weeks. Give specific dates.
- Going to the hospital (not primary health clinic) for prenatal care for all subsequent pregnancies. In the hospital, patient should take the post-operative hand card given to her and to insist on seeing a doctor to plan her delivery which must be by caesarean section.
- All subsequent deliveries after fistula repair must be by caesarean section.
- Manual work can resume after eight

weeks.

- Importance of good nutrition to the family, particularly children.
- Advising other women in the neighbourhood of the importance of labour and delivery in a health facility instead of at home.
- Importance of family planning or child spacing.

Give these instructions in simple and clear terms. If the patient cannot understand them all at one session, give the instructions in bits as the patient comes for follow-up.

It is important to have the husbands around during the time of instructions for those who are still in cordial marriage relationship.

## 6.3 FOLLOW-UP VISITS

At each follow-up visit, enquire about leakage of urine, date of last menstrual period if she has resumed menstruation, coital activity, and about any other complaint. If the visit is not as it was planned, ask for the reason for the default. Examine the patient for leakage, anaemia, gait, abdominal tenderness and swelling. Note presence or use of rags. Examine the perineum and the vagina including a dye test if still leaking.

Encourage the patient to follow instructions about diet, coital activity, prenatal care and need for hospital delivery. Give her haematinics and multivitamin supplements and the date for the next visit.

## **6.4 COMPLICATIONS OF SURGICAL TREATMENT OF OBSTETRIC FISTULA (Prevention, Identification and Management)**

### **6.4.1 Intra-operative**

These include bleeding, ureteric injury, not making urine, vomiting, shock, pain.

Vomitus should be cleaned by the circulating nurse, and the anaesthetist should intervene and control the vomiting.

### **6.4.2 Delayed Complications**

Fever/headache: do full workup to determine the cause of fever and headache and treat accordingly.

### **6.4.3 Wound infections**

Wound should be dressed. If there is infection, notify the doctor immediately.

### **6.4.4 Catheter Problems**

#### **Not draining:**

Urine not draining from the catheter could be as a result of the catheter being blocked by blood, debris or stone; it fell out; kinked or the patient is lying on it. It could also be as result of no urine in the bladder from inadequate water intake. When the non-functioning catheter is as a result of mechanical blockage, there may be retention of urine. This situation is dangerous because it can cause breakdown of the repair.

Respond quickly to calls for catheter that is not draining. Find out the reason for the failure to drain. Irrigate the catheter and if it is still not draining, inform the surgeon and plan for replacement of the catheter. When

changing the catheter that is blocked as result of clot, debris or stone, use a bigger size than the one used earlier. Increase or encourage fluid intake and continue with monitoring of the urine output and reassure the patient.

Catheter that becomes difficult to remove – Call the attention of the doctor and reassure the patient.

### **6.4.5 Forgotten Materials**

Sometimes materials like vaginal pack and suture material may be forgotten in the vagina after surgical repair of fistula. Such situations come to attention when the patient tries to clean up or develops vagina discharge that is usually foul smelling. Examine the patient, carefully remove the foreign body, wash the vagina with saline solution and call the attention of the doctor. If the wound is also infected, it can be treated with antibiotics.

### **6.4.6 The Wet Bed**

This means the patient is leaking. The leakage may be from the fistula or around the catheter. Change bed linen and make patient comfortable. Ensure that the catheter is draining well. Ensure liberal fluid intake. Examine the patient appropriately. Reassure the patient, advice accordingly and call the attention of the doctor.

### **6.4.7 The Moody Patient**

Fistula patients are very grateful when they are dry after surgery. However, when the repair fails and there is leakage, it is easily noticeable from their mood. They

withdraw and become moody.

Ask why the patient is moody, reassure her and inform the surgeon.

#### **6.4.8 Death**

This is very rare but does occur usually from pre-existing medical or obstetric complications, anaesthetic complications, haemorrhage, infection or bilateral ligation of the ureters that is not attended to immediately. Call the attention of the Doctor to certify death, perform the last office care. Ensure that the relations are informed and give grief support. Involvement of the social worker can be of immense benefit.

### **6.5 LATE COMPLICATIONS**

#### **6.5.1 Failed Repair**

Clean the patient, reassure and call the attention of the doctor.

#### **6.5.2 Patient still wet**

Flush the catheter, encourage liberal fluid intake, reassure and call the attention of the doctor.

#### **6.5.3 Amenorrhoea**

Counsel the patient, reassure, and inform the doctor.

#### **6.5.4 Dyspareunia**

This may be as a result of vaginal scarring with reduced depth. Counsel the couple, advise the patient on vulva hygiene, reassure her, and inform the doctor. If the fistula is closed and the patient continent of urine, she may benefit from vaginoplasty if it is as result of gynaetresia.

#### **6.5.5 Pelvic Pain/Secondary Fistula**

Reassure the patient. For secondary repair – Enquire about pregnancy, abortion and/or delivery since surgery.

#### **6.5.6 Urethral Stricture**

Relieve retention when it exists. Clean the patient, reassure and call the attention of the doctor.

# CHAPTER SEVEN

## INFECTION PREVENTION

### 7.1 DEFINITION

#### Q1. What is infection?

Ans. Infection is a successful invasion of the body by pathogenic micro organisms.

#### Q2. What is infection control?

Ans. Infection control is the way of minimizing the spread of pathogenic micro organisms.

### 7.2 METHOD OF INFECTION CONTROL

#### 7.2.1 CLINIC

Soap and water must always be available for washing hands after contact with patients or discharges.

Ensure sweeping is done including high dusting and mopping (by the use of disinfectants like chlorine solution or lysol with dry and wet cloth). Sterilization of instruments. Regular and appropriate use of mask and gloves. Staff doing cleaning and washing of instruments, furniture, equipment and floor must use utility gloves during the process.

#### 7.2.2 WARD

Same as for the clinic including bed making, bed spacing, apron, health talk on control

measures.

Care of the toilet and bathrooms.

Proper disposal of waste.

Proper disposal of used materials.

Avoid recapping of used needles.

Washing of hands before and after each procedure.

Decontaminate used instruments by immersing them in 1:6 chlorine solution for 10 minutes, wash with soapy water and brush under running tap water, then rinse with clean water, dry, pack the instruments and then send for autoclave sterilization.

Fumigate discharged patient's mattresses or dry them in the sun for a whole day.

Used gowns, towels and drapes should be sent to the laundry for washing and ironing, then packed and sterilized.

Theatre fumigation – Fumigation is a method of minimizing the spread of micro organisms in the theatre. It is supposed to be carried out at least every 3 months by a fumigation expert using formaldehyde and savlon.

### 7.3 MATERIALS FOR PROTECTIVE BARRIERS

These include gloves, aprons, boots, caps, masks, protective goggles and protective gowns. Get adequate instruments to prevent spread of infection from one patient to another.

# CHAPTER EIGHT

## DOCUMENTATION AND TRAINING

### 8.1 DATA COLLECTION

#### 8.1.1 Definition

Data is a collection of information from a client.

#### 8.1.2 Clinical

Biodata – e.g. Name, address, age, sex, marital status, educational level, occupation, e.t.c.

Pre-operative - e.g. presenting complaint, date of last menstruation, previous medical history, past obstetric history, history of labour, place of delivery, parity and number of children alive, e.t.c

Intra-operative - e.g. complications, blood loss, type of operation, e.t.c.

Post-operative – e.g observations, maintenance of intake and output chart, administration of prescribed drugs.

#### 8.1.3 Follow-up:-

This is the visit after discharge.

Data collection during follow-up should include:

History of leakage

History of menstruation

Nutritional status

Status of the site of operation

Counseling and rehabilitation

#### 8.1.4 Social:-

Demographic – is data of her community background

Psychological – reassurance

Literacy – that is the level of awareness

Social support – from her husband and family

Skill - that is can she do any hand work and how is she coping?

### 8.2. DEFINITION OF COMPETENCE:-

Competence can be defined as being efficient, effective and having a high sense of responsibility.

Trainee selection criteria – somebody with nursing and midwifery council certificate with at least 3 years working experience.

Duration of training – at least 6 weeks.

Continuing education at least once a year.

### 8.3. PRACTICUM/CLINICAL

Participation in clinic, ward, theatre and sometimes outreach activities.

### 8.4 APPENDICES

#### 8.4.1 Minimum Equipment Requirement

Hydraulic Operating Table

Anaesthetic Machine

Operating Lamp

Autoclave Machine (electrical and manual)

Suction Machine

Diathermy Machine

Trolleys

Surgical Instruments

Auvard Vaginal Speculum  
Cervical Dilators (set)  
Small Artery Forceps  
Big Artery Forceps  
Bard Parker Handle  
Thorex Scissors  
Curved Assistance Scissors  
Stitch Scissors (straight)  
Dissecting Forceps  
Aneurism Needle  
Needle Holder, etc.  
8.4.2 CONSUMABLES  
Gauze  
Sutures (absorbable and non absorbable)  
Catheter (size 16, 18, 20)  
Surgical Gloves/Examination Gloves  
Cotton Wool  
Antiseptics  
Spiral Needles  
Spirit  
Syringes and Needles (5cc, 10cc, 20cc, 50cc)

### 8.4.3 DRUGS AND MEDICATIONS

Analgesics  
Haematinics  
Anti-malarials  
Anaesthetic Drugs  
Anti-emetics  
Antibiotics  
IV Fluids

### 8.5 GLOSSARY

VVF - Vesico-vaginal Fistula  
RVF - Recto-vaginal Fistula  
OF - Obstetric Fistula  
ANC - Antenatal Care.  
HIV - Human Immuno-deficiency Virus  
AIDS - Acquired Immune Deficiency Syndrome