

GUIDELINES FOR NURSING MANAGEMENT OF PEOPLE INFECTED WITH HIV/AIDS

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AIDS/STDs Section

Ministry of Health Malaysia

KUALA LUMPUR

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This manual is dedicated to all persons who are involved in clinical teaching or nursing persons with HIV/AIDS.

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INTRODUCTION

The purpose of this book is to guide nurses in rendering nursing care required by HIV/AIDS patients to prevent infection and to provide care throughout the various stages of infection.

Due to the rapid increase in the rate of infection, more nurses in the course of time, will be involved in nursing HIV/AIDS patients. It is therefore important for nurses to acquire the skills of nursing HIV/AIDS patients who will be in their care.

Since there is no known cure for HIV/AIDS at the present time, prevention of HIV/AIDS and management of symptoms are the only options available. Nurses then, are required to update their knowledge to the utmost on the current management procedure of HIV/AIDS patients.

NURSING POLICIES AND STRATEGIES IN THE MANAGEMENT OF PERSONS WITH HIV/AIDS

The aim of nursing is to help the society which it serves to modify their attitude towards HIV/AIDS and their related diseases, thereby creating an awareness and acceptance of persons with HIV/AIDS.

The nursing policy states that:

- 1) Nursing personnels have a duty to care towards all patients and are obligated to offer appropriate and meaningful care to those requiring it.
- 2) The patient's dignity is to be respected in life and in death.
- 3) Nurses have a duty to relatives and others who are significant and must treat them with respect and kindness.
- 4) Nurses have an individual responsibility to know the latest existing Global and National policies and procedure for patient care.
- 5) Continuing education is essential to allow nursing programmes to achieve its objectives.

With the above as the guidelines, the objectives of nursing management of HIV/AIDS persons are formulated to :

- i) give skilled nursing care to patients through individualised adaptation to patient, procedures and needs which are non-judgemental.
- ii) offer support and guidance for the patients in their interactions with family and significant others.
- iii) Coordinate and utilize the resources in the community that contribute towards assisting persons with HIV/AIDS and their families.

Planned strategies to achieve the above objectives are :

- 1) Strengthening the present training programmes; basic, post basic and inservice.
- 2) Encourage research to evaluate effectiveness of training and quality of care.
- 3) Monitor and review the trends and development in the global management of HIV/AIDS and its implication on nursing practices.
- 4) Monitor the implementation of universal precautions and rectify any shortcomings.
- 5) Actively involve in counselling services to persons with HIV/AIDS or persons caring for persons with HIV/AIDS.
- 6) Provide nursing services in the community for persons with HIV/AIDS.
- 7) Liase with non-governmental organisations providing services to persons with HIV/AIDS.
- 8) Establish nursing body (AIDS) at National and state level to ensure that the above strategies are achieved.

NURSING MANAGEMENT OF SYMPTOMATIC HIV/AIDS PATIENTS (ADULT) IN THE HOSPITAL

The objectives of nursing management is to

- 1. relieve physical symptoms
- 2. maximise the level of the patient's function
- 3. counsel patients and families
- 4. provide care during terminal stage
- 5. give clinical education with regards to knowledge of HIV/AIDS and prevention of its transmission

Persons with HIV/AIDS should be nursed in an open ward and to be treated as any other patients.

Isolation of patients should only be if they:

- i) are immunosupressed
- ii) have infectious opportunistic infection e.g. T.B.
- iii) have persistent body discharged e.g. diarhoea, vomiting
- iv) have neurological impairment e.g. dementia, restlessness

Nursing care of HIV/AIDS patients in the ward would include :

- 1) meeting the psychological physical and social needs of the patient
- 2) implementing the universal precautions
- 3) giving patients necessary education
- 4) counselling patient
- Meeting the psychological, physical and social needs of the patient
 The individualized care of patients with AIDS and HIV related illness requires skill, competence and confidence. These are based on factual

understanding of the pathophysiology of HIV infection and good rationale when assessing patient and patient needs.

The needs of patients are assessed based on the nursing model if Henderson's (Component of Basic Nursing) and Roper's (Activities of Daily Living).

The needs of requisities for Health as identified by Roper and Henderson covers "14 Activities Of Daily Living" and "Components of Basic Nursing" they are:

- 1. The need for adequate respiration
- 2. The need for adequate hydration
- 3. The need for adequate nutrition
- 4. The need for urinary and faecal elimination
- 5. The need for control of body temperature
- 6. The need for movement and mobilization
- 7. The need for personal hygiene
- 8. The need for safe environment
- 9. The need for expression and communication
- 10. The need to maintain psychological equilibrium
- 11. The need for rest and sleep
- 12. The need to worship according to faith
- 13. The need to express sexuality
- 14. Needs associated with dying.

These needs are identified during the nursing assessment and history taking. They maybe actual problems (needs or those that may be anticipated due to patients' requirements, deprivation, medical condition or treatment) see potential problems/ needs - appendix I.

2. Implementing the universal precautions

All patients admitted to the wards are considered infectious. Nurses therefore, MUST practice universal precautions at all times.

Based on the above, it is recommended that the nurses should as far as possible, apply the guidelines in the care and management of persons with HIV/AIDS. Provision should be made to meet the needs of local policies and protocols - (appendix II, III).

3. Giving Patient Teaching

The main goal is to encourage the patient towards self care and to lead a life as normal as possible. It is also aimed at decreasing the risk of disease progression and to avoid the spread of disease to others. Health teaching should also be extended to the family and significant others. Informations regarding, healthy lifestyle, stress reductions, positive thinking, disease process, application of universal precautions and prevention of transmissions will need to be stressed during health teaching session.

4. Counsel Patients

Being diagnosed with or recognising the possibility of personal HIV infection/AIDS brings with it profound emotional, social and behavioral consequences. The knowledge that there is no cure or death is iminent at the prime of one's life involves constant stress and anxiety to the person and the caregivers. Counselling therefore must be offered in the nursing management of person with HIV/AIDS.

HIV counselling means encouraging individuals to make changes to everyday lives and to sustain these changes. It involves understanding/among others of the prefered lifestyles, sex and sexuality and human behaviours. Counselling too means consistent and correct information about HIV/AIDS disease. In order to counsel effectively, nurses will need to be sure about facts of HIV/AIDS disease, have a non-judgemental attitude and skilfull in communicating techniques. In other words, she needs to be trained and supervised.

There are ample opportunities for the nurse to do counselling for persons with or living with HIV/AIDS either in the wards or clinics. The most ideal situation would be for each hospital to have its own counselling unit where the activities of counselling should be solely the task of the personnels in this unit.

For further reading, refer to the Ministry of Health - "Guideline on Counselling of HIV/AIDS persons".

NURSING MANAGEMENT OF PERSONS WITH HIV/AIDS IN THE COMMUNITY AND HOME

The management of people with HIV/AIDS in the home, community and hospital are linked and integrated. In the community, nursing management of the patient is based on the patient's and care giver's needs which are almost similar as in the hospital.

The main issues are:

- 1. prevention the spread of infection
- 2. sustaining the changed behaviours
- 3. decreasing the risk of opportunistic infection
- 4. decreasing the progression of the disease
- 5. utilizing the available support network

Nursing management therefore is directed towards:

- 1. Patient education on
 - transmission and prevention of infection to others
 - application of universal precautions
 - healthy living
 - recognising signs/symptoms of disease progression
- 2. Provide counselling and crisis intervention
- 3. Utilizing community support services

NURSING MANAGEMENT OF HIV/AIDS (PAEDIATRIC)

The World Health Organisation (WHO) estimates that over 1,000,000 children are infected with HIV world-wide. Infants can be infected with HIV during pregnancy, birth or breast feeding. Rarely, children can be infected by contaminated blood or non-sterile equipment o r through sexual abuse.

The lives of many children who do not have HIV themselves are affected when family members have AIDS. Families face increased poverty and stress because adults are too sick to work or look after them. Girls in particular, often become carers for sick parents, relatives or siblings. After the parents death, children are left to the care of aged grandparents, aunts or other relatives.

Globally infants with HIV do not live long. Nearly half may die by the age of 2 years due to complications. However, good care and support can increase the length and quality of life.

Diagnosis for children below 18 months is difficult and costly, for their antibodies cannot be detected until after this time. HIV infected child, often means that the mother, or her sexual partner, may have HIV, but unware of the fact. Nurses need to consider the implications of the child's diagnosis for the parents. This would mean the mother (parents and with their permission, other family members) need counselling care and support.

Older children who may have HIV need special consideration to cope with the illness or other related issues.

Below are some key points for the nurse to remember when addressing HIV in children.

- 1. Maintain good nutrition. This includes advice on breast-feeding, and other feeding techniques including alteration in nutritional status.
- 2. Problems related to common childhood infections.
- 3. Issues related to immunisation.
- 4. Monitor growth regularly.
- 5. Treat the child as normal; ensuring that he/she attends school or plays with other children.
- 6. Give comfort and prevent distress.

ISSUES IN NURSING MANAGEMENT OF PERSONS WITH HIV/AIDS

1. Notification

HIV/AIDS is listed as a communicable disease (P.&C.D Act 1988). As such all persons who are HIV positive or having AIDS must be notified to the heath authority. Nurses will need to be aware of such terminology as non-nominal notification and the procedure of doing it.

2. Confidentiality

A persons who is HIV positive or having AIDS faces discrimination, stigma and possibility of being ostracised. As such, an individual positive status is of utmost important. Various methods must be secured to ensure that no unauthorised persons have access to this information. In nursing, confidentiality need to be addressed in situations such as specimen collection, filling of forms, sending of specimen, receiving results, keeping of BHT, documenting of report and passing of report.

Each hospital has its own unique way of maintaining confidentiality when dealing with HIV/AIDS. Therefore, all nurse must know their own hospital policy with regards to this issue.

3. Breast-feeding

According to WHO, 20% - 30% of babies born to HIV positive mothers might contract HIV either in-utero, during labour or during lactation. In Malaysia all HIV positive mothers are discouraged from breast feeding their children in view of the high standard of hygiene when preparing the formula.

4. Immunisation

Health nurses are required to do child assessment and plan for immunization scheduled for an infant. According to WHO there is no contra-indication for immunization unless the vaccine contains live virus. However, when in doubt do clarify with the attending physician.

5. Needle Prick Injury

Puncture injuries are common in the wards. Though the chances of being infected through needle prick injury is low, nurses need to be aware of their own potential hazard. Wearing of gloves does not protect oneself of injury from sharp instruments. All staff must known what to do if she/he injures himself/herself. Information about the protocol of needle - prick injury should be strategically placed in the wards. Tutors will need to introduce this precaution protocol as early as in the first semester (refer appendix IV).

EDUCATION AND TRAINING STRATEGIES

Nurses need to be competent and have confidence when caring for persons with HIV/AIDS. They must provide, at all time, a high standard of individualised care in a safe and caring environment. They need to be compassionate and non-judgemental when delivering their care.

Training need not stop once the nurse has graduated. Provision for structured on going education should be carried out and all training activities will need to be standardised by a central nursing body which would carry out periodic appraisals in the learning and nursing activities, so that the overall nursing of HIV/AIDS patient's programmes achieve their objectives.

NURSING BODY (AIDS)

Nurses are committed to ensure that all HIV/AIDS patients consistently receive meaningful, non-judgemental and compassionate nursing care of the highest quality. However, doubts and uncertainty regarding nursing practices will create fear which prevent the nurse from delivering that care.

It is essential that infectious control policies and procedures are formulated and reviewed constantly with the changes in clinical management required by the advent of HIV infection. On going monitoring of the operational policies and procedures must be circulated to all hospitals and training centres. This will enable the nurse to update her knowledge and practices with conviction.

The provision of the above activities can only be attained if there is one central nursing body which will translate the policies into nursing action and will act as a reference body for the national nursing management of HIV/AIDS. The subcommittee in each state will carry the operational activities and report to the central body regularly. Members of the central and sub-committee should comprise of personnels who are either currently nursing or teaching HIV/AIDS. Additional qualifications such as counselling, research, administration and curriculum planning will enchance the quality of the group. Above all, members must be committed and actively involved with AIDS work. Other non-nursing personnels will be invited on an ad-hoc basis.

GLOSARRY

AIDS : It stands for Acquired Immune Deficiency

Syndrome. A disease cause by HIV which

breaks down the body's immune system.

Body Fluid : Fluid that comes from a person's body. It

includes blood product, semen, vaginal

secretions, CSF amniotic fluid, pericardial fluid

and pleural fluid.

Care givers : Person/persons who provide care to an ill

person. Can be family, friends, nurses or

volunteer person.

Clinical Waste : Refers to used cotton, guaze, plasters or other

items used while performing procedures on the

patient.

Clean Team : Refers to unscrubed personnels in the surgical

team e.g circulatory nurse, anaesthetic nurse or

attendant.

This team will be in the exit room until the

surgery is over.

The function is to receive messages, handling

over operative items or collecting used swabs

and pads.

Dirty team : Refers to scrubed personnels who are actually

doing or assisting in the operation.

Domestic Waste : Left over food, vegetables, fruits.

Drainage bag : Bags (sterile, non-sterile) used to receive body

discharge from the patient e.g urine bag, organ

drain bag, colostomy bag.

Exit Room : Is a room next to the main operation theatre.

It is a place where the "clean team" is stationed

during the operation.

It is also a place where the trolley used to wheel the HIV infected person (and his belongings)

into the theatre is placed.

A "No Entry" sign is placed at t he door of this

room.

Healthy Lifestyle : Refers to activities that promote to the well

being and health of a person (physical, mental and spiritual). It would include

stress/drug/alcohol/nicotine free, exercise and

well balanced diet.

Heavy-duty glove : Is a colored elbow-length glove (commercial

glove) used by housewives for gardening or

washing dishes.

HIV : Is human immune deficiency virus.

HIV Positive : When a person is proven by clinical test to

contain antibodies or virus against HIV.

Housekeeping : Activities related to general cleaning of the

unit/room/ward e.g moping floor, washing

toilet.

Invasive Procedures : Procedures involving inserting tubes or canulas

into patient's body.

Linen : All cloth-materials used for the patients e.g

baju, sarung/ trousers, bedsheets, blankets,

towel, bath blanket, drawsheets.

Normal Waste : Refers to papers, clips, pin, etc.

Sharps : All items that are pointed or can cut/cause

injury eg scissors, scapel blade, needles (injection, suture, I/V infusion, AVF, butterfly

and trocars).

Significant : Person/person that are important in another

persons life. Can be parents, friends, lovers,

husband/wife, uncle/aunt or grandparents.

Single Use : Means that each item is used once for a person

or each item is used strictly for an individual

person at all time.

Spillage : Means that any of the patients' fluid that has

spilled over on the floor or any flat surface.

Stainless Steel Utensils : Include all items made of steel and rendered

rust free eg. galipot, kidneydish, forceps, etc.

These items are not corrosive free.

Support network : Person/organised body involved in providing

support to the persons in need. Support can be

emotional, financial, legal or pastoral care.

Terminal Disinfection : Activities undertaken to clear area/unit/rooms

off the organism after the patient is discharged

or has died. Various ways of disinfection can be

deployed.

Waste Product : Includes all waste discharged from a patient.

Can be urine, faeces, vomitus or pus.

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APPENDIX 1A

- 1. Anxiety, anger, depression, fear
- 2. Alteration in mental status
- 3. Fatigue and malaise
- 4. Respiratory distress including shortness of breath, difficulty on exertion, tachypnoea, couth
- 5. Anorexia, nausea, vomiting, diarrhoea and dehydration
- 6. Inadequate resistance to infection.
- 7. Fever
- 8. Bleeding
- 9. Alteration in skin integrity
- 10. Pain
- 11. Need for IV therapy
- 12. Local and systemic reactions to medication
- 13. Injury
- 14. Substance abuse
- 15. Need for patient, family and significant others on HIV related education and information
- 16. Need for clarification of resuscitation measure
- 17. Terminal care

APPENDIX IB

Problems/Needs	Expected Outcome	Nursing Intervention
3. The need for adequate nutrition. Problems Weight loss Due to: - disease process - opportunistic infecti ons 3.1 Potential Problems Further severe weight loss and malnutrition. Due to: - fever - diarrhoea - nausea/vomitin g - profound anorexia - dysphagia	Patient appears well nourished - no further weight loss - enhance weight gain	 Weigh patient weekly. Assess dietary habits. Monitor and record I/O. Serve frequent small meals. Encourage home food if preferred. Give and record nasogastric feeds if indicated. Regular flow of Total Parenteral Nutrition if ordered. Serve medication as prescribed.

	Problems/Needs	Expected Outcome		Nursing Intervention
4.	The need for urinary and faecal elimination. Potential Problems i) Skin breakdown due to diarrhoea ii) Oliguria due to dehydration iii) Incontinence due to loss of mobility/confu sion/ terminal illness	No incontinence of faeces and urine. Patient regains normal bowel and urinary habit. - skin intact	1. 2. 3. 4. 5. 6. 7. 8. 9.	Keep skin clean and dry. Clean and dry perineal areas after each defeacation. Monitor and record frequency and characteristic of stool/ urine Apply protective cream for incontinent patient. Keep mattress and linen clean, dry and protected. Encouraged fluid ad lib. Use diapers. Change patient's position 2 hourly. Monitor and report any signs of skin break down redness - pain
5.	The need to control body temperature. Potential Problem Fever and night sweats due to opportunistic infections.	Normal body temp. maintained (36°C - 37°C) - patient comfortable	1. 2. 3. 4. 5. 6. 7.	Monitor and record 4 hly temperature. Keep patient clean and dry. Do cold compress if temp. 37.5 - 38.5°C Do tepid sponging if temp. 38.5°C and above. Serve antipyretic as prescribed. Call doctor if fever is persistent. Document occurance of night sweats.

Prol	olems/Needs	Ex	pected Outcome		Nursing Intervention
mo mo	e need for vement and bilization. ential Problems Restricted mobility due to muscle atrophy. Decubitus ulcers due to weakness and prolonged bedrest. Deep vein thrombosis due to peripheral neuropathy.	-	Able to mobilize independently. Resulting in absence of pressure sores, venous thrombosis and excessive muscle wasting.	1. 2. 3. 4. 5.	Teach and encourage active and passive exercise. Position patient 2 hly. Examine for signs of pressure sores and deep vein thrombosis localised pain - redness - inability to move limb due to pain Inform doctor if any of above signs present. Encourage ambulation if able.
env Pot -	e need for a safe ironment ential Problems nosocomial infection accident e to: weakness confusion hospital environment and equipment opportunistic infection eg. CMV retinitis.	-	Does not acquire nosocomial infection Patient safe from potential hazard	1. 2. 3. 4.	Observe signs of: - disorientation - confusion Assess patient's physical condition. Isolate patients at risk. Maintain a safe environment in ward areas: a) Keep side rails of bed upright if patient is confused or sedated. b) Keep floors clean, dry and free from clutter. c) Display `No smoking' sign when 02 is in progress. Practice effective hand wash when handling patient.

	Problems/Needs	Expected Outcome	Nursing Intervention
8.	The need for personal hygiene and comfort	Looks comfortable, dry and clean at all time.	Encourage patient to brush teeth after meals using soft tooth brush if able. Do much toilet for ill
	Potential Problems Poor oral hygiene Inadequate body hygiene Due to disease process opportunistic infections general debility		 2. Do much tonet for in patients. 3. Give mouth gargles before and after meals. 4. Prevent dryness of lips. 5. Observe for signs of infection sores and cracked lips halitosis Body hygiene 1. Bathe or sponge patients daily. 2. Provide dry and clean linen. 3. Change patient's clothing when damp, wet or soiled.
			4. Assist patient in maintaining hygiene.
9. i) b)	The need to expression and communication. Potential Problems Impaired coagulation disorientation due to disease process. Isolation due to: fear of Aids by Health Care givers Excessive infection control recautions.	Able to communicate with significant others and health care workers. - sense of loneliness, rejection and isolation reduced.	 Always be there for the patient. Assess patient's orientation status. Encourage visits by significant others. Contact voluntary organization if patient requires/consents. Encourage patient to mix with other patients. Avoid excessive Infection Control precautions

Anxiety due to: - fear of loss of confidentiality disease process. 10.1 Potential Problem A) Ineffective coping social isolution due to: - Loss of control - Withdrawal of social supports Isolation in hospital. B) Loss of self esteem due to: - Guilt - Altered body image Stigma of AIDS - Reception of self as continuous of others. C) Depression due to loss of: - Personal relationship Self esteem Physical potency - Control - Sexuality - Effective role in life. Able to ventilate feelings and emotions. - Demostrate acceptance of disease - Verbalizes well - Verbalizes - Always be there for the patient Observe for signs of anxiety - Teachycardia - irritability - restlessness - insomnia - Information if ordered. 1. Discuss with patients their fear. 2. Encourage socialization and leisure time activities 3. Refer for professional help. 4. Form counselling and support group. 5. Adopt a non-judgmental attitude. 1. Observe for signs of depression: - altered behavior - disturbed sleep - loss of ability to concentrate - suicidal tendency. 2. Give antidepressants as prescribed. 3. Be available for patient/ family. 4. Follow steps as in above problems.	Problems/Needs	Expected Outcome	Nursing Intervention
	psychological equilibrium. Anxiety due to: - fear of loss of confidentiality disease process. 10.1 Potential Problem A) Ineffective coping social isolution due to: - Loss of control - Withdrawal of social supports Isolation in hospital. B) Loss of self esteem due to: - Guilt - Altered body image - Stigma of AIDS - Reception of self as continuous of others. C) Depression due to loss of: - Personal relationship Self esteem Physical potency - Control - Sexuality	feelings and emotions.Demostrate acceptance of disease	 Encourage patient to verbalize. Always be there for the patient. Observe for signs of anxiety tachycardia irritability restlessness insomnia Serve medication if ordered. Discuss with patients their fear. Encourage socialization and leisure time activities Refer for professional help. Form counselling and support group. Adopt a non-judgmental attitude. Observe for signs of depression: altered behavior disturbed sleep loss of ability to concentrate suicidal tendency. Give antidepressants as prescribed. Be available for patient/ family. Follow steps as in above problems.

Problems/Needs	Expected Outcome	Nursing Intervention
11. The need for adequate rest and sleep.11.1 Potential Problems Insomnia due to pain, discomfort or anxiety.	1. Able to obtain adequate rest and sleep while in Hospital. - has uninterrupted periods of sleep.	 Ascertain patient's usual sleeping pattern. Eliminate unnecessary noise/light especially during the night. Make patient comfortable. Serve night sedation/ medication as prescribed. Plan patient care.
12. The need to worship according to faith. Religious deprivation due to guilt, isolation.	Able to worship and be comforted by his religious beliefs.	 Inform patient of religious facilities available. Allow visiting nights by religious adviser if patient requires. Allow family to utilize religious rites if not contraindicated.

Problems/Needs	Expected Outcome	Nursing Intervention
 Needs associated with dying. Fear, anxiety and loneliness due to impending death, manner of death, loss of power and control. Potential Problem Physical problems associated with dying from AIDS. Due to pathophysiology of HIV disease. Inability to adjust to impending death due to fear. 	Appears calm and understands disease process. - reassurance and support given through various psychological stages associated with death.	 Be supportive. Allow patient to verbalize fear. Encourage significant others to visit. Arrange for visiting religious advisor if requested. Observe for suicidal tendency. Be there for the patient. Encourage patient to make final will. Observe for physical symptoms associated with dying. Pain Dysnoea Nausea/vomiting Immobility Open Fever Incontinence Cough Pressure sores Dysphagia Confusion Dehydration

APPENDIX II

APPLICATION INFECTION CONTROL & UNIVERSAL PRECAUTIONS (GENERAL)

1.	Linen:	-	No soaking in the ward or within the patient's vicinity. Used dry linen - to treat as any other ward linen. Soiled linen - do put in color coded bag, (Yellow?) before sending to linen room.
2.	Bed/or bed :	-	Clean with soap and water. Air-out in the sun.
3.	Mattress: lining. & pillow N. B.	- - -	to line with disposable water - proof wipe with soap and water after use. if heavily soiled/discard or burn.
4.	Stainless:	-	if heavily blood/mucus stained pour sodium hypochlorite 1:10 for 30 minutes. wash with soap & water. Send for sterilization if need be.
5.	B/P set & Stethesope :	-	soiled cuff - to soak in sodium hypochloride

1 : 10 for 30 minutes.

wash with soup &

water.

- Dry

- Pump & tube - wipe with alcohol 70% casing & diaphragm.

6. Thermometer: - single use.

- wash with soap & water.

- Wipe with alcohol 70%.

7. Waste products : - throw into the selvage or service room.

8. Clinical Waste: - dispose in color-cooded bag.

9. Sanitary pad: - wear glove when handling used pads.

- wrap with paper.

 Dispose in plastic bag before sending for incineration or dispose into color coded bag.

10. Drainage bags: - wear glove when handling.

11. Sharps: - dispose in puncture-proof container before sending for incineration.

			-	send for
				sterilization
Special procedures :	-	dressing -	use disposable sets	
	-	enema	-	use
				disposable set
	-	urine testing	-	use dipstick
				or clinitest
	-	R/T aspiration	-	use
				disposable
				glove
			-	dispose Ryle
				tube after use
	-	Items that are	-	wear heavy
duty glove				
		in Invasive	-	wash with
soap & water				
		procedures	-	wash with
soap & water				
			-	send for
				autoclave
	duty glove soap & water	duty glove soap & water	- enema - urine testing - R/T aspiration - Items that are duty glove in Invasive soap & water procedures	- enema - urine testing - R/T aspiration - R/T aspiration - Items that are duty glove in Invasive - soap & water procedures - Invasive - Invasi

Scissors:

use heavyduty glove wash with

soap & water

N.B. All Scopes ----soak in recommended

disinfectant eg. codex or preset.

Suction tubes - dispose after use in color-coded bag
 Oxygen tubes - dispose after use in color-use in color-

- Suction bottles - line with disposable bag

- dispose into disposable bag in color coded bag after use.

13. Specimen: - Place in plastic bag

- Labelled "biohazard"

14. When to use the following items?

14.1 disposable - while assisting invasive procedures eg. Endoscope.

apron/gown - when heavy splash are expected eg. conducting babies,

washing of placenta or heavily

contaminated items.

 nursing patient who is severely vomiting or heavy diarrhoe or having bad oozing wound. 14.2 disposable mask - nursing patient having infectious

respiratory

condition eg. TB.

14.3 glove disposable - when touching items contaminated by

blood and blood products or other

body fluids eg. urine, pus,

mucus.

- when taking blood, specimen.

*heavy-duty - when washing contaminated

items/linen.

15. Spillage - deal immediately

- pour sodium hypochloride pure for 5

minutes.

- wipe with absorbant paper or mop.

16. House keeping

o Mop or wipe area with soap and water.

o Mop

o soak in hot water & soap

o wash & dry upright.

APPENDIX III

APPLICATION OF UNIVERSAL PRECAUTION IN SPECIAL AREAS

MATERNITY HOSPITAL

1. Labour Room

- Staff of labour room must be informed should there be an HIV positive patient in labour.
- Delivery must be conducted by a doctor or trained experienced staff.
- Preparation of room
 - Ideally one room/cubicle should be reserved strictly for HIV infected mother.
 - As for as possible, equipment use should be disposable.
 - All unnecessary equipment should be removed from the room/cubicle.
 - Cover delivery bed with disposable water proof material.
 - Line a bucket with color coded plastic bag (to receive blood, liquar etc.).

2. Preparation of delivery trolley

• Keep a puncture proof container for sharps at the bottom shelf of the trolley.

3. Preparation of baby's resuscitation trolley

• Line the cot & trolley with water-proof material eg. incontinent pad.

4. Delivery attire for staff

Staff conducting the labour must wear disposable attire eg.

- long sleeve water proof gown
- plastic apron
- light zipped-up boots

- mask
- eye protection shields
- elbow length gloves

5. Precautions during delivery against splash

- a) Cutting of umbilical cord
 - apply 1st clamp
 - milk the cord towards the mother
 - apply 2nd clamp
 - cover the area in between the two clamps with gauze
 - cut the cord
- b) Episiotomy (cutting & suturing)
 - have sufficient light } to prevent accidental
 - apply proper technique } injuries

6. Care of new born

- Use disposable suction tubes
- "top & tail" baby in own cot
- line weighing scale with water-proof material eg. incontinent pad prior to weighing.

7. Care of placenta

Muslim patient

- Place placenta in colour coded plastic bag and give it to the relative with 2 pairs of glove.
- Educate relatives on precautions.

Non muslim patient

- Place in deep freezer
- Line freezer with colour coded plastic bag

8. Cleaning of the cubicle after delivery

- Use heavy duty glove, boot and plastic apron
- Place all body fluid in a bucket lined with colour coded plastic bag
- Cover spillage with sodium hypochloride pure for 5 minutes
- Mop area
- Wipe wall, bed, mattress, pillow trolleys with sodium hypochloride 1
 : 1 0 and put to air where applicable
- Linen and non disposable equipment refer application of universal precaution (general)

9. Post Natal Ward

- Mother and child to be nursed together
- Discourage breast feeding
- Toilet before each use
 - $\hbox{-} \qquad \hbox{wipe with pad damped in sodium hypochloride} \\$
 - 1:10
 - wipe dry with chinese paper

OPERATION THEATRE

Staff of operation theatre must be inform by the ward staff should there be an HIV infection patient coming for operation.

- Where possible put the patient last on the operation list.
- Minimal staff should be deployed during operation.

- Minimal equipments (operative aneasthestive should be used).
- Where possible use disposable items/sets.
- Ensure that there is enough slippers.
- Overboots for all personnels involved.

1. Utilization and attire of staff

There should be 2 teams.

a) clean team - wear long sleeve unsterile gowns.

 remain in exit room till operation is over.

b) dirty team - wear short cuffed sleeve sterile gown

 wear disposable gown boots & boot covers, goggle, disposable caps & mask.

- Do not leave O. T room till all cleaning is done

After operation - change completely the OT attire at the

door when leaving the room

- perform 3 minutes terminal scrub

- change into clean attire.

2. The patient - wheel patient into the theatre direct from the airlock.

wrap patients belonging eg pillow, blanket in a plastic bag & place it on the trolley.

 Wheel trolley (and patient's belonging) into the exit room.

N.B - if stained by body fluid, use high utility glove, wipe stain with sodium

hypochloride (pure) followed by soap and water before pushing the trolley into exit room.

After operation - clean patient off blood & secretions

- patients is nursed in the operation room till fully recovered

 when recovered send patient straight to the ward.

3. During Operation

- 3.1 abdominal pack
 - throw into kidney dish
 - dispose into a plastic bag after making sure that the total number is 10 (for easy counting)
 - throw into colour-coded bag after operation

3.2 used gloves

- throw into kidney dish
- dispose into plastic bag
- throw into colour coded bag before sending to CSSD

4. After Operation

- 4.1 Operative instruments/sets
 - place in colour coded bag
 - send to CSSD

4.2 Linen

- place in colour coded bag
- send to CSSD or laundry

4.3 Footwear

- use heavy duty glove
- wash in soap & wash
- rinse & dry

4.4 Anaesthetic & diathermy machines

- wipe with warm water & soap
- if soiled wipe with sodium hypochloride 1:10

4.5 Used gloves

- dispose in colour coded plastic bag
- send to CSSD

4.6 Trolley & iperation table

- wipe with soap & warm water followed by sodium hypochloride 1:10.

4.7 BLB mask, Mcgill forcep & laryngoscope blade

- wash with soap & warm water
- wipe with precept

4.8 OT Light

- wipe with soap & warm water followed by precept.

4.9 OT walls

- wipe walls up to hands' height with soap & warm water.

4.10 Floor & spillage

- pour spillage with pure sodium hypochloride for 5 minutes.
- Wipe/mop off area, followed by moping the whole floor with sodium hypochloride 1 : 10

4.11 Used rags & mop

- all rags/gauze used to wipe equipments or wall to dispose in colour coded plastic bag.
- Mop soak in sodium hypochloride 1 : 10 x 30 minutes
 - wash & dry

4.12 Staff involved in cleaning OT

- used heavy duty glove
- perform 3 minutes terminal scrub after cleaning is complete
- charge into clean attire

RENAL UNIT

- Relevant staff must be informed should there be an HIV infected patient.
- Use disposable sets eg. dialysis lines, bladder irrigation sets.
- Use disposable glove when connecting dialysis lines.
- Wipe machines with soap & water followed by sodium hypochloride 1 : 10 after each use.

1. Peritoneal Dialysis & Bladder Irrigation

- Separate disposable container to receive peritoneal effluent.
- Dispose effluent (peritoneal & bladder) into sewage.

2. Haemodialysis

- Separate patient into infectious area.
- Separate machine for the patient.
- Dialysis lines & dialysser to be single use.
- Wear plastic apron & disposable glove when needling or removing lines from patient.
- Cover puncture sites with water-proof dressing.
- Discard lines into colour coded bag.
- Discard AVF sharps into puncture proof containers.

APPENDIX IV

PROTOCOL FOR

1. Needle prick injury

- i) IMMEDIATELY bleed puncture area under running water.
- ii) IMMEDIATELY inform staff-in-charge e.g. sister, senior staff.
- iii) Complete accident/incident forms.
- iv) Send patient and affected staff blood for HIV testing.
- v) IMMEDIATELY see physician and counselors for assessment and counselling.

2. Splashes in mouth/eyes

- i) IMMEDIATELY, rinse area with plenty of water.
- ii) Follow ii v in protocol for needle prick injury.

3. Protocol for isolation nursing

- prepare room/area with barest necessary item.
- Follow universal precaution (general & specific).
- Inform relative reason for isolation & necessary precaution.
- Terminal disinfect the room when patients' discharge/died.

APPENDIX V

GUIDELINES FOR THE DISPOSAL OF DEAD BODIES DUE TO HIV INFECTION/AIDS

1. GENERAL PRECAUTIONARY MEASURES

- 1.1 All staffs/persons handling the body and the soiled linen should wear gloves.
- 1.2 Where there is possibility of injury to the fingers (e.g. cleaning the oral cavity) double gloves should be worn.
- 1.3 If there is danger of fluid spillage such as when disinfecting or washing the body, the attendant should wear in addition, a mask, waterproof apron and boots.
- 1.4 Further, they must wash their hands thoroughly with soap and water after the procedures.
- 1.5 If the relatives request to see the body, they should be allowed but must be strongly discouraged from embracing or kissing it.

2. SUPERVISION

Following notification, supervision for the handling, transport and disposal/burial of the dead bodies shall be by the district Health Inspector (for male and dead bodies) the Public Health Nurse (for female dead bodies) and the Medical Assistant in charge of the mortuary for death in the hospital.

3. DEATH IN THE HOSPITAL

- 3.1 Hospital Ward
 - 3.1.1 Notify the Medical Assistant in charge of the mortuary who will inform the District Health Officer of the death. The next-of-kin of the deceased is also to be

informed immediately of the death and that burial is required to be done within 24 hours. The assistance of the nearest police station should be quickly sought if the next-of-kin could not be directly contacted.

- 3.1.2 The body should not be handled more than its necessary.
- 3.1.3 Place the body in a translucent body bag and transport it to the mortuary room on a steel top trolley for subsequent disinfection.
- 3.1.4 Soiled linen should be handled as little as possible and with minimal agitation to prevent gross microbial contamination of the air and of persons handling the linen. All the soiled linen should therefore be bagged, properly labelled and sent to the laundry where they are first disinfected with sodium hypochlorite for 1/2 hour before being washed.
- 3.1.5 Stretcher trolley, bed and other fomites that come in contact with the body/body fluids must be immediately disinfected with sodium hypochlorite.

3.2 In the Mortuary

3.2.1 All clothings worn by the deceased are removed and soaked in sodium hypochlorite for at least 1/2 hours.

- 3.2.2 The body is first washed with sodium hypochlorite and then followed by rites of the respective religions. The washing is to be done by representatives of the religious department/relatives under direct supervision of the health personnel.
- 3.2.3 Cleaning of the oral cavity or other orifices should be done with the assistance of a sponge holder (forceps) or other suitable instrument.
- 3.2.4 All orifices should be plugged with cotton wool soaked in sodium hypochlorite.
- 3.2.5 The body is then wrapped in cloth. Bodies with open wounds due to accidents or with skin lesions should be wrapped in cloth and put in a translucent body bag. In the case of a Muslim, white cloth is used and the body further wrapped twice more in white cloth.
- 3.2.6 The body can then be transported in a coffin made of wood or metal for burial or cremation. This coffin must be of sufficiently solid construction to withstand load stresses.
- 3.3 The preparation area and any place which is contaminated or could possibly be contaminated with body fluids should also be disinfected with sodium hypochlorite.