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CHS 409 CLINICAL SKILLS I (3 units c)

STUDY UNIT.

The study units in this course are as follows.

MODULE 1: HISTORY TAKING

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Unit 2 Concept of interview in history taking

Unit 3 Approaches to history taking

Unit 4 Essential clinical history

Unit 5 Principles involved in history taking

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MODULE 2: PHYSICAL EXAMINATION

Unit 1 Definition of concept of physical examination

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CHS 409 CLINICAL SKILLS 1 (units 3c)

Module 1: History Taking
Unit 1: Basic Definition in History Taking

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UNIT 3: Approaches to History Taking

UNIT 4: Essential Clinical History

MODULE 2: PHYSICAL EXAMINATION

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UNIT 2: Qualities of a Good Examiner

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UNIT 4: Preparation and Administration of Intravenous Fluid

UNIT 5: Principle and Procedures of Aseptic Techniques in Clinical Skills

CHS 409 CLINICAL SKILLS I

Unit 1: Basic Definitions in History Taking

1.0 Introduction

In this unit, we shall discuss the basic definitions in History taking. It will also take account of how to carry out good history taking.

2.0 Objectives

At the end of studying this unit the learner would be able to:

- Understand basic definition of history taking
- Define what is history taking
- Carry our good history taking

3.0 Main Content

The art of obtaining an accurate history expeditiously can be acquired and developed with practice.

In history taking, the first task is to listen and observe, not only to obtain information about the current problem but also to understand the patient as a person and his life situation.

Amadi (1996) defined “history taking as an act of obtaining relevant information from a patient which is aimed at making provisional diagnoses of the patient's health status”.

When the history has been obtained, the first step has been taken towards diagnosis. The information must be appraised, taking into account the reliability of the patient as a witness. The relevant facts must be separated from irrelevant ones and evaluated objectively.

When the basic technique has been acquired, skill will improve with experience until an efficient method has been developed.

4.0 Conclusion

In this unit you have learned what history taking is all about. You should at this point be able to define history taking in your own understanding.

You have also realized that history is usually most valuable part of clinical study, as well as the fact that every man has history. Techniques of obtaining accurate history is said to improve with experience. The technique or procedure for history taking is discussed in unit 6.

5.0 Summary

This unit focused on the definition of history taking. It also discussed issues in history taking and how to carry out good history taking.

6.0 Tutor Marked Assignment

1. Give a simple definition of history taking
2. Sate the basic techniques involved in obtaining history taking

7.0 References/Further Reading

Amadi, N. (1996), *A Practical Approach to Clinical Studies for Medical and Health Students,* Emhai printing and publishing co, Choba, University of Port Harcourt.

Macleod, J., and Munro, J. (1986), *Clinical Examination* Seventh Edition. Church Livingstone, medical Div. of Longman group Ltd, U.K.

Unit 2 Concept of Interview in History Taking

1.0 Introduction

In this unit we shall discuss the concept of interviewing a patient, it will also consider the various questioning technique and types of questions to ask. We shall equally discuss materials required to conduct interview and principles and procedures involved in interview.

2.0 Objective

At the end of this unit, the student should be able to:

- Define the concepts of interview
- Understand the term structured and unstructured interview (Types)
- Materials for conducting interview
- Principles and procedure involved in interview.

3.0 Main Content

An interview is a process whereby someone (interviewer) asks another, in this context a patient (interviewee) ask series of questions and records the information supplied. (Eguavoen, Omorogbe and Omohan 2006).

In a typical interview situation, there is a interviewer and the interviewee. An interviewer is that individual who formulates and ask the question(s) while the interviewee is that individual that responds to questions asked.

3.1 Types of Interview

There are several types of interview. These includes structural, semi- structural and unstructured interview. Interview can be

structured or unstructured if the interview is in the form of a well-prepared list of questions and is carried out in a fairly controlled environment, then, it is said to be structured. In some cases, the interaction may be a little bit informal and the interview conducted in a casual manner, such is an example of unstructed interview.

3.2 Materials for Conducting Interview

The materials for conducting interview includes:

- Memo pad and pen
- Audio Tape Recorder
- Questionnaire

Memo pad and pen is very essential tool in conducting interview, because it helps in jotting down the facts of interview by the interviewer.

Electronic device like audio tape recorder is another important material because this aids a replay of recorded version, by so doing eliminates forgetfulness.

Questionnaire is yet another important material for conducting interview, and it comes handy in structured interview.

3.3 Principles and Procedure Involved in Interview

The general principle guiding the conduct of interview is such that the interviewer chooses and arranges an appropriate venue,

ensures everything is in place, ensures there is no interruption or disturbance during the interview session, and is also responsible for jotting down of facts or the audio recording.

A simple procedure is such that the interviewer introduces the topic, such introduction could/begin from the general to the I specific. He does the asking of the questions, in the process shows flexibility and sensitivity and fact; probes for details or explanation. And at the end articulates the facts and sum them up.

4.0 Conclusion

In this unit, you have learnt about the concept of interview, and should be able to define it. You have also learnt about the various types of interview and materials you require to conduct an interview. You have equally learnt about the principle and procedures involved in interview.

It is hoped that you should be able to now define interview, state the various types of interview, list the materials required for conducting and interview as well as the procedure for interview.

5.0 Summary

The unit focused on interview in history taking. It has also dealt with the various types of interview, the materials for interview and the principle and procedure involved in interview.

6.0 Tutor Marked Assignment

1. Define the terms structured and unstructured interview in your own words?
2. List three basic materials for conducting interview?

7.0 References/Further Reading

Eguavoen, A.N.T., Omorogbe, S.K,. and M, E, Omohan, (2006), *Sociology, An Introductory Text,* 2nd Edition, Lucosen publishing House Benin City.

Macleod, 3., and Munro, J. (1986), *Clinical Examination,* Seventh Edition, Churchill Livingstone, Medical Div. of Longman group Ltd. U.k.

Unit 3 Approaches to History Taking

1.0 Introduction

In this unit, we shall discuss approaches to history taking. We will also discuss establishment of appropriate rapport as well as the use of appropriate language and assurance of confidentiality in history taking.

2.0 Objective

At the end of this unit, the student should be able to:

- Understand how to approach the patient courteously, which will enhance the patient's co-operation.
- To establish appropriate rapport with a patient
- Design a way of building confidentiality on the patient

3.0 Main Content

It has been observed over time that patients often find it difficult to give appropriate information or perhaps suppress vital information of their health condition, often, these information are information that the consultant will need in his diagnosis, so in order to ensure that a patient gives an exact information; it becomes necessary to design a form of approach that will ultimately encourage the patient to open-up and give the necessary information without reservation: This can be achieved by.

3.1 Establishment of Appropriate Rapport

To establish an appropriate rapport on a patient involves creating of a friendly relationship with the patient, by simply greeting,

smiling, being sympathetic etc. All these will make the patient to respond accordingly and give appropriate information.

3.2 Use of Appropriate Language

The use of language is very important in communication especially in history taking. This is why a patients language background is sought before history commences so that if the patient is not lettered, and the consultant does not understand the patient language, an interpreter could be assigned to relate the information, otherwise the patient goes with grudges of not been understood, and therefore feels inadequate in whatever remedy that will be applied toward solving the health problems.

3.3 Assurance of confidentiality

The issue of confidentiality in clinical practice is not over-emphasized, no patient wants to be exposed. One of the ethics of medical and health profession is to ensure confidentiality of any patient, to this end, some documents especially the folders are inscribed confidential as a constant reminder not to divulge the health status of the patient.

In order to achieve this goal, the consulting room where the information is obtained from the patient is organized in such a way as to aid obtaining this information without necessarily exposing the patient to other workers in a clinical set-up. The process of history taking is one-on-one basis. By so doing confidentiality is built because it is only the consultant that knows the actual health problem of the patient.

4.0 Conclusion

In this unit, you have learnt about the approaches to history taking. You have also learnt about the use of appropriate language and how it can enhance understanding in history taking.

The importance of assurance of confidentiality in history taking has also been highlighted to your understanding.

5.0 Summary

This unit examined approaches to history taking. It also focused on establishment of appropriate rapport, the use of appropriate language and assurance of confidentiality in history taking.

6.0 Tutor Marked Assignment

1. Enumerate three reasons why a patient can suppress vital information.

2. What measures will you put in place to enhance co- operation from your patient in approaches to history taking.

7.0 Reference/Further Reading

Amadi, N. (2006), *A Practical. Approach to Clinical Practice, for Medical and Health Students* (2nd Edition), Emhai printing and publishing co. Choba, University of Port Harcourt.

Unit 4 Essential Clinical History

1.0 Introduction

In this unit, the focus shall essential clinical history. We will also discus the types of essential clinical history.

2.0 At the end of this unit, the student should be able to:

- Understand the meaning of essential clinical history
- Know the categories of essential clinical history
- Differentiate between essential and nonessential clinical history.

3.0 Main Content

An essential clinical history could be. described as those important information supplied by the patient, that could assist the consultant to gain insight into the patient's health problems.

It is called essential history because over time/ patients had gone out of their way to give information which is not necessary and therefore not essential. It has been observed that patients instead of giving a direct information concerning their health status, prefers to give information about their life style/ family background or social status. In this process, if the consultant is not patient enough to listen attentively to the patient's story "he may not be able to gather essential information that will assist him in diagnosis. Often time patients had gotten angry with the consultant, because he tried to stop them from giving irrelevant information which were not necessary, and had been called names from the patient.

3.1 Types of Essential Clinical History

Essential clinical history are grouped into nine broad categories, as can be seen below.

3.1.1 Demographic History

Demographic history includes personal particulars e.g name, address, sex, age, occupation, next of kin, height, weight, religion etc.

3.1.2 Present Health History (Current Illness)

This has to do with the immediate complaints of the patient, e.g the current illness that brought the patient to the health facility for treatment. In this regard information required is about the present illness, e.g what is the problems, how serious is the problems, when did it begin, what medication had been applied for the problems etc.

3.1.3 Past Medical History

This history is about whether or not the patent has had similar problems before, if yes, was the patient hospitalized, where and for how long, what form of treatment was given.

It should be borne in mind, however, that the diagnosis supplied by patient may not be correct. If medical records are not available the examiner may have to decide about past episodes on the patient description of symptoms and the circumstance at that time.

3.1.4 Ante-Natal and Birth History

This history is centred around the pregnancy, and child birth. If the woman is pregnant, determine if she is primigravida, multigravida or multipara. Get to know if there is any history of twin delivery, cesarean section, or possible death during child birth in the family. This information helps to ensure that a more adequate attention is given in that regard.

3.1.5 Mental and Developmental History

Obtain information on the developmental growth of the patient, because some early childhood impairments tends to re-surface in adulthood. In infants and children in particular, check the rate of their mental and physical development in relation to their age and in comparism to other children within their age bracket.

3.1.6 Immunization History

Obtain adequate information on immunization, get to know if the child completed the schedule of immunization.

3.1.7 Nutritional History

Information about nutrition has to do with the feeding habits, patterns and frequency of feeding, as well as its dietary

components required for the individual. Ask if there were situations that gave rise to a patient being kept on special diet, review the implication of such diets, if found hazardous to health, encourage the patient to adopt a possible alternative. We have discovered that most malnourished patients are victims/of personal beliefs, anchored mostly on religion e.g vegetarians.

3.1.8 Family History

The state of family income, low, medium or high determines the state of the well being of the individual. If patient's parents are dead, obtain information on the cause of their death. It is a well known fact that certain hereditary conditions play a predominant role in destabilization of most families. Such factor accounts for a possible presence of such a condition in a patient.

3.1.9 Social History

Individual's personal relationship with peer groups, if on the negative side, has an unquestionable potential influence on patient.

Patient's occupation and social environment may, like family influence, have profound repercussion on their health. Therefore

inquiry should be made about home, occupation, personal interest and habits.

Patient's leisure pursuits, such as the amount of physical exercise undertaken, and intellectual activities should not be over-looked, as such positive indulgence promotes mental and physical well-being.

Some habits acquired may have disastrous negative implications on health e.g food, tobacco, alcohol etc. most lung diseases and psychological instability have over a long period of time been attributed to tobacco smoking.

4.0 Conclusion

This unit has highlighted the basic understanding of essential clinical history, which you ought to know. You have also learnt about the differences between the essential and non-essential clinical history.

From this unit you have also been informed that essential clinical history are grouped into nine categories, as seen in the main text.

5.0 Summary

This unit focused on essential clinical history. It also dealt with the types of essential clinical history and the differences between the essential and non-essential clinical history.

6.0 Tutor Marked Assignment

1. Outline the nine categories of clinical history

7.0 References/Further Reading

Akinpelu, M.O. (2002), *Practical Skills in Primary Health Care Setting.* Big Olas (Nig) Priniter Ijebu-Ode.

Unit 5 Principle Involved in History Taking

1.0 Introduction

In this unit, we shall discuss the principle involved in history taking, the reasons for obtaining correct history and problems associated with incorrect history.

The basic medical or health history of a patient is taking generally with a view to assisting in proper understanding of the patient's present health status.

Certain principles must guide the individual who is obtaining the history of a patient, in order to ensure that an erroneous history is not

obtained which can lead to wrong diagnosis and wrong prescription and subsequent treatment.

2.0 Objective

At the end of this unit, the student should be able to understand the under listed objectives

- The basic principle involved in history taking
- Reasons why correct history must be obtained
- Problems associated with incorrect history

3.0 Main Content

The principles involved in history taking are as follows:

- You don't obtain history from a patient that is under the influence of alcohol.
- Obtain information from a relative or friend when the patient is unable to supply it because of immaturity, severe illness, senility or mental disturbance (insanity).
- Obtain an account from an eye-witness in a case of a patient who is unconscious.
- Don't try to obtain information from a patient where there is a suspicion that such a patient might surpress vital information, as a result of the environment or exposure eg in the presence of other patients.

- Timidity, guilt or fear of the disease may cause a patient to surpress vital information.

3.1 Reasons why correct history must be obtained

Correct history must be obtained, because it has been observed that some patient's tend to exaggerate symptoms in an attempt to secure the attention and sympathy of the consultant. On the other hand, most patients with some imperfect medical knowledge tend to give a diagnosis rather than an account of symptoms; such statements must not be accepted without reviewing their bases.

3.2 Problems Associated with Incorrect History

Incorrect history are misleading, often time it leads to wrong diagnosis and wrong treatment. Wrong application of treatment leads to wastage of drugs and eventual death.

4.0 Conclusion

In this unit you have learnt about the principle involved in history taking, and should be able to outline them. You have also learnt

about the reasons why correct history should obtained, as well as the problems associated with incorrect history.

5.0 Summary

In this unit we were able to see the interplay between the principles of "dos" and "donts" in history taking.

The reasons why correct vital history must be obtained are also highlighted as well as problems associated with incorrect history.

6.0 Tutor Marked Assignment

1. What do you consider as the basic problems associated with incorrect history.

7.0 References/Further Reading

Sorungbe, A.0.0. (1995), Federal Ministry of Health and National Primary Health Care Development Agency, *Standing orders for Community Health Extension Workers,* Training and manpower development division, Nigeria.

Unit 6 Procedures in History Taking

1.0 Introduction

In this unit we shall examine the procedures of techniques involved in history taking. In many aspects of clinical study, there are basic procedures an individual must adhere strictly, to be able to achieve the set objective. Procedures or techniques involved in history taking happens to be one of them.

2.0 Objective

On completion of this unit, the student should be able to:

- Understand the procedures in history taking

3.0 Main Content

It has been emphasized in the earlier units that it is essential that the patient is put at ease through a courteous and friendly relationship to enable the patient give adequate vital information. Therefore the first procedure in history taking is to establish an appropriate rapport (friendly relationship) with your patient.

It is also very important to let your patient express how he feels concerning his health without restriction. It is even encouraging to assist your patient in areas of difficulty in explanation of certain health feelings. Show sympathy and re-assure patients in distress condition.

Macleod and Munro (1986) advised that it is essential that record be made without delay basic facts about the history should be written down as it is given. This can be done as quickly as possible with little or ho interruption of the patient. Alternatively the consultant can jot down the main issues, especially in complicated cases, and later do the sequencing and elaborating of the fact.

When the history has been obtained satisfactorily, the first essential step towards diagnosis has been taken. The information must be appraised, taking into account the reliability of the patient as a witness. The relevant facts must be evaluated objectively; the logical analysis and interpretation of the evidence will usually lead to provisional diagnosis.

4.0 Conclusion

In this unit, you have learnt about the procedure or techniques involved in history taking, and should be able to express them.

5.0 Summary

This unit focused basically on the procedures involved in history taking.

6.0 Tutor Marked Assignment

1. Enumerate at least three procedures involved in history taking.

7.0 References/Further Reading

Macleod, J., and Munro, J., (1996) *Clinical Examination,* Seventh Edition, Churchill Livingstone, Medical Div. of Longman group Ltd, U.K.,

Module 2: Physical Examination

Unit 1: Definition and Concept of Physical Examination

10. Introduction

In this unit, we shall discuss the basic definition of physical examination, and the reasons for conducting physical examination.

The concept of physical examination basically is anchored on the fact that not all diseases or ailments are internal, very many diseases are found externally, and even the ones found internally has clinical manifestation on the physical body. Therefore it becomes necessary to look out for them.

2.0 Objective

At the end of this unit, the student should be able to understand the following objectives.

- The basic definition of physical examination
- The reasons for conducting physical examination

3.0 Main Content

Physical examination is defined as an act or a process of screening for features of diseases in a patient from head to toe.

For an examiner to accurately diagnose an ailment, it is pertinent that the fellow should be familiar with the range of normal signs before abnormalities can be confidently recognized. This is why Merril C. Sosman in Boston, summarized physical examination as "seeing only what you look for, and recognizing only what you know"

The individual carrying out a physical examination is entirely and solely responsible for seeking out the features of disease and must not expect the patient to draw attention to them. Occasionally and for a variety of motives according to Macleod and Munro (1996) patients will not reveal what they regard as stigmata of disease, but as a rule failure to recognize these signs are due to careless or inadequate examination.

4.0 Conclusion

In this unit, you have learnt the definition of physical examination, you should by now formulate your own definition base on your understanding of the passage. You have also learnt why physical examination is conducted on a patient.

5.0 Summary

This unit focused on the definition and concept of physical examination, it also discussed why physical examination is necessary and why it should be carried out in a patient.

6.0 Tutor Marked Assignment

1. In your own understanding define the concept of physical examination.

7. References/Further Reading

Macleod, J., and Munro, 3. (1996) *clinical examination,*

Seventh Edition, Churchill Livingstone, Medical Div of

Longman Group Ltd, UK.

Unit 2: Qualities of a Good Examiner

1.0 Introduction

This unit shall discuss basically the qualities of a good examiner. Certain qualities must be possessed by a good examiner, according to Oruamabo (1995), an examiner must exhibit a true exemplary qualities, which must be identified in him, to enhance the patient to have confident in making himself available to the examiner for examination.

2.0 Objectives

At the end of this unit, the student should be able to understand such qualities which must be possessed by the examiner'.

3.0 Main Content

It has been observed that most patients find it difficult to expose their bodies for examination. Part of this problem stems from the way and manner some examiners appear. No patient wants his body to be unnecessarily perused and touched by an un-organized examiner.

An examiners appearance, utterances, reactions etc. is a true reflection of whom the examiner is, and therefore if on the negative side, does not encourage a patient to submit for examination.

a) To this end, therefore, a good examiner must be in a right mood (happy).

b) Look composed, calm and competent.

c) Must be neat, show love and understanding.

d) Must avoid expressions of disgust, alarm, de-taste or any other negative reactions resulting from coming in contact with filthy things etc.

e) Ensure a strict adherence to privacy as most patients will not co-operate if they are unnecessarily exposed.

4.0 Conclusion

In this unit you have learnt about the qualities of a good examiner and should be able to adopt them. It is a known fact that

quality attributes of an examiner accounts for co-operation on the part of the patient. And this can be identified in him by the way and manner he handles issues in relations to physical examination.

5.0 Summary

This unit examined the qualities of a good examiner which is essential in physical examination. It equally outlined the qualities one after the other to enhance understanding.

6.0 Tutor Marked Assignment

1. What could possibly discourage a patient from co- operating in physical examination?

7.0 References/ Further Reading

Oruamabo, J. (1995) *Qualities of a Good Examiner* Lecture Notes on Clinical Skills, College of Health Science and Technology, Port Harcourt.

Unit 3: Materials for Physical Examination

1.0 Introduction

In this unit, we shall outline the various materials used for physical examination. To achieve a high degree of success in physical examination, it is convenient to have all the examining materials made available in the consulting room and consideration has to be given to the condition under which the physical examination is conducted.

2.0 Objective

At the end of this unit, the student should be able to understand the under-listed objectives.

- To enumerate the materials for physical examination
- To know when to apply such materials.

3.0 Main Content

A number of materials are used in physical examination. Some of these materials are diagnostic and therapeutic materials which aids the examiner in eliciting information in the course of physical examination.

In a Nutshell, some of the materials are as listed below.

* Diagnostic set
* Blood Pressure apparatus — Sphygmomanometer, Stethoscope
* Thermometers — Oral, Rectal
* Spatula — Metal, Wooden
* Speculum
* Laryngoscope
* Phargngoscope

* Pen Torch
* Weighing Scale
* Charts
* Hand Gloves
* Examination Couch
* Forceps
* Antiseptic lotions/ swabs/ Lubricants
* Ophthalmoscope with auriscope etc.

4.0 Conclusion

In this unit, you have learnt about various materials used in conducting physical examination. You should be able to identify the various materials and their uses.

5.0 Summary

High degree of success in physical examination depends on the availability of materials; This is why this unit outlined the various materials for physical examination, so that the learner can identify and know how to use them.

6.0 Tutor Marked Assignment

1. Enumerate at least ten materials for conducting physical examination.

7.0 References /further Reading

Amadi, N. (2009) *Parameters in Physical Examination* Lecture Notes on Fundamentals of Medical Practice, College of Health Science and Technology, Port Harcourt.

Unit 4: Principles and Rules Involved in Physical Examination

1.0 Introduction

In this unit, we shall examine the principles and rules involved in physical examination. Physical examination is one such examination that borders on the integrity of both the examiner and the patient. And it is because of these that certain principles and rules must be adhered to in its conduct.

2.0 Objective

At the end of studying this unit, the learner would be able to know the principles and rules involved in physical examination.

3.0 Main Content

Ideally in physical examination there is the principle of ensuring your patient is made to be very comfortable before commencement.

It is salutary to start from one region especially the head region in general physical examination. Then in a sequential order examine the other areas.

The general rule of I.P.P.A is to be adopted in physical examination. I.P.P.A. means

I - Inspection: (observation by sight): This rule says carry out physical examination by mere close perusual of the patient; this method will highlight congenital abnormalities, colour, posture, spontaneous movement etc.

P - Palpation: (observation by Touch): This method will afford the examiner the opportunity to feel a hard mass under the skin/ which might possibly be a tumour. As a result of palpation the patient may complain of pain on touching an area of the body.

P - Percussion: (observation by sound): In this case tapping with the finger over a cavity will indicate the density of the under laying tissues e.g. posterior chest wall in a pneumonic patient can indicate the localized area of lung involved.

A - Auscultation: (observation by sound): This rule involves the use of stethoscope using a stethoscope, the heart/breath sounds can be heard, as well as abnormalities associated with the cardiovascular and respiratory region.

4.0 Conclusion

In this unit you have learnt about the principles and rules involved in physical examination. From the understanding in this unit, it's been observed that the patient's comfort is absolutely necessary.

It is also favoured to start general examination from one region and sequentially progress, than haphazardly.

5.0 Summary

This unit focused on the principles and rules involved in physical examination.

Physical examination requires some level of integrity. Its principles and rules must be followed strictly, as outlined in the course of the study.

6.0 Tutor Market Assignment

1. What do you understand as the IPPA rule in physical examination?

7.0 References /Further Reading

Amadi, N. (2003) *A practical Approach to Clinical Practice, for Medical and Health Students.* Emhai Publishing Co. Choba Uniport.

Unit 5: Procedure in Physical Examination

1.0 Introduction

In this unit, we shall discuss the procedures involved in physical examination. It will also emphasize the issue of compromise in physical examination because It would not be practicable for even the most professional to carry out examination in a patient with some degree of compromise.

2.0 Objective

At the end of this unit, the student should be able to:

- Understand the procedure involved in physical examination
- Not compromise with any patient at the expense of the profession.

3.0 Main Content

Before discussing the basic procedures, consideration has to be given to the condition under which the physical examination is conducted.

Privacy is essential and this usually constitutes no problem in the home or the consulting room.

In some families, relatives may feel it is their duty to be present in numbers which may embarrass the patients and the examiner. The tactful dismissal of all, or all but one, is desirable. In a hospital ward, screens must be drawn round the bed before the examination begins. When necessary, steps should be provided for easy access to a high couch in the consulting room. Comfort is important and encourages adequate relaxation.

Positioning of the examiner counts so much in any examination, as any awkward position impairs perception; therefore you can adjust

your examining couch to any reasonable height to ensure the comfort of the patient. Illumination must be good, exposure of the area to be examined must be adequate but not to an extent that might unnecessarily embarrass the patient.

While privacy is important, the presence of a relative or nurse is often desirable and is essential when a rectal or vaginal examination is performed by a male examiner to avoid embarrassment.

Let your patient be well-informed as you progress, remember to relate your findings to the patient appropriately, and if you have missed any portion, kindly explain and politely seek for permission to examine the portion.

Other aspects of procedure include.

- Preparation e.g. Hand washing
- Explanation of purpose to the patient, this may be advisable mostly if examination commences at a point remote from the site of complaint.

- General observations for:

i. State of alertness and temperament

ii. Signs of physical or mental disability

iii. Signs of chronic illness

iv. State of cleanliness

4.0 Conclusion

In this unit, you have learnt that it is absolutely clear that physical examination follows a procedural approach; which can not be compromised. Anything short of that is unethical

5.0 Summary

This unit examined exclusively the procedure in physical examination. It also dealt with the issue of compromise which is seen as a human factor.

6.0 Tutor Marked Assignment

1. Name at least four factors necessary in procedure for physical examination.

7.0 References / Further Reading

Houghton, M., and Parnell, 3.E, (1969), *Practical Procedure for Nurses*. Williams and Wilkins Comp. Baltimore.

Module 3: Measurement of Vital Signs

Unit 1: Meaning / Estimation of vital signs

1.0 Introduction

In this unit, we shall discuss the measurement of ital signs. It will also highlight the meaning of vital signs and how to estimate vital sings in a patient. We will equally consider the abnormalities associated with various vital signs.

2.0 Objectives

At the end of this unit, the student should be able to;

- Understand the meaning of vital signs
- How to measure vital signs

3.0 Main Content

Vital signs could be described as the necessary indication in a patient which helps to determine the health aspects of the patient.

Vital signs in a patient consist of measurement of temperature, pulse, respiration (TPR) and estimation of blood pressure.

3.1 Temperature Taking

Combs (1976) defined temperature as the degree of intensity of heat especially as measured with a thermometer. According to Akinpelu, temperature is a degree of hotness or coldness within a substance which can be measured against a standard scale. She further says regulation of body temperature is accomplished principally through thermo regulatory centre located in the hypothalamus of the brain.

3.1.1 Temperature Sites

An individual's body temperature can be obtained either from the:

a. Month
b. Rectum
c. Groin
d. Axilla

The normal body temperature is 37℃, but any readin g which ranges between 36.5℃ and 37.5℃ (97.7° F. to 99.5 ℉) is considered to be normal. Amadi (2003).

Surface temperature is 1/4 ℃ less in intensity th en internal temperature e.g Axilla and Rectum.

The highest temperature is found mostly between the hours of 5-8 pm and the lowest between 2 and 6 am, as observed by Ross and Wilson (1970).

Temperatures are classified according to their intensity from collapse to hyper pyrexia.

3.2 Pulse Rate

The mechanism of pulse is the wave of expansion and contraction of the left ventricle which forces a volume of blood through the arterial wall into the aorta.

Pulse can be felt at any point where an artery can be pressed gently against a bone (Pressure point). The most convenient point to take the pulse is the anterior surface of the wrist. However, other points include temporal, facial, groin, carotid, femoral etc.

Werner (1979) believes that the best time to take an individual's pulse and arrive at a fairly accurate result is when the fellow is at rest; otherwise a few alterations may be noticed. Conditions that may give rise to such alterations are namely positioning, sex, age etc.

However the normal pulse rate is said to be within the under listed range

* Adults 60 - 80 beats per minute
* Children 80 - 100 Beats per minute
* Infants 100 - 140 beats per minute
* Neonates 140 and above

3.3 Respiratory Rate

Respiration is described as the inspiration and expiration of air brought about by a collection of nerve cells in the respiratory centre of the medulla oblongata.

Normal respiration should be quiet regular and rhythmical. There are situations where there can be normal increment in respiratory rate. This occurs during exercise, excitement, emotional out burst or decrease in atmospheric pressure. Normal decrease occurs in sleep, rest or fatigue.

3.3.1 Normal respiratory Rate

* Adults 14 - 20 breaths per minute
* Children 20 - 30 breaths per minute
* Infants 30 - 40 breaths per minute
* Neonates 40 and above

3.3.2 Abnormalities Associated with Respiration

Excessive rapidity in respiration may be brought about by disease of the lungs and air passage, febrile conductions, heart diseases, hemorrhage and cranial pressure, coma due to toxaemia, as well as administration of respiratory depressive drugs e.g. morphia and barbiturate overdose.

3.4 Estimation of blood pressure

Blood pressure is that pressure which is exerted on the arterial wall as a result of the total out-put of blood from the heart into circulation.

The brain cells and other vital organs in the body are constantly fed with oxygen which is brought about by this pressure. When the pressure is low, the brain cells suffer from lack of oxygen. Excessive high pressure can result in the rupture of the blood vessels in the brain, as is often the case in cerebral hemorrhage. It is therefore essential that a regular check should be observed to ensure that it is maintained at a normal limit.

3.4.1 Factors Responsible for High Blood Pressure.

In the recent years, a number of factors have been identified as pre-disposing causes of high B.P some of them are:

* **Environmental factors**

This consists of day-to-d ay interactions of an individual which brings stress, thinking as well as other parameters encountered in a place of abode, e.g. poverty, broken home unemployment etc., all these can lead to high blood pressure.

* **Elasticity of Arterial walls**

The constriction of the artery walls inhibits blood pressure. This situation eventually leads to high blood pressure as is often found with patents with severe rheumatoid arthritis and severe varicose veins.

* **Arteriosclerosis:** This is a state where the arteries or veins are either thickened or hardened as to reduce the normal pressure in them. A reduction in pressure, leads to an accreted blood pressure.

3.5 Normal blood pressure

The normal blood pressure is given as 120/80 mmHg (systolic/ diastolic).

4.0 Conclusion

In this unit, you have learnt about the measurement of vital signs, and should be able to define it. You have also learnt about the estimation of vital signs and various aspects of vital signs.

It is hoped that you should be able to state the various aspects of vital signs, viz: Temperature, pulse and respiration and to estimate blood pressure, as well as enumerate the normal and abnormal factors associated with vital signs.

5.0 Summary

This unit focused on measurement of vital sings. It also dealt with the various aspect of vital signs and outlined the normal and abnormal factors associated with vital signs.

6.0 Tutor Marked Assignment

1. What is the importance of measurement of vital signs?

7.0 References /Further Reading

Amadi, N. (2003), *A Practical Approach to Clinical Practice for medical and Health students.* Emhai Printing and

publishing co Choba. Uniport.

Combs. P.C.M. (1976) *Illustrated medical Dictionary* Consolidated Book Publishers, New York.

Ross, J.S. and Wilson, K.J.W. (1970) *Foundations of Nursing and First Aid,* Fifth Edition. Churchill Livingstone Medical DIV. of Longman Group Ltd, U.K.

Werner, D. (1979) *Where there is no Doctor,* Macmillan Publishers Ltd., London.

Unit 2: Materials for Measurement of Vital Signs

1.0 Introduction

In this unit we shall discuss the materials for measurement of vital signs. Measurements of vital signs are technical skills that require materials or instruments to be able to measure them. Its measurement accuracy depends on materials and the skillful handling of the monitor.

2.0 Objective

At the end of this unit/ the student should be able to:

- Name the materials for measurement of vital signs

3.0 Main Content

A number of materials are in use in the measurement of vital signs, some of them are as follows.

3.1 Clinical Thermometer — oral
— Rectal

Different types of thermometer are in use for special purposes, but we are concerned with the use of clinical thermometer.

As the name implies/ this is the type that is used in the clinic, hospitals and maternities to obtain the patient's temperature.

There are two types of clinical thermometer namely oral and rectal. One considerable importance a clinical thermometer has over others is that it is self-registering and readable in a suitable light after removing it from the

In oral thermometer, the centigrade scale ranges from 5 ℃ to 42 ℃. Each line represents I. unit, whereas in Fahrenheit

scale. It ranges from 94 ℉ to 108 ℉ where each li ne represents 2 units.

Most clinical thermometers are, however, of dual scale which means they are graduated both in ℃ and ℉. O ne remarkable feature of the rectal thermometer is the blue or red dot at the tip of the bulb.

3.2 Blood Pressure Apparatus

According to Bur-ton (1976), there are two main clinical instruments which are used to determine blood pressure,

* Sphygmomanometer
  - Aneroid
  - Mercurial

* Stethoscope
  - Dual = Diaphragm with bell
  - Single = bell or diaphragm only

4.0 Conclusion

In this unit you have learnt about the materials required for measurement of vital signs. Measurement of vital signs requires clinical materials, however we have just discussed two out of a lot other materials in use for vital signs.

5.0 Summary

Two most essential materials in measurement of vital signs had just been highlighted.

It is of importance that these materials be used skillfully to be able to achieve results.

6.0 Tutor Marked Assignment

1. Name two outstanding materials for measurement of vital signs.

7.0 References/Further Reading

Burton, J.L, (1976) *Aids to medicine for Nurses* Churchill Livingstone, Medical Div. of Longman Ltd. U.K.

Unit 3: Concept and Reasons for Tepid Sponging

1.0 Introduction

In this unite we shall discuss the concept and reasons for tepid sponging. Tepid sponging or tepid bathing as its generally known clinical skill aimed at resuscitating or reinvigorating an individual.

It is a practice, often time people look down upon, but proved to be very efficient in the management of high grade fever.

2.0. Objective

On conclusion of this unit, the student should be able to:

- Understanding the meaning of tepid sponging
- State the reasons for tepid sponging

3.0 Main Content

Tepid sponging is simply defined as an act or a process of the application of tepid (Luke Worm) water to the body of an individual with high pyrexia from head to toe.

3.1 Reasons for Tepid Sponging

Fever or pyrexia is a medical condition that calls for emergency. If this condition is not carefully handled, it could result to some complications or even death. Therefore once fever is noticed, especially high grade fever, efforts should be made to bring it under control to prevent further damage, more so when children are involved. High fever, if not controlled results to convulsion, shock, anorexia, brain damage etc.

The basic reasons for tepid sponging are:

- To reduce the intensity of fever in a patient

- To resuscitate the patient
- To prevent complication
- To ensure the patient is brought to a level where he could undertake treatment without reaction
- To prevent death.

Conclusion

In this unit, you have learnt about the concept and the reasons for tepid sponging. The skill of Tepid sponging even though very simple has proved to be the very first step in the management of grade fever.

Therefore every individual should strive to undertake simple skill, during the onset of high grade fever.

5.0 Summary

This unit examined the concept of tepid sponging. It also focused on the reasons why tepid sponging has to be carried out in a patient as well as the advantages of tepid sponging.

6.0 Tutor Marked Assignment

1. State five reasons why tepid sponging should be undertaken as a clinical skill.

7.0 References / Further Reading

Jelliffe, D.B. (1974) *Child Health.in the Tropics* Edward Arnold Ltd., London.

Unit 4: Materials for Tepid Sponging

1.0 Introduction

In this unit we shall discuss the materials used for tepid sponging, we shall also outline the necessary materials to enable the student identify them.

2.0 Objective

This unit is designed to ensure that the student:

- Understands the materials for tepid sponging.
- Identifies the materials during the course of demonstration.

3.0 Main Content

The materials for tepid sponging are as listed below

- An examination couch or bed
- Bed cover
- Mackintosh
- Hand towel
- Large size towel
- Thermometer
- Sterile tray
- Sterile bowel with cover
- Tepid water

4.0 Conclusion

In this unit, you have learnt about the materials for tepid sponging. From the list above, it is very clear that the materials required to conduct tepid sponging is such that can not be too expensive to obtain. To the end, therefore, refusal to conduct tepid sponging on account of materials cannot be entertained.

5.0 Summary

This unit focused on the materials for carrying out tepid sponging. It also outlined the materials for easy identification.

6.0 Tutor Marked Assignment

1. List any five materials for conducting tepid sponging.

7.0 References/ Further Reading

Jumbo, G. (1998) The Process of Tepid Sponging Lecture Notes on Health Care Delivery/ College of Health Science and Technology, Port Harcourt.

Unit 5 Procedure and Principles Involved in Tepid Sponging

1.0 Introduction

In this unit we shall examine the procedure and principles involved in tepid sponging. The conduct of tepid sponging on an individual is guided on a number of principles and a laid down procedure. This skill is carried out on an individual and therefore such an individual require some degree of careful handling and respect.

2.0 Objective

This unit is designed to inculcate the principles and procedure of Tepid sponging in students. .

3.0 Main Content

Before the commencement of Tepid sponging the examiner must ensure that the materials are assembled and the stage ready for the patient.

It is absolutely necessary as well to commence tepid sponging from one region e.g. the head, and in that order gradually go down to the extremities.

Determine the intensity of the fever on arrival of the patient, with the clinical thermometer as to decide whether or not to carry out Tepid sponging on the patient.

Basic procedure includes

- Assemble all the materials for the conduct of tepid sponging.
- Spread the mackintosh accordingly.
- Spread the large towel on top of the mackintosh
- Explanation of purpose to mother and soliciting for the mother to undress the child and help to put the child on the bed.
- Soak the hand towel in the tepid water and squeeze the water out a little

- Gradually rub the hand towel with the tepid water on the body of the patient
- The duration of this exercise depends on the intensity of fever.

Let the patient remain exposed for at least 30 minutes, after which temperature can be taken to determine if fever has gone down. If yes, institute actual treatment.

Note: If patient feels cool, in the course of tepid sponging stop and insulate.

4.0 Conclusion

In this unit, you have learnt about the procedure and the principles of tepid sponging and should be able to state them.

It is a skill that requires a lot of patient on the part of the examiner, as he has to monitor the gradual drop in temperature of the patient.

5.0 Summary

This unit focused on the procedure and principles involved in tepid sponging. It also highlighted the step-by-step approach involved in tepid sponging.

The level of fever should first be ascertained as to know when it has reduced. The basic procedure must be followed as outlined.

6.0 Tutor Marked Assignment

1. State step - by - step approach in conducting tepid sponging

7.0 References / Further Reading

Akinpelu, M.O (2002) *Practical Skills in Primary Health Care Setting,* Big Olas (Nig.) Printer, Ijebu-Ode.

MODULE 4: ASPETIC TECHNQUES IN CLINICAL SKILLS

Unit 1: Definitions and Concept of Aseptic Techniques.

1.0 Introduction

In this unit we shall discuss the definition and the concept of aseptic techniques. The concept of aseptic technique is a conscious effort made by health workers to ensure an all round free Pathogenic micro - organism both from the environment, as well as the materials used in the discharge of clinical duties.

2.0 Objective

At the end of this unit, the student should be able to:

- Understand the meaning of aseptic technique
- understand the reasons why aseptic technique is practiced in health faculties.

3.0 Main Content.

The practice of aseptic technique is built on the premise that pathogenic micro - organisms are abound within the health facility.

In order to control or possibly eliminate them, the act of practicing aseptic techniques in every aspect of health delivery, therefore becomes necessary.

By simple definition, the concept of aseptic technique could be described to mean the process of ensuring that all aspects of health delivery services are rendered with utmost sterility.

4.0 Conclusion.

In this unit you have learnt about the definition and the concept of aseptic technique. By now you should be able to define what

aseptic technique is all about and why it is practiced in health facilities.

5.0 Summary

This unit focused on the basic definition and the concept of aseptic techniques, it also dealt with the reasons why aseptic techniques is very important in health facilities.

If all aspects of health care delivery system are practiced with sterility, then there will be a total eradication of the incidence of sepsis found within the health facility.

6.0 Tutor Marked Assignment.

1. What is the basic reason for practicing aseptic technique?

7.0 References /Further Reading.

Amadi, N. (2001) *A practical Approach to Clinical Practice; for Medical and Health Students:* Emhai Printing and Publishing Co. Choba, University of Port Harcourt.

Unit 2: Instruments and Sterilization Process

1.0 Introduction.

In this unit we shall study the instruments and sterilization process. We shall also consider the physical and chemical sterilizing agents used in the health facilities.

2.0 Objective

At the end of this unit, the student should be able to;

- Understand the instruments use in sterilization
- Understand the process of sterilization.

3.0 Main Content.

Sterilization is defined as the process of rendering all articles free from all living micro - organisms. Sterilizing agents can be grouped into two.

- Physical sterilizing agents.
- Chemical sterilizing agents.

Physical sterilizing agents can further be sub - divided into sunlight, wind, heat etc.

Heat can either be dry or moist. An example of dry heat is hot air oven.

3.1 Hot Air Oven

This method consists of enclosed oven where the articles to be sterilized are subjected to the heated air.

Time of exposure and temperature depends on article to be sterilized. Hot air oven is best for glassware eg glass syringes, but should in no way be recommended for plastics/ Rubber or textile, as an attempt will seriously damage them.

3.1.1 Moist Heat.

(a) Boiling. This method is often the practice in the clinics and health center where large scale sterilization is not required. It ensures a complete immersion of items to be sterilized in water e.g. Kidney dishes, forceps, gallipots etc.

It is timed from the point of boiling about 100℃. It is often advisable that sodium carbonate (washing soda) be added *to* help prevent rusting of metallic instruments.

(b) Steam pressure

The examples of steam pressure apparatus s are autoclave I steam sterilizer.

The underlying principle of steam sterilization generally, is that an increase in pressure of steam brings about a rise in temperature.

Therefore, the length of time required to sterilized ides at whatever temperature depends on the pressure applied.

3.2 Chemical Sterilizing Agents.

There are a good number of chemical agents available in the drug and chemical manufacturing companies, all over the world. Some of them are as follows

- Hibitane
- Dettol
- Cetalon
- Formalin gas
- Milton
- Savlon
- Acriflavin
- Methylated spirit

Articles to be sterilized in chemical fluids must be rinsed in cold water, washed in hot soapy water and scrubbed with brush to remove all organic materials. It has to be rinsed again in cold water, complicated instruments should be dismantled to ensure a thorough penetration to all parts, then all should be immersed in the fluid which must be an inch above all instrument. Removal of instrument should be by the use of sterile forceps.

4.0 Conclusion

In this unit you have learned what sterilization island that of definition of sterilization, as a process of rendering all articles free n

all living micro - organisms; you have also realized that sterilization involves the use of physical and chemical sterilizing agents.

You should at this point define sterilization in your own words and be able to classify the sterilizing agents into the physical and Chemical agents.

5.0 Summary

This unit has focused on the importance of sterilization in clinical set - up. The main objective is to reduce the incidence of pathological micro -organism.

Sterilization involves the use of physical and chemical sterilizing agents.

6.0 Tutor Marked Assignment.

1. Name three physical and three chemical sterilizing agents. You have studied.

7.0 References/Further Reading.

Akinpelu, M.O. (2002), *Practical Skills in Primary Health Care Setting.* Big Olas (Nig) Printer, Ijebu- Ode

Unit 3: Preparation and Administration of Salt, Sugar Solution.

1.0 Introduction

In this unit we shall discuss the preparation and administration of salt, sugar solution. We will also examine the requirement for preparation of salt, sugar solution.

2.0 Objective

At the end of studying this unit, the learner would be able to understand;

- The preparation of salt, sugar solution

- How to administer salt, sugar solution.

3.0 Main Content

When there is an on -set of passage of watery stool, more frequently than normal, about 2- 5 times a day, and usually, lasting for one to four days, what readily comes to mind, before any other form treatment is the administration of salt, solution (SSS). This is aimed at preventing dehydration and replacement of fluids end electrolyte already lost.

Oral Rehydration therapy (ORT) which is a form of treatment of plain diarrhea from the mixture of salt, sugar solution is based on the scientific knowledge that when the gut is infected, some absorption still takes place. When a solution of salt and sugar prepared in the right proportion is given, the sugar aids the re-absorption of salt and water back into the body, therefore preventing dehydration. This application has proved to be very safe and highly effective in all ages according to Nigerian Medical Association booklet entitled

“Acute Diarrhea /ORT (1995).

3.I Requirements for Preparation of Salt, Sugar Solution SSS)

To prepare the SSS, the following under listed items are required.

- 1 sterile empty beer bottle or 2 sterile empty mineral bottles 29cl)
- Clean potable house hold water, which could have been boiled and allowed to cool, in a container with cover.
- A sterile bowel for mixing of salt, and sugar
- Cubes of sugar or granulated sugar in a container
- 3ml measuring tea spoon
- 1 desert spoon for mixing
- 1 funnel
- 1 cup to administer solution
- 1 sterile Napkin and soap for washing and drying of hands.

3.2 Preparation of Salt, Sugar Solution.

- Create an appropriate report.
- Explain the purpose and procedure to the patient or child's mother
- Wash hands thoroughly with soap and water and dry hands.
- Fix the funnel into the bottle and pour in the clean water, until it gets to the neck of the beer bottle or measure approximately 600mls of water.

- Pour back the measured water into the bowel
- Add 5 cubes of sugar or 10 level 3mls teaspoon of granulated sugar.
- Add 1 level 3ml teaspoon of salt into the water in the bowel.
- Then use the desert spoon to mix all the contents very well.
- Pour some quantity of the mixture into the cup and administer with the teaspoon to the child or for adults drink freely.

Note: By the end of the day or 24 hours from the time of mixture, throw the first mixture away and mix another one, if patient continues to pass watery stool, continue to administer the mixture and gradually introduce solid food as problem improves.

4.0 Conclusion

In this unit, the students have learnt about the preparation : salt, sugar solution, as well the requirements and administration of the solution.

5.0 Summary

This topic has informed the student that an onset of passage watery stool should first be tacked with salt, sugar solution store any other form of treatment.

It is also from this unit, that the student understands the scientific knowledge behind the preparation and administration of SSS.

6.0 Tutor Marked Assignment

1. Briefly outline the scientific knowledge behind the preparation and administration of salt, sugar solution.

7.0 References /Further Reading

Amadi, N. (2003), *A practical Approach to Clinical Practice, for Medical and Health Students'* (2nd Edition) Emhai printing and Publishing Co. Choba, University of Port Harcourt.

Nigerian Medical Association Booklet (Acute Diarrhea ORT 1995).

Unit 4: Preparation and administration of intravenous fluid.

1.0 Introduction

In this unit we shall discuss the preparation and administration of intravenous fluid. It will also consider the types of intravenous infusion as well as the materials for administration of intravenous infusion. We shall equally discuss the procedure involved in the administration of intravenous infusion, and finally we will take a look at the complications or dangers of intravenous infusion.

2.0 Objective

At the end of this unit, the student should be able to:

- Define intravenous infusion.
- Understand the types of intravenous infusion.
- Understand the complications or dangers involved in intravenous infusion.

3.0 Main Content

Fluid lost from the body occurs in very many ways, and each time it occurs, efforts are made to quickly replace them, or implications will set in. This process of quick replacement resuscitates the patient.

Intravenous infusion is defined as an act of introducing fluids, through the vein into the circulatory system of the body.

Essentially the aim of administering an infusion is to combat dehydration, and maintain the body's electrolyte and water balance.

Burton (1976) emphasizes the use of infusion as that of the replacement of abnormal loses of body fluids and the correction of electrolyte depletion. However, he warned that patients with renal or cardiac disease require special care.

Houghton and Parnell (1969) described, intravenous infusion as the quickest and most controlled method of replacing serious loss of water and correcting electrolyte imbalance. Fluid lost may be due to a number of factors, namely, excessive vomiting, diarrhea, choiera, excessive sweating, bleeding, burns, pre and post- operative conditions etc.

3.1 Types of Intravenous Infusion

There are good numbers of intravenous infusion commercially available in our drug stores. The fluid to be administered depends on the condition of the patient, as specific fluids are more tolerable in certain conditions. However it must be on doctor's prescription.

Notable amongst the infusions are:

- Physiological (Normal) Saline
- Dextrose saline
- Ringer's solution
- Hartman's solution
- Antibiotic infusion
- Darrow's solution

• Dextran I.V Saline

3.2 Materials for Administration of Intravenous Infusion

A complete intravenous infusion tray must contain.

- 1 sterile kidney dish with cover
- sterile gdlipots with cover
- pack of adhesive stripping
- Intravenous infusion set/ which must contain hypodermic or scalp vein needle and a drop counter.
- Sterile piece of toniquette
- In addition, a drip stand is required,

3.3 Procedure for Administration of an Intravenous Infusion.

The following steps should be followed in administering an infusion.

- Explanation of purpose to the patient
- Washing and drying of hands with soap and water
- Setting of the tray.

- Obtain an intravenous fluid set, which is most often accompanied with half strength solution needle/ a drop counter, and pieces of adhesive strip.
- Position a drip stand to give at least 45 centimetres (18 inches) height for the bag above the couch or vein site, this secures a good rate of flow.
- Tie the toniquette around the site of choice and let the patient make a fist to ensure the bulging of views for visibility.

- Clean the site on the skin, where the vein will be pierced.
- Expel the air from the tubing by running a few drops of the fluid out.
- Pierce the skin obliquely until the needle has gone in about one inch (1 inch) and is in the vein, this occurs when there is a slow, but free movement of blood back into the tube attached to the needle, then ask patient to release the fist made.
- Check regularly to see that it is dripping and the fluid is going into the vein properly, and the punctured site is not tissued.
- Observe for any possible reaction before you discharge the patient.

3.4 Complications or Dangers of Intravenous Infusion.

A number of complications have been recorded due to careless administration of intravenous infusion, or perhaps situations which do not call for intravenous infusion.

Jumbo (1989) highlighted the dangers of intravenous infusion as that of:

- Air embolism
- Cardiac arrest
- Thrombophlebitis
- Septicemia
- Shock
- Gangrene

4.0 Conclusion

This unit has provided sufficient information for the student on the preparation and administration of intravenous infusion. By now the student should be able to define intravenous infusion.

It is from this unit that the student understands the motive behind the administration of intravenous infusion.

5.0 Summary

This unit teaches the student that fluid lost is quickly replaced to prevent complication. Fluid lost occurs from various sources, as we were meant to understand.

Many types of intravenous infusion exists, the on e to administer depends on the condition and the prescription of the doctor, the materials for administration are highlighted, and the complications that could possibly arise following the administration of intravenous infusion are also noted.

6.0 Tutor Marked Assignment

1. Enumerate five types of intravenous infusion

7.0 References /Further Reading

Burton, J.L. (1976) *Aids to Medicine for Nurses.* Churchill Livingstone, Medical Div. of Longman Ltd. U.K.

Houghton, M./ Parnell, J.E; (1969), *.Practical Procedure for Nurses.* Williams and Wilkins Comp. Baltimore.

Unit 5: Principles of Aseptic Techniques in Clinical Skills.

1.0 Introduction

In this unit we shall discuss the principles of aseptic techniques in clinical skills.

2.0 Objective

At the end of this unit the student should be able to:

- Understand the principles involved in aseptic techniques.
- Understand the procedures in aseptic technique.

3.0 Main Content

The health facility is one institution where all manners of diseases and ailments are treated. In the course of treating them, people get contaminated even without their knowledge. A number of health providers had died while trying to assist patient recover from their illnesses, as a result of contacting infection from either the patient or instruments used in treating patients.

Therefore, in other to reduce the risk of contacting infection, certain principles of aseptic techniques had been developed to solve these problems.

3.1 The Principle of Non-touch Technique

It is a general practice in all health facilities, that all health care providers should not touch fluids or other bodily substances with their bare hands without a glove.

It is equally a principle that you don't touch or administer drug brought by the patient that had been opened and administered by some one else.

All instruments for treatment e.g. forceps cannot be touched with bare hands, no matter how clean the hands are. It is a principle that all health care providers must appear in uniform and cover - all

to perform specific assignment, for instance during a surgical section all doctors and nurses must wear apron in addition to the usual uniform.

It is a principle to discard all disposable items immediately, as soon as a specific assignment had been concluded.

3.2 Procedure Involved in Aseptic Technique

In aseptic technique, the procedure is to undertake the "first thing first". All procedures must be top - bottom approach.

4.0 Conclusion

In this unit you have learnt about the principles of aseptic techniques in clinical skills. The student should by now understand the principles guiding aseptic techniques.

5.0 Summary

This unit focused on the principles of aseptic techniques in clinical skills. It also considered the principle of non-touch technique,

which is designed to ensure that pathogenic micro-organisms are not introduced in the course of carrying out skills.

All bodily fluids, substance, and instruments should not be touched without a protective device.

All disposables and non disposable are to be adequately taken care of accordingly.

5.0 Tutor Marked Assignment

Name three basic principles of aseptic techniques.

7.0 References /Further Reading

Sorungbe, A.0.0./ (1995), Federal Ministry of Health and National Primary Health Care Development Agency; *Standing Order for Community Health Extension Workers,* Training and Manpower Development Division Nigeria.