

# **COURSE GUIDE**

## **NSC 502 PUBLIC –COMMUNITY HEALTH NURSING IV**

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## **INTRODUCTION**

NSC502 is a three (3) credit unit course. It is a 500 level core course available for Bachelor of Nursing Science (B.NSc) students. The goal is to assist you in the application of integrated knowledge in problem solving with regard to identification of community health nursing needs and working within community framework to promote health and prevent diseases. It will also enhance your skills in assessment, planning, implementation and evaluation of impact of intervention modalities of lives of individuals, families and communities.

## **WHAT YOU WILL LEARN IN THIS COURSE**

The course consists of four modules and 12 units in addition to a course guide which tells you briefly what the course is about, what course materials you will use and how you can go through these materials with maximum benefit. In addition the course guide will direct you in respect to your Tutor- marked Assignments (TMA) which will be made available to you at the appropriate time. It is for your best interest to attend the facilitation sessions which will be online.

## **COURSE AIMS**

The aim of this course is to develop your ability to understand and apply the principles of assessment and planning, concepts in management and process of community health nursing in providing care to the community. You will acquire an in-depth understanding and skill to implement programme of care in the community in areas of health promotion and disease prevention.

## **COURSE OBJECTIVES**

The main objective of Public-Community Health Nursing IV is to provide optimum care to individuals, communities and the public in general. In order to achieve the broad objective, each unit has specific objectives which are usually stated at the beginning of the unit. You are expected to read these unit objectives before studying the unit and as you progress in your study of the unit you are also advised to check these objectives. At the completion of each unit you are expected to review these objectives for your self-assessment.

## **WORKING THROUGH THE COURSE**

The course will be delivered by adopting the blended learning mode of 70% of online with interactive sessions and 30% of face to face working with preceptors during practical sessions. You are expected to register

for this course online before you can have access to all the materials as well as have access to the class sessions online. You will have the hard and soft copies of course materials, online interactive sessions, face to face sessions with instructors during practical sessions. The interactive online activities will be available to you on the course link provided on the NOUN websites. There are activities and assignments online for every unit every week. To complete the course, you are expected to study through the units, the recommended textbooks and other relevant materials. Each unit has model questions which you are required to answer. It is important that you visit the course site weekly and do all assignments to meet deadlines and contribute to the topical issues that would be raised from everyone's contribution. You will be expected to read every module along with all assigned readings to prepare you to have meaningful contributions to all sessions and complete all activities. You will also be expected to keep a portfolio where you keep all your completed assignments.

## **COURSE MATERIALS**

Course Text in Study Units  
Textbooks (Hard and electronic)  
Book of Nursing Practicum  
Assignment File/Portfolio

## **STUDY UNITS**

### **Module 1    Health Needs Assessment**

Unit 1        Identification of community needs  
Unit 2        Community health needs assessment  
Unit 3        Community health planning

### **Module 2    Community Interventions**

Unit 1        Anthropometry  
Unit 2        Family Health Records  
Unit 3        Epidemiological Perspectives  
Unit 4        Epidemiology of Communicable Diseases

### **Module 3    Management in Public Health Nursing**

Unit 1        Delegation and Supervision in Public –Community Health  
Unit 2        Conflict and Conflict Resolution  
Unit 3        Staff Development and Time Management in Public-Community Health Nursing

### **Module 4    Violence and Disaster Nursing**

Unit 1        Violence in Community  
Unit 2        Disaster Nursing

## TEXT BOOKS AND REFERENCES

Bradshaw J.(1972) A taxonomy of social needs. In McLachlan G(ed) Problems and progress in medical care: Open university press  
Goldsteen RC Goldsteen K and Dwellle (2015) Introduction to Public Health practices. Springer publishing company New York page 133-134.

Guest C, Ricciardi W, Kawachi I and Lang I (2013); Oxford Handbook of Public Health Practice. Oxford University Press.

Hunt R (2009); Introduction to Community-Based Nursing. Wolters Kluwer Health Publishers, New York

Lucas AO and Gillas H M (2003) short textbook of Public Health Medicine for the Tropics. Revised Edition. Georgina Bentiff page 29-36.

Maurer F A and Smith C M (2013) Community/Public Health Nursing Practice. Health for community and populations. ELSEVIER Inc.

Okoronkwo, I.L (2021) Nursing Service Administration and Management, Revised edition, Institute of Developmental Studies, Enugu

Principles of Epidemiology in Public Health Practice, 3<sup>rd</sup>ed. An Introduction to Applied Epidemiology and Biostatistics .US Department of Health Services, Healthy People 2020, Washington DC  
Assignment File

## TUTOR-MARKED ASSIGNMENTS (TMAS)

There will be 30 objective questions from all the units of the course materials. The questions will be divided into three tutor marked assignments that will be uploaded to the NOUN website for you to download and answer and then upload. It is computer marked. The value is 30% of the total mark.

## FINAL EXAMINATION AND GRADING

The final examination for course NSC502 will come up at the end of the semester comprising essay and objective questions covering all the contents covered in the course. The final examination will amount to 70% of the total grade for the course.

### Grading Criteria

A total of 100% for this course shall be made up as follows: :

Continuous Assessment - 30%

End of Course Examination - 70%

The examination Pass mark is 50%.

## GRADING SCALE

A = 70-100

B = 60 – 69

C= 50 - 59

F = < 49

### Schedule of Assignments with Dates

Every unit has activity that must be done by you as spelt out in your course materials. In addition to this, specific assignments will also be provided for each module by the facilitator.

## COURSE OVERVIEW

The course is on further development of students' knowledge and skills in the planning, organisation, and administration of community health nursing and primary health care services. The course emphasizes the application of integrated knowledge in the development, implementation and evaluation of community health nursing and primary health care programmes, using a model of Community Health Planning Cycle of, "Need Assessment or Community Health Diagnosis; development, of Care Plans; implementation of care Evaluation" and building on earlier community-based exposure at previous levels

The course will involve:

- i) A period of attachment to PHC programmes and public health facilities;
- ii). Further attachment to a defined rural/urban geographical-political community for the collection, analysis and presentation of data for in-depth assessment of community health problems or programmes;
- iii) Planning with groups concerned with health care in the communities;
- iv). Implementation of care plan through participation and working with community agencies;
- v) Programme evaluation.

The course will also cover epidemiological tools and techniques of health promotion and disease prevention.

## HOW TO GET THE MOST FROM THIS COURSE

1. Read and understand the context of this course by reading through this course guide. paying attention to details. You must know the requirements before you will do well.
2. Develop a study plan for yourself.

3. Follow instructions about registration and master expectations in terms of reading, participation in discussion forum, end of unit and module assignments, nursing practicums and other directives given by the course coordinator, facilitators and tutors.
4. Read your course texts and other reference textbooks.
5. Listen to audio files, watch the video clips and consult websites when given.
6. Participate actively in online discussion forum and make sure you are in touch with your study group and your course coordinator.
7. Submit your assignments as at when due.
8. Work ahead of the interactive sessions.
9. Work through your assignments when returned to you and do not wait until when examination is approaching before resolving any challenge you have with any unit or any topic.
10. Keep in touch with your study centre, the NOUN, School of Health Sciences websites as information will be provided continuously on these sites.
11. Be optimistic about doing well.

### **FACILITATORS/TUTORS AND TUTORIALS**

There are hours of facilitation to support this course material. You will be notified of the dates, times and locations of these facilitation as well as the names and phone numbers of your facilitator.

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## **MODULE 1 HEALTH NEEDS ASSESSMENTS**

Health needs assessment (HNA) is a systematic method for reviewing health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities. HNA is a recommended public health tool to provide evidence about a population on which to plan services and address health inequalities. It provides an opportunity to engage with specific populations and enable them to contribute to targeted service planning and resource allocation. HNA provides an opportunity for cross sectoral partnership working and developing creative and effective interventions.

Unit 1	Identification Of Community Needs
Unit 2	Community Health Needs Assessment
Unit 3	Community Health Planning

### **UNIT1 IDENTIFICATION OF COMMUNITY HEALTH NEEDS**

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- 1.0. Introduction
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  - 3.3 Steps in Health Needs Assessment
- 4.0 Conclusion
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#### **1.0 INTRODUCTION**

Community health refers to the health status of a defined group of people and the actions and conditions both private and public to promote, protect, and preserve their health. Community health needs are the gap between what services currently exists in a community and what should exist. Identification of community health needs is therefore a systematic method of identifying unmet health and healthcare needs of a population and making changes to meet these needs.

The pattern of health services frequently reflect only the health needs of the population that it is serving while those with greatest needs receive least attention because they are in the minority and not identified. This has increased interest in the continuous need assessment of the communities. In addition, there is pressure on the allocation of scarce healthcare resources to those in need. Health assessment provides a method of monitoring and promoting equity in the provision and use of health services and addressing inequality in health.

## **2.0 OBJECTIVES**

By the end of this unit you should be able to

- Understand the concept of health needs assessment
- Outline the types of health needs
- Explain the uses of health need assessment
- State the importance of health need assessment.
- Describe steps in assessment of health need project
- Discuss different health assessment approaches

## **3.0 MAIN CONTENT**

### **3.1.1 Concept of Health Needs Assessment**

This is a systematic approach to understanding the needs of a population. It is a process that

1. describes the state of health of local people
2. enables identification of the major risk factors and causes of ill health
3. enables the identification of the actions needed to address them.

Need assessment is not a one off activity process but a developmental process that is added to and amended over time. It is not an end in itself but a way of using information to plan health care and public health programmes in the future as well as to review the issues facing the population leading to agreed priorities to improve the health and reduce inequalities. The purpose is to enable community health nurses to gain more in depth understanding of their communities and the needs that exist for effective planning, prioritization, development and delivery of services to improve outcomes for the population.

### 3.1.2 Types of Health Needs

Need is an important concept in public health. It is used in the planning and management of health services including improving health, resource allocation and equity. However, need is a multifaceted concept with no universal definition. In healthcare, need has a variety of meanings that may change over time, so it is not surprising that different groups of health professionals refer to needs assessment in different ways. According to Bradshaw (1972) there are 4 types of health needs.

**Normative Needs:** This is a need that is defined by experts e.g professionals. Normative needs are not absolute and there may be different standards laid down by different experts. Example of normative need is vaccination. It is a decision made by a healthcare provider that a person needs to be immunized against communicable diseases or surgery - a decision made by a surgeon that a person needs operation.

**Felt need:** This is a need perceived by an individual. Felt needs are limited by individual perception and knowledge of health services. They are wants, wishes and desires of an individual. E.g. having a headache or knee pain.

**Expressed needs:** This is a health seeking behaviour by an individual or community. E.g. going to the dentist for a toothache. It is a vocalized need on how people use health care services.

**Comparative need:** These are needs identified by comparing the services received by one group of individuals with those received by another comparable group. E.g. A rural village may identify a need for a bore hole or a school if a neighboring village has one.

The need for healthcare should be distinguished from the need for health. The need for health is broader and can include problems for which there is no treatment. In public health context health need exists only if there is capacity to benefit from the particular health care service. So, need is different from demand, which arises when someone with a need for care expresses it. Need is a measurable change in health status attributed to the intervention. Health demand is what people ask for. It is not necessarily what they need. They may not benefit from their demand. Health supply is the healthcare interventions and services that are available to the population, including the available resources. Health supply depends on the interests of health professionals, the priorities of politicians and the amount of money available.

### 3.1.3 Uses of Health Needs Assessment

**Planning:** This is the central objective of need assessment, to help decide what services are required, for how many people, the effectiveness of the service, the benefits that will be expected and at what cost.

**Intelligence:** Gathering information to get an overview and an increased understanding of the existing healthcare services, the population it serves and the population's health needs.

**Target Efficiency:** Aids in measuring whether or not resources have been appropriately utilized.

**Involvement of Stakeholders: Conducting health needs** assessment, can stimulate the involvement and ownership of the various players in the process.

**Equity:** Improves the allocation of resources between and within different groups. Equity may be horizontal or vertical. The horizontal equity is concerned with the equal treatment of equal needs irrespective of socio-economic background. This means that to be horizontally equitable, the healthcare allocation system must treat two individuals with the same complaint in an identical way. While vertical equity is concerned with the extent to which individuals who are unequal should be treated differently. This means unequal treatment for unequal need in order to achieve equal health status.

### 3.1.4 Importance of Health Need Assessment

Health need assessment provides the following opportunity for:

1. Describing the pattern of disease in the local population and the differences from local, state and national disease patterns.
2. Learning more about the needs and priorities of their patients and the local population.
3. Highlighting the areas of unmet need and providing a clear set of objectives to work towards meeting these needs.
4. Deciding rationally how to use resources to improve their local population's health in most effective and efficient way.
5. Influencing policy formulation in health,
6. Help in identifying inter-agency collaboration
7. Help in conduct of research in research and
8. development priorities

Information gained from on health need assessment is the basis for designing and implementing programme of health and healthcare that is acceptable and accessible to the Local Community as is based on evidence of cost-effectiveness. It is also the primary means of allocating scarce health and public health resources to individual and communities with the greatest need.

### 3.2 Health Need Assessment Approaches

There are four approaches that could be used for need assessment, they include:

#### 1. **Epidemiology:**

This approach considers the epidemiology of the condition, current service provision, the effectiveness and cost effectiveness of interventions and services. The advantage of this approach is that it gives overall figures of numbers likely to have specific problems.

- It is relatively quick and easy.
- It identifies the broad range of clinical conditions.
- It is systematic and objective.

#### **The disadvantages are:**

- It assumes a uniform prevalence, although can be weighted for known risk factors.
- It is only possible for some conditions where there is straightforward means of identification.
- There is frequent lack of existing local epidemiological data and lack of evidence for certain interventions.
- It is costly and time consuming.

2. **Comparative:** This approach compares service provision between different populations. Large variations in service use may be influenced by a number of factors and not just differing needs.

The advantages are:

- It sets local service provision against national norms.
- It is good for identifying inequalities.
- It uses existing data and multiple sources of information.

#### **The disadvantages are:**

- The relationship is unclear between provision, utilization of services and actual needs.
- It assumes that the intervention rate in the area where it is higher is the correct one.
- It fails to take into account different intervention rates or previous treatment.

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3. **Corporate:** This approach is based on eliciting the views of stakeholders which may include professionals, service users, the public and politicians on what services are needed. Elements of the corporate approach (i.e. community engagement and user involvement) are important in informing local policy.

The advantages include:

- It involves local healthcare providers and local people.
- It is responsive to local concerns and fosters local ownership of the issues.

The disadvantages are:

- If carried out in isolation, may determine demands rather than needs and stakeholder concerns may be influenced by the political agenda.
- Risk legitimizing of existing patterns of care that may have little rational basis.

4. **Rapid Appraisal:** This method seeks to gain community perspectives of local health and social needs and to translate these findings into action. Interest in rapid appraisal method has grown due to the prospect of gaining information about the health problems of populations quickly and cheaply. It also focuses on the participation of community in collection of information.

The advantages are:

- It is good for community profiling.
- Highly participative

Disadvantage

- Only limited information on specifically focused topics is to be collected

### 3.3 Steps in Health Needs Assessment

#### 1. Step 1: Getting started

The aims of this step are;

- Identify the population.
- Identify the key stakeholders
- Identify what is to be achieved.
- Identify the needs.
- Identify resources that are required
- Identify the risk.

**The expected outcomes of this step include:**

- State clear definition of the population that are to be assessed and rationale for the assessment and its boundaries.
- Agreement to proceed with allocation of resources required for the project.

- Identify the project lead and steering group.
  - Policing the project in place with timescales for each task.
  - 2. **STEP 2: Identifying health priorities.** The aims of this step include:
    - Population profiling
    - Gathering data
    - Perceptions of needs
    - Identifying and assessing health conditions
    - Identifying determinant factors.
- The expected outcomes for this step are:
- List of health priorities identified for the profiled population with a profile of these issues.
  - Using the impact and changeability as explicit criteria.
  - Determine limited number of overall health priorities.
  - Check these with the steering group and other stakeholders.

3. **Step 3: Assessing a health priority for action:**  
The aims of this step are:
- Assessment of a specific health priority for action.
  - Determining effective and acceptable interventions and actions.
- The expected outcomes are:
1. Select factors that have most significant impact on health functioning for the selected priority.
  2. Focus the action on reducing health inequalities for the health priority.
  3. Acceptable and cost-effective actions to improve the selected health priority are identified.

**STEP 4: Planning for change:** This includes:

- Clarifying aims of the intervention.
- Action planning
- Monitoring and evaluation strategy
- Risk management strategy

The expected outcomes of this step are:

- Agree on aims, objectives, indications and target.
- Set out the actions and tasks needed to undertake to achieve the aims and objectives.
- Agree on how to evaluate the programme.
- Identify the risk and how to manage them.

**STEP 5: Moving on/Review**

The aims of this step are:

- State what is learnt from the project.
- Measuring impact.

- Choosing the next priority.
- The expected outcomes of this step include:
- What went well and why?
  - What did not go well and why?
  - Is there any further action required?

### **SELF-ASSESSMENT EXERCISE**

What do you understand by health needs assessment?

## **4.0 CONCLUSION**

In this unit 1, you have learned the concept of health needs assessment, the types of needs, uses and importance of having a needs assessment. The various approaches and steps in conducting needs assessment have been clearly described in this unit.

## **5.0. SUMMARY**

Health needs assessment is a systematic process involving the community to identify and analyze community health needs and assets in order to prioritize these needs and to plan and act upon unmet needs. Health assessment provides a method of monitoring and promoting equity in the provision and use of health services and addressing inequality in health.

## **6.0 TUTOR MARKED ASSIGNMENT**

1. Explain the concept of health needs assessment
2. List the types of health needs
3. Outline the importance of health need assessment
4. Discuss the different health assessment approaches
5. Describe the steps in health assessment need .

## **7.0 REFERENCES/FURTHER READING**

Bradshaw J.(1972) A taxonomy of social needs. In McLachlan G(ed)  
Problems and progress in medical care: Open university press

Guest C, Ricciardi W, Kawachi I and Lang I (2013); Oxford Handbook  
of Public Health Practice. Oxford University Press.

Maurer F A and Smith C M (2013) Community/Public Health Nursing  
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## UNIT 2 COMMUNITY HEALTH NEEDS ASSESSMENT

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    - 3.3.10 Value –Belief Pattern
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor marked Assignment
- 7.0 References/Further Reading

### 1.0. INTRODUCTION

The community health needs assessment is a process that describes the state of health of local people. It enables the identification of major risk factors and causes of ill health and actions needed to address them.

Health profiling is a method by which needs are assessed and used mainly for quantitative data.

### 2.0. OBJECTIVES

By the end of this unit you are expected to:

- Outline the Characteristic of a Healthy Community
- Describe the Use of SWOT and PESTEL Analysis as a Framework for Community Assessment.

- Discuss the Application of Gordon Health Pattern in Public-Community Health Nursing Assessment

### **3.0 MAIN CONTENT**

#### **3.1 Healthy Community**

The health of a community is dependent not only on the genetics of its residents but also on the environment in which the individuals live. A person's health is a product of their environment. Therefore a healthy community is one in which all residents have access to a quality education, safe and healthy homes, adequate employment, transportation, nutrition in addition to quality healthcare. Unhealthy communities lead to chronic diseases such as cancers, diabetes and heart disease. The health of our communities is critical to the growth and development of our nation. Health protection is a branch of public health that seeks to protect the public from and limit exposure to hazards that may be harmful to health. It is concerned with the prevention, investigation and control of infections as well as environmental hazards. Health protection is also concerned with readiness for emergency situations that may impact on human health, including act of terrorism and the deliberate release of hazardous agents.

Public health nurses are involved in health protection through a variety of primary, secondary and tertiary interventions aimed at reducing the incidence of diseases and its consequences and of promoting wellbeing in affected individual or group.

The Community/Public Health Nurse is concerned with the health of the individual, the family, populations and the community. A healthy community is one which residents are happy with their choice of location and which exhibits characteristics that would draw others to the location.

##### **3.1.1 Characteristics of a Healthy Community**

The characteristics of a healthy community include:

- Low crime rate.
- Good school
- Strong family life
- Robust economy (good job)
- High environmental quality
- Accessible quality health services
- Adequate housing
- Civic involvement
- Good weather

- Good transportation
- Leisure activities
- Exposure to the arts
- Reasonable taxes
- 

### 3.1.3. Factors Affecting the Health of a Community

Health is affected by a number of factors which include:

- i. Physical environment in which people live such as the quality of the air they breathe and the water they drink
- ii. The social environment- the level of social and emotional support received from families and friends
- iii. Poverty- a significant factor worldwide which shortens and reduces life
- iv. Behaviour and lifestyle e.g. smoking causes lung cancer and coronary heart disease so a reduction in this behaviour will reduce the disease
- v. Family genetics and individual biology- If you come from a healthy family you have a better chance of staying well

### 3.1.4. Profiling the Population

The health profile information of the population includes:

1. **Characteristics of the population**
  - Geography
  - Number
  - Age distribution
  - Gender distribution
  - Ethnicity and religion
  - Population trends
  - Educational factor
2. **Health status of population**
  - Mortality
  - Morbidity
  - Low birth weight
  - Disease prevalence
  - Health behaviours
  - Use of local health services
3. **Local Factors affecting work and employment**
  - Poverty and income
  - Environment
  - Transport
  - Access to leisure services

### 3. Health concerns and priorities of the Local Community

- Interviews
- Focus groups
- Community/residence survey

### 4. Local and national priorities and targets

The purpose of community health analysis is to identify the key issues that the organization is to address.

## 3.2 The Framework for Community Assessment:

**SWOT Analysis:** This is an analysis of strengths, weaknesses, opportunities and threats. It provides a simple framework to evaluate the current public health services.

**Strengths** are aspect of public health which are delivered well and are meeting the needs of the local population.

**Weaknesses** are aspects which are not achieving targets or making a difference to public health. Strengths and weaknesses often relate directly to the internal environment of the organization in terms of how well current resources are being used in the delivery of public health.

**Opportunities** are those aspects that can only be capitalized upon if there are sufficient and appropriate resources to meet the challenges posed.

**Threats** relate to the aspect that the capabilities to deal with the problem do not exist. Opportunities and threats are related to the external environment of the organization.

**SWOT** analysis is normally presented as a matrix and should be limited to those factors that have most impact so that attention can be concentrated upon them. Factors identified through the SWOT analysis may fit into more than one category, so something that is seen as strength may also be identified as a threat. The SWOT analysis aims to identify internal strengths to take advantages of external opportunities and to avoid threats while addressing the weaknesses.

**PESTEL Analysis– PESTEL is an acronym that** refers to: Political, Economic, Socio-cultural, Technological, Environmental and Legal factors. It provides a framework to analyze and categorize environmental influences impacting upon public health.

A PESTEL analysis enables the identification of public health opportunities provided by environmental conditions as well as current or emerging threat. The SWOT and PESTEL analysis provide a view of how well the current public health strategy is being achieved and what the

future challenges may be. In order to develop a meaningful public health strategy, a need assessment will also be undertaken.

### 3.2.1 Combining SWOT and PESTEL Analysis in Teenage Pregnancy

Strengths		Weakness	Opportunity	Threats
Political	Existing policy from work	Socio-cultural influence	Partnership and collaboration working practices	Lack of community engagement
Economic	Reduce cost of health	Might come from new finance	Cross boundary commissioning	Reduce functioning
Socio-cultural	Building for the future, young people, friendly, positive life style	May perpetuate social boundaries, entire negative belief	Positive influence and healthy life style choice	Misunderstanding of the purpose
Technology	To utilize modern advances in the field	Technology increases cost	More efficient and effective services	Lack of knowledge and skills
Environment	Facilitators that are accessible and equitable	High cost due to location, limited interagency working	To be part of community infrastructure based on local needs	Negative press
Legal	Meets trust performance targets	Preventing objections	Promote positive understanding of the law	Risk assessment could restrict the development

Moved to unit 3.1.1 Unit 2

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### 3.3 Application of Gordon's Health Functional Pattern in Public –Community Health Assessment

Gordon's health Functional pattern includes:

#### 3.3.1 Health perception- health management patterns:

According to Gordon (2008) health perception – health management patterns should be assessed because it verifies family and community perception of their medical problems and helps to clarify misconception and adherence to the therapeutic regimen. It also helps to identify health behaviours and other values that promote or impede proper health behaviours.

**Family assessment;** It involves current health and well-being, health risk and disease management, age-appropriate immunization and health care utilization.

**Characteristics of at-risk family in this pattern include**

- History of absent from school by children in the family
- Absent from work by adults in the family
- Low income and
- Over crowding
- Low age appropriate immunization coverage

**Nursing diagnoses:** - Ineffective family therapeutic regimen management, Readiness for enhanced immunization status.

The nurse takes action to integrate into the family processes a programme for treatment of illness.

**Community assessment:** -The nursing assessment focuses on

- Health education programme and activities
- Hospital, clinic and related organization
- Future health planning
- School health programme

The characteristics of community at risk in this pattern are

- History of epidemic
- Heavy industries
- Disaster
- High accident rate
- Bad road condition
- Poor health facilities
- Inappropriate food handling
- No on-going health promotion activity
- Low ratio of health professional
- High alcohol drinking pattern
- High drug use
- High incidence of sexually transmitted disease.

#### **Nursing diagnosis**

- Ineffective community therapeutic regimen management.

Plan to integrate into community programmes what will help to improve treatment of illness and eliminate unsatisfactory methods.

Tips: Consider the culture of the people and use community representatives for interview.

### **3.3.2 Nutrition-metabolic patterns**

**Family Assessment:**-The assessment should focus on

- Family pattern of food and fluid intake
- The presence of household member during mealtime
- Dietary restrictions and related problems
- Use of food aids
- Available food types
- Food storage,
- Meal preparation

- Family menu
- Water supply and storage system

Family at risk in nutrition-metabolic pattern

**The characteristics of family at risk are**

- Low income
- Deficient knowledge of daily nutrient requirement
- Frequent use of fast-food meals by the members
- Presence of malnourished member

No Nursing diagnosis for family

**Community assessment:- Focus on**

- Water supply
- Food hygiene
- Nutritional needs of the population
- Available food commodities

**Characteristic of community at risk; include**

- Inadequate financial resources
- Lack of regulation of food handling
- Lack of food inspection and supervision
- High rate of infant malnutrition
- Displaced people

No nursing diagnosis for community

### 3.3.3 Elimination Pattern

Elimination pattern of a family involves handling of wastes and disposal of hazardous and non-hazardous material which has to be disposed in a way that do not risk or contaminate the environment.

It is focused on

- Family disposal of garbage
- Disposal of human and animal waste and related hygiene practices

**Characteristics of family at risk**

- Lack of toilet hygienic practices
- Improper animal waste disposal
- Inadequate water for dish washing and other domestic activities
- Open garbage that attract flies

Nursing diagnosis; Risk for infection and risk for contamination

**Community assessment; focus on**

- Community industrial waste
- Auto emission
- Contamination of underground water
- Workers exposed to chemicals

**Characteristics of community at risk**

- Underdeveloped sanitation codes
- Absence of laws protecting food, water supply and environment
- History of industrial air, water and environmental pollution

**Nursing diagnosis**

- Risk for contamination,
- Impaired elimination pattern,
- Ineffective Refuse Disposal System

**3.3.4 Activity – Exercise Pattern**

Activity – exercise describes family pattern of activities, exercise, leisure and recreation. It includes how the family budgets time and resources in order to organize its activities of daily living such as working, dependent care, self-care, cooking, shopping, cleaning and home maintenance.

**Family at risk**

The characteristics of family at risk in this pattern are

- Time constraint e.g. job
- Knowledge deficit on time management
- Fatigue
- Members with disability
- Insufficient budgeting of family finances
- Low income

**Area to focus on nursing assessment**

- Shopping pattern
- Schedule keeping for members – children activity
- Meal preparation
- House keeping
- Budgeting for food, clothing and holiday

**Nursing diagnosis**

No family diagnosis but the following are relevant for family in child-bearing age.

- Developmental delay in self-care skill

**Community assessment:-**

Activity – exercise pattern describes the type, quantity and quality of leisure and recreation programme available to various age groups in the community. These include.

- Senior centre
- Teenage recreation centres
- Housing and transportation
- Amusement park
- Zoo
- Botanical gardens

**At risk community:-**The characteristics of at risk community include

- High crime rate that restrict movement
- High rate of juvenile delinquency
- Low rehabilitation services
- Inadequate transport system
- Inadequate community centers
- Inadequate playground
- Housing-low income – high income
- Cultural programmes (community festivals)
- Environment friendly for handicaps

No community diagnosis in this pattern

### 3.3.5 Sleep – rest pattern

Family assessment:- The problem of sleep-rest pattern may arise from environmental factors such as

- Sleeping arrangements
- Sleep interruptions
- Outside noise
- Patterns of life of family members
- Night-time routine

**The characteristics of family at risk include**

- Disorganized lifestyle
- Living in overcrowded housing
- Members who do shift work
- Nocturnal neighbourhood activities

**Focus on assessment**

- Preparing for work and school
- Sufficient space
- Quiet, dark sleeping space available
- Young baby in family
- Enough time to sleep

**Nursing diagnosis;** Disturbed sleep,

Community assessment

The assessment is focused on environmental factors and should be obtained from the residents and it can also be observed in the environment to see if it is conducive for sleep and rest.

At risk community:- The characteristics of at risk community in the pattern of rest-sleep include

- Housing built along a major highway or bust city street
- Housing built near an airport
- Housing built on late-closing commercial areas.

Housing diagnosis – none yet

### 3.3.6 Cognitive – perception pattern

#### Family assessment

The assessment of family on cognitive-perception pattern is focused on

- Family patterns of problem – solving and decision making
- Information and information gathering strategies.

Family identity include

- Nuclear family – parent and children
- Extended family – relations

Family self-esteem include

- Quality of relationship
- Cohesion of member
- Concern for each other

Family self-competency is ability to handle

- Daily activities
- Financial matters
- Plan for the future
- Family stress

At risk family:- The characteristics of at risk family include

- Financial difficulty
- Drug abuse
- Alcohol abuse
- Homelessness
- Members of a minority cultural group

Nursing diagnosis; Ineffective impulse control,

Community Assessment: The self-perception self-concept pattern describes community members perception of community self-image, identify and stability. This includes amount of culture, age, racial, and socioeconomic diversity of the community and attitude toward minority groups within the community.

Community at risk: The characteristic of at risk community in this pattern include:

- High crime rate
- Littering of street
- Changing demography
- Racial or ethnic tension
- Unemployment
- Teen suicide
- School bullying
- School dropouts

No community diagnosis

### 3.3.7 Role-Relationship pattern

#### Family Assessment

In the family, relationships vary in intimacy and roles. Roles vary according to the position in the family like:

- Father
- Mother
- Marital status
- Socio-political position

Traditionally family provides an environment for individual growth and development with focus on

- Physical
- Psychological
- Moral and
- Spiritual well being

**Family at risk:** the characteristics of at risk family include

- Family members with a diagnosis of terminal illness
- Death of a family member
- Immigrant family with lack of pre-departure support
- Recent retirement
- Divorce or separation
- History of domestic violence or abuse
- Prolonged caregiving to a member

#### Nursing Diagnoses

- Interrupted family process (specify)
- Dysfunctional family process (Alcohol, psychosocial etc.)
- Readiness for enhanced family process,
- Disorganized family behaviour

**Community Assessment:** The assessment on this pattern focus on

- Opportunities for community to provide social amenities
- Composition of community includes age group ethnic group and racial group.
- Relationships among ethnic, racial and age group
- Resources including natural resources, and healthcare
- Law and regulation that govern role-relationships that maintain the structure of the community.

**At risk community:** The characteristics of community at risk include

- History of ethnic or racial problems or violence
- Isolation of ethnic or racial group
- Tensed relationship amount groups
- People feeling powerless over political issues that affect their lives
- Lack of community health centre
- Lack of spiritual programmes
- Inadequate mental health services
- High rate of school dropouts

- High divorce rate

### 3.3.8 Sexuality-Reproductive pattern

Family Assessment: the family sexuality-reproductive pattern focuses on

- Marital relationship
- Sexual relationship
- Family planning
- Ability to educate and counsel children on sexual matters

**Family at risk:** The characteristics of at risk family include

- History of domestic violence
- Verbal abuse
- Present loss of significant other
- Death of a child
- Knowledge deficit regarding sex education
- Lack of privacy in the home
- Stress from job,
- Family finances
- Chronic illness of a member
- No specific nursing diagnosis

**Community Assessment:** Social, cultural, religious diversity and national, state and local laws affect the community in many ways such as

- Selling printed materials
- Pornographic video
- Acceptability of radio and TV content
- Abortion laws
- Marriage licensing and age allowed
- Sex education
- Reproductive issues

**Community of risk:** the characteristic of at risk community in this pattern include

- Increasing member of teen pregnancies
- Few community controls on adult entertainment including movies,
- Insufficient crime preventive measures
- Lack of organized crimes control centres
- Insufficient prevention and treatment clinic for STDs
- High rate of divorce

No specific Nursing diagnosis

### 3.3.9 Coping-stress tolerance pattern

#### Family assessment

Family mobilizes human and materials resources enable members to withstand stressors when the occur, family may involve through:

- Role relationship changes within the family
- Formally dependent members assume caregiving role
- Calling upon social network and community resource for assistance

The nurse should focus on

- Current stresses on family function
- Coping strategies available
- Effectiveness of the coping strategies

**Family at risk:** The at risk family is characterized by

- Lack of time for interaction or communication
- Financial problems
- Multiple stresses within a short period
- Overwhelming responsibilities
- Unresolved needs like food, clothing and housing
- Illness or disability of a member

#### **Nursing Diagnoses**

- Compromised family coping
- Disabled family coping
- Readiness for enhanced family coping

#### **Community Assessment**

**Community coping involves mobilizing people and materials to deal with the problem. The community**

- Minimizes the possible event
- Plans for the event
- Mobilizes resources

The stressor may be disasters like

- Earthquake
- Erosion
- Hurricane
- Coal mine disasters
- Large industrial accident
- Terrorist attacks
- Volatile demonstration

#### **Community at risk**

Characteristics of at risk communities include

- Political conflict interfering with law and order
- Inadequate financial resources
- Inadequate training of health-care providers for emergency
- Community feeling helpless to a problem
- Inadequate emergency medical system, including police and fire services
- High crime rate
- Lack of respect for constituted authority
- Inadequate communication infrastructure for handling major community stressors

**Nursing Diagnoses**

- Ineffective community coping
- Readiness for enhance community coping

**3.3.10 Value – belief pattern****Family Assessment**

Family assessment should focus on values and beliefs of the family.

The family has the responsibility for passing on to children

- a. Cultural and moral values
- b. Spiritual values and beliefs
- c. Family tradition
- d. Meaning and value of relationships
- e. Interconnection of family members
- f. Meaning of family life

Spiritual values can give hope and comfort during family transitional, physiological or psychological crises situation.

**Family at risk:** at risk family is characterized by

- Single-parent family without extended family support
- Recent death of family members
- Drug/alcohol abuse issues
- Poor family and neighbourhood role
- Recent retirement of family members
- Social rejection or alienation
- Terminally ill family members
- Family member with depression

Nursing diagnoses; hopelessness, spiritual distress, Readiness for enhanced spiritual well-being

**Community Assessment**

The focus is on

- Provision of spiritual support through building worship centers
- Provide opportunities for people to get to know each other and serve as support system for each other when necessary
- Supporting business that servethe needs and values of the community
- Facilitate development projects

**Community at risk**

The characteristics of at-risk community are

- conflict among adult
- lack of concern for community aesthetics such as flowers and clean street
- lack of support for libraries, museums and cultural resources
- discriminatory practices

- lack of support to community organizations
- No community diagnosis

### **SELF-ASSESSMENT EXERCISE**

Using Gordon's functional health pattern, assess the nutrition –metabolic pattern of a community

### **4.0 CONCLUSION**

This unit has presented how you can use the SWOT and PESTEL analysis in identifying the health needs of the community. The use of Gordon Majory's theory and nursing diagnosis have been described. When needs are properly identified, applying solutions become easy.

### **5.0 SUMMARY**

Proper assessment leads to correct diagnosis. These assessment methods are presented here to help you carry out proper diagnosis of community needs. You can only care for what you understand.

### **6.0 TUTOR MARKED ASSIGNMENTS**

1. List the characteristics of a healthy community
2. Explain the factors that affect the health of a community
3. Describe the use of SWOT and PESTEL analyses in community health assessment

### **7.0 REFERENCES/ FURTHER READING**

Guest C, Ricciardi W, Kawachi I and Lang I (2013); Oxford Handbook of Public Health Practice. Oxford University Press.

Marjory Gordon (2008) Assess Notes: Nursing assessment and Diagnostic Reasoning. E A Davis Company Philadelphia.

Maurer F A and Smith C M (2013) Community/Public Health Nursing Practice. Health for community and populations. ELSEVIER Inc.

## **UNIT 3 COMMUNITYHEALTH PLANNING**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Community Health Programme Planning
    - 3.1.1 Steps in Programme planning in Community Health
    - 3.1.2 Community Diagnosis
    - 3.1.3 Identification of the Planning Group
  - 3.2 Community Programme Evaluation
    - 3.2.1. Steps in Evaluation
  - 3.3 Health Risk Appraisal
  - 3.4 Screening
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

Health planning is a continuous social process by which data about clients are collected and analyzed for the purpose of developing a plan to generate new ideas, meet identified client needs, solve health problems and guide changes in healthcare delivery.

### **2.0 OBJECTIVES**

By the end of this unit you are expected to:

- Discuss the Community health programme planning using the nursing process
- Identify steps involved in planning community project
- Develop a community Diagnosis
- Identify Community Planning Group
- Conduct community programme evaluation
- Discuss steps in evaluation of programme plan.

### 3.0 MAIN CONTENT

#### 3.1 Community Health Programme Planning

A population –focused health planning is the application of a problem-solving process to a particular population. In population-focused health planning, communities are assessed, needs and problems are prioritized, desired outcomes are determined and strategies to achieve the outcomes are delineated.

Population-focused health planning can range from planning health care for a small group of people to planning care for a large aggregate or an entire, city, state or nation. Increased costs have placed heavy demands on the healthcare system which makes health planning essentially economically focused. Nursing process describes the components of and steps used in programme planning, the types of interventions appropriate for the community level, and the responsibilities of a public –community health nurse in planning and implementing care with population. The nursing process is dynamic as the needs of community are dynamics.

ASSESSMENT AND ANALYSIS	DIAGNOSIS	PLANNING	IMPLEMENTATION	EVALUATION
It includes community members in process	It identifies health issues and problems	Involve community leaders	Select intervention. Health education Screening Direct health service	Outcome Community

##### 3.1.1 Steps in Community Health Programme Planning

The planning process consists of a series of specific steps. Occasionally, several steps may be taking simultaneously or they may occur in slightly different order. The steps are as follows:

1. Assessment
2. Diagnosis
3. Validation
4. Prioritization of need
5. Identification of the target population
6. Identification of the planning group
7. Establishment of the programme goal
8. Identification of possible solutions
9. Matching solutions with at risk aggregates
10. Identification of resources
11. Selection of the best intervention strategies
12. Delineation of the intervention work plan.
13. Planning for programme evaluation.

It should be noted that some of these steps are included in the nursing process.

### **3.1.3 Community Diagnosis**

After analyzing the data, the next step is to make a definitive statement (diagnosis) identifying what the problem is or the needs are. Nursing diagnosis for communities may be formulated based on the following issues:

1. Inaccessible and unavailable service.
2. Mortality and morbidity rates
3. Communicable disease rate
4. Specific population at risk for physical or emotional problems
5. Health promotion need for specific populations
6. Community distinction
7. Environmental hazards

### **3.1.4 Identification of the Planning Group**

The nature and extent of the community's needs determine who should be involved in developing the plan. Consideration should be given to:

- i. Persons for whom the plan is designed, that is, the target population.
- ii. Those who are concerned with health problem.
- iii. Those who appear best able to contribute resources to the plan.
- iv. Those who are most likely to follow through in carrying out the plan of actions.
- v. Leaders of the groups e.g. women leaders
- vi. Political leaders
- vii. Religious leaders

### **3.2 Community Programme Evaluation**

Evaluation is the process by which a nurse judges the value of nursing care that has been provided. Public community health nurse seeks to determine the degree to which planning were achieved and to describe any unplanned results.

The purpose of evaluation is to facilitate additional decision making. Evaluation is based on several assumptions;

- That nursing actions have results, both intended and unintended.
- That nurses are accountable for their actions and care provided and
- That different set of actions results in resources being used differently.

- Evaluation involves two parts
- Measurement and
- Interpretation

In nursing process, the idea of measuring is to be sure if planned goals were achieved. This is the same as if results have been attained or achieved. Performance evaluation results from effort and evaluation of effectiveness. The result may also be described as Appropriate i.e. suitable for a particular occasion or use.

- Adequate – able to fill a requirement.
- Effective – producing an expected results

Evaluation of effectiveness of care that takes place after the interventions have been performed is known as summative evaluation while formative evaluation is evaluation that occurs throughout the nursing process but before the outcome of care.

### 3.2.1 Steps in Evaluation

#### **Plan the Evaluation:**

1. Review goals and objectives
2. Meet with stakeholders to identify which evaluation questions should be answered.
3. Develop a budget for evaluation.
4. Determine who will conduct the evaluation.
5. Develop the evaluation design (what will be done)
6. Decide which evaluation instruments will be used to collect information.
7. Analyze how the evaluation questions relate to the goals and objectives.
8. Analyze whether the questions of stakeholders are addressed.
9. Determine when the evaluations will be conducted (develop a timeline)

#### **Collect Evaluation Data**

10. Develop specific processes for collecting data through questionnaires, review of records or documents, personal interviews, telephone interviews and observation.
11. Determine who will collect the data.
12. Pilot the data collection instrument.
13. Refine the instruments based on data from the pilot.
14. Identify the sample of persons from whom evaluation data will be collected.
15. Collect the data.

#### **Analyze the Data**

16. Determine how the data will be analyzed.
17. Determine who will analyze the data.

18. Analyze the data, generate several interpretations and make recommendation.

#### **Report the Evaluation Results**

19. Determine who will receive results.
20. Determine who will report the findings
21. Determine format for the report, including the executive summary.
22. Discuss how the findings will affect the programme.
23. Determine which findings will be included in the report.
24. Distribute the report.

#### **Implement the Results**

25. Plan how the result will be implemented.
26. Identify who will implement the result.
27. Determine when the result will be implemented (develop a timeline).

### **3.3 Health Risk Appraisal**

The health risk appraisal is a method for estimating an individual's health threat due to demographic behavioural and personal characteristics. The personal risk profiles are developed based on information from laboratory and other assessments.

One goal of the health risk assessment is to collect and organize personal data to provide an accurate, individualized assessment of risk factors that may lead to health promotion. A second goal of health risk assessment is to stimulate the necessary behavioural changes that may reduce health risk.

### **3.4 Screening**

Screening is the process of using clinical test and/or examination to identify patients who require diagnosis and additional health-related interventions. The goal of screening is to differentiate correctly between persons who have a previously unrecognized illness, developmental delay or other health alteration and those who do not. Screening recommendation most often used for health screening events and routine health care appointment are based on clinical research and evidence-based preventive care.

#### **SELF-ASSESSMENT EXERCISE**

List the steps involved in planning a community project

#### **4.0 CONCLUSION**

This unit focused on helping you to gain a good knowledge of health programme planning in the community where you are working. The steps to be followed in planning and evaluation were presented.

#### **5.0 SUMMARY**

After proper assessment, what follows is planning, implementation and evaluation. The steps in planning, implementation and evaluation have been presented to you. These steps if well followed will help you meet the needs of the community where you work.

#### **6.0 TUTOR MARKED ASSIGNMENTS**

- (1) Discuss community health programme planning using the nursing process
- (2) Identify the issues that will assist you in formulating a community diagnosis
- (3) Describe how you will evaluate a community project

#### **7.0 REFERENCES/FURTHER READING**

Guest C, Ricciardi W, Kawachi I and Lang I (2013); Oxford Handbook of Public Health Practice. Oxford University Press.

Maurer F A and Smith C M (2013) Community/Public Health Nursing Practice. Health for community and populations. ELSEVIER Inc.

## **MODULE 2            COMMUNITY INTERVENTIONS**

Community health intervention refers to a community-wide approach to health behaviour change. Rather than focusing primarily on the individual as a change agent, community interventionist recognizes a host of other factors that contribute to an individual's capacity to achieve optimal health. This approach recommends that a multisectoral strategy be taken in order to make changes to create an environment or foundation of a healthy community. Public health requires understanding of interactions of factors such as workplace, physical surroundings, environmental conditions, and cultural factors. In order to have the ability to realize optimal health, the community must have the capacity to promote the good health of its citizenry. Any community intervention must involve community collaboration and empowerment. By designing and implementing interventions in a clear, systematic manner, you can improve the health and well-being of your community and its residents. Interventions promote understanding of the condition you are working on and its causes and solutions.

Unit 1	Anthropometry
Unit 2	Family Health Record
Unit 3	Epidemiological Perspectives
Unit 4	Epidemiology of Communicable Diseases

### **UNIT 1            ANTHROPOMETRY**

#### **CONTENTS**

1.0	Introduction
2.0	Objectives
3.0	Main Content
3.1	Growth Monitoring
3.1.1	Implementation of Growth Monitoring
3.1.2	Height Measurement
3.2	Nutritional Assessment
3.2.1	Measuring Mid-upper-arm Circumference
3.3	Body Mass Index
3.4	Infant and Young Children Feeding
3.5	Malnutrition Management
4.0	Conclusion
5.0	Summary
6.0	Tutor-Marked Assignment
7.0	References/Further Reading

## **1.0 INTRODUCTION**

Growth Monitoring is a simple way to identify if the child is growing. Growth monitoring refers to regular assessment of a child's size (weight, height, or length and head circumference) from birth to five years of age in order to document growth. It is used at the time growth is fastest which is first 36 months of life. It helps to detect early changes from normal growth and the application of appropriate interventions. Growth monitoring is an essential part of primary health care in children

## **2.0 OBJECTIVES**

By the end of this unit you should be able to:

- Describe growth development and monitoring
- Discuss nutritional assessment
- Determine Body Mass Index
- Discuss management of malnutrition

## **3.0 MAIN CONTENT**

### **3.1.1 Growth Monitoring**

Growth monitoring begins immediately after birth by taking the birth weight. The birth weight forms the base line for growth monitoring. It shows underweight, overweight and or normal weight gain. This is done on a regular basis using road-to health chart. It is used until the child is five years (i.e. pre-school age). As a child grows, he gains weight so long as he remains healthy. Malnutrition and diseases disrupt this process of growth and can abnormally increase or decrease the weight. The kind of scale used depends on the age of the child. For example, for infants and young children 0-24 months, hanging scales is used in the rural areas where there is no Salter bowl type scale. For older children, bathroom type scale can be used.

### **3.1.2 Implementation of Growth Monitoring**

Before a child is weighed, correct and accurate age to the nearest months of birth (birth month) should be determined from birth records. The growth charts are designed for mothers and families as means of communication between them and the health workers. It is a home-based record that needs to be brought along with her to the health facility whenever she has an appointment.

- Weights of children are taken on regular (monthly) intervals and plotted against the age (in months) by joining the monthly dot(.) made on the growth chart.
- The month is written in full (i.e. November, October)
- The chart is used during the first five years of the child's life
- The graph has two weights-for-age curves or lines.
- The Upper one represents the 50<sup>th</sup> centile (for boys) and lower, the 3<sup>rd</sup> centile (for girls).
- The space between the two is called the "ROAD TO HEALTH" which most healthy children are expected to follow.
- In addition to the two standard curves described, some graphs may have a third curve, the 97<sup>th</sup> centile.
- The shape of the curve of the normal healthy child's growth line is similar to that of the reference lines on the growth chart. The slope of the growth line is then compared with the normal average growth curve already printed on the card.

There are three shapes or three reference curve directions for growth monitoring which must be recognised and their implications understood.

- (a) Upward direction: Good. The child is gaining weight and growing well (normal development). The mother should be commended.
- (b) Horizontal or flat line : Warning sign. Child is not gaining weight (static). Growth has flattered. Something is wrong and requires investigation.
- (c) Downward line: Very dangerous. Weight does not rise above the lower line. Child is losing weight. Very abnormal and urgent action must be taken. Ask and check for infection (treat if present). Breastfeeding and complimentary foods, personal and environmental hygiene are advised as appropriate.

As a guide, weight between 80-100% of the standard reference is good. Weights between 60-80% are referred to as underweight and such a child is said to be at risk of malnutrition. If a child's weight is < 60% of normal standard weight, he is said to be malnourished. He is either suffering from marasmus or kwashiorkor.

To be able to get the above percentage (%) is used

$$\frac{\text{Actual age of the child}}{\text{Standard Weight}} \times 100$$

### 3.1.3 Height Measurement

It is used to estimate the rate of growth of the individual and correlate the relation of height with general health.

The implementation includes the following

- Inform the mother about the procedure and gain consent
- Lay the child on a flat even surface like table
- Hold the head and heel firmly
- Place two books or any flat non-injurious objects one each at the head and heel level.
- Instruct the mother to remove the infant
- Place a measuring tape between the two blocks and measure height
- Record the height and inform the mother

#### **To measure school children and adults**

- Inform the client about the procedure and gain consent
- Instruct the client to stand against a wall on a flat surface or against the height rod with his feet together, arms and hands down, head erect and eyes straight, without footwear, feet parallel and heels, buttocks, shoulders and back of head touching the wall.
- Place the ruler on top of the head level and mark the area with pencil where the ruler touches the head.
- Instruct the client to move away from the area marked.
- Measure from ground level to the marked area with a measuring tape or if a height is used, read the measurement that appears at the point where the ruler touches the head.

### **3.2 Nutritional Assessment**

Nutrition is the provision of energy and essential nutrients to maintain optimal growth and development. An adequate diet contains all kinds of food in the right proportion. To remain healthy, an individual (child, adolescent and adult) must have the right amount and kind of food. Inadequate diet may result in under nutrition, overweight or obesity (mal nutrition) there are four elements of nutritional assessment. These include the following:

- Biochemical data such as Hb, PVC and urinalysis
- Clinical data such as information about individual's medical history which include acute and chronic illness, diagnostic procedures or treatment which can increase or decrease nutrients.
- Dietary data taken during a nutritional interview about the meal taking during previous day previous twenty four hours. Estimating portion or size of food is difficult.
- Anthropometric measurement such as weight, height, head circumference, skinfold thickness, mid upper arm circumference, chest and head circumference are carried out for assessing the level of malnutrition in children while the body mass index (weight and height<sup>2</sup>) in adolescents and adults.

### 3.2.1 Measuring the Mid-Upper Arm Circumference (MUAC)

Mid-Upper Arm Circumference is age independent measurement to assess the nutritional status or to screen malnutrition in children between ages one and five years. Measuring the mid-upper arm circumference is one of the direct anthropometric techniques of assessing the nutritional status of children between 1-5 years of age. It is one of the cheapest, easiest and quickest techniques. The MUAC changes with about 1cm or less from 1-5 years regardless of the sex of the child. At birth, it is between 7 and 9 centimeters and increases minimally in diameter between the first and fifth birthdays in healthy normal children. Any child whose MUAC is below 14.6centimeters within 1-5 years of age is undernourished.

The device for the measurement of MUAC is called SHAKIR strip (named after the developer) or MUAC tape. MUAC strip can be made from old X-ray films (previously washed). At its simplest form, the strip has a zero mark and three areas marked by colours green, yellow and red. “Green” signifies healthy baby, colour “yellow” indicates caution/warning and that the child is not getting enough and not growing well. The colour “red” is generally noted for danger.

The three colours of the strip can be effectively used as nutrition educational tool for mothers. The colour “green” can be used to give information to the mothers on locally available food stuffs and encourage the mothers to give green leafy vegetables, yellow colour signifies the need to give food and fruits such as pawpaw, mangoes, pineapple, banana, yellow yam, oranges, and other yellowish fruits. Red colour indicates the need for reddish foods such as palm oil, tomatoes, as good sources of carotene.

#### Implementation

Nurses implementation include:

- Collect appropriate requirements needed including Shorka’s strip
- Greet and explain to the mother the reasons for using the MUAC strip/tape
- Ensure mother is well seated with the child on her laps
- Give the MUAC tape/strip to the child to examine or hold before applying it
- Push up clothing from the left arm
- Allow arm to hang freely
- Locate the middle point by measuring the length between the tip of the shoulder (acromion) and the elbow (olecranon) of the left arm using non-stretchable fibre tape as the arm hangs freely.
- Place the MUAC tape/strip round the middle of the upper arm at the marked spot (i.e.mid-way).
- Put the end of the tape through the small slot in the wide of the tape

- Pull the tape/strip firm but not too tight that it pinches or pull the skin
- Read and record the colour where the tape/strip intercepts the original marked line on the strip (in-between the arrows)
- Counsel the mother accordingly to the result of the MUAC Tape (Nutrition Education).
- Green-Normal (commend good efforts)
- Yellow-Warning sign (child requires attention)

Red – Danger sign (child needs immediate attention with follow-up instructions on nutrition, personal and environmental hygiene and immunization.

### 3.3 Body Mass Index

Body Mass Index (BMI) can be described as a reliable indicator that measures generalized body fatness for adult adolescents and children. It is calculated by dividing the weight (kg) by height (m) squared. The average normal BMI for men and women is 24.99kg/m<sup>2</sup>. Anything above 25kg/m<sup>2</sup> but less than 30.0 is regarded as overweight and when it is above 30 but less than 40, regarded as morbid obesity. The BMI for children and young adults' age 2 to 20 years is expressed in percentiles. Regardless of gender when the BMI falls below the 5<sup>th</sup>, it is referred to as underweight, when it is between the 5<sup>th</sup> percentile and less than 85<sup>th</sup> percentile, it is within healthy weight. When it is within 85<sup>th</sup> but less than the 95<sup>th</sup> percentile the classification is overweight and when the BMI for boys and girls 2 to 20 years can be numerically classified.

Boys 2 to 20 years	Girls 2 to 20 years
<14.8- Underweight	<14.4 – Underweight
14.8 – Healthy weight	14.4 – 18.0
Healthy weight	
18.4 – 19.2 Overweight	18.0 – 19.0 Overweight
>19.4 – Obese	>19.0 – Obese

**BMI Formula**=  $\frac{\text{Weight in kilogrammes}}{\text{Height in metres}^2}$

The interpretation is as follows:

Less than 20	-	Inadequate nutrition
20 – 24	-	Normal
25 – 29	-	Overweight. Possibly obese
30 – 39	-	Moderately obese
40 and above	-	Grossly obese

### 3.4 Infant and Young Child Feeding

Infant and young child feeding (IYCF) encompasses the set of feeding practices needed to prevent malnutrition. These practices are essential for the nutrition, growth, development and survival of infants and young children. Breast feeding should be initiated within 30 minutes of delivery and infants should be exclusively breastfed for the first six months of life and thereafter breastfeeding should continue up to two years and beyond while safe complementary foods are introduced at six months after delivery.

Inappropriate breastfeeding practices are a major factor contributing to infant and child mortality in Nigeria. Children from 0-6 months who are not breastfed have five and seven times higher risk of dying from pneumonia and diarrhoea respectively. In addition, these children are at higher risk of developing non-communicable diseases in adulthood. Promotion of Exclusive Breast Feeding (EBF) for six months and continued breastfeeding with adequate complementary foods until 24 months and beyond constitutes the most effective preventive interventions reducing child morbidity and mortality.

Skilled behaviour change counselling and support for infant and child nutrition should be integrated into all points of contact between mothers and health service providers during pregnancy and the first two years of life of a child. Community based support networks are needed to help support appropriate infant and young child feeding (IYCF) at all levels.

Table 1: Interventions Focusing on Infant and Young Child Feeding.

Intervention	Description	Target Population	Potential Dietary Platform
Breast feeding promotion and support, taking into account policies and recommendations of HIV and infant feeding.	Early initiation of breast feeding within 30 minutes of delivery. EBF for 6 months and continued breastfeeding until 2 years of age and 12 months for HIV exposed infants.	Pregnant mothers and parents of infants under 6 months of age	Health Facilities Community structures Campaigns/Outreaches. Home Visits
Complementary feeding promotion	Behaviour change promotion to follow international best practices Provision of CIYCF counselling provision of nutrient dense complementary	Pregnant mothers and parents of infants and young children under two years of age.	Health Facilities Community structures Campaigns/Outreaches Home Visits

	foods for children under two.		
Strengthening of optimal feeding of a sick child during and after illness and exceptional circumstances	Encouragement of breastfeeding increase frequency of eating during and after illness.	Pregnant mothers and parents of infants and young children under 5 years of age.	Health Facilities Community Structures Campaigns/Outreaches. Home Visits
Advocacy for monitoring and strengthening enforcement of the international code of marketing of breast milk substitutes	Advocate for increased monitoring and enforcement that supports breast feeding promotion	Legislators	Health Facilities Community structures campaigns/outreaches. Home Visits

*Sources: Nutritional policy- National strategic plan of action for nutrition in Nigeria (2014-2019)*

### 3.5 Management of Severe Acute Malnutrition in Children under Five Years

Health workers who have contact with infant and young children should be oriented on the early signs and dangers of under nutrition. They should know how to identify the underlying causes of under nutrition, be able to recognize poor child caring practices and advice caregivers on corrective action. They should be equipped with screening tools for acute under nutrition and appropriate information for referral and follow up. Children with acute malnutrition are at higher risk of dying particularly those with (SAM) Severe Acute Malnutrition and require feeding with appropriate treatment.

**Table 2**

Intervention	Description	Target Population	Potential Dietary Plat Form
Prevention and management of moderate under nutrition in children 0-23 months of age		Population with high prevalence of children 0-23 months of age with weight for age	Health Facilities Community structures Campaigns/Outreaches. Home Visits
Treatment of Severe malnutrition	Identification of SAM and subsequent treatment	Children 6-59 months of age with weight to height (with or without oedema) or with MUAC<110cm	Health Facilities Community structures Campaigns/Outreaches.

*Source: Nutritional policy – National strategic plan of action for nutrition in Nigeria (2014-2019)*

### Micro Nutrient Deficiency Control

Vitamin A and mineral deficiencies contribute to morbidity and mortality among children by impairing immunity, impeding cognitive development and growth thereby reducing physical capacity and work performance in adulthood.

Micro nutrient deficiencies of public health importance in Nigeria include Vitamin A, Zinc, Iron, Folic acid and iodine. Multiple strategies are needed to control these deficiencies.

Table 3: Intervention Focusing on Micronutrient Deficiency Control (PI. Use this format)

Intervention	Description	Target Population	Potential Delivery Platform
Vitamin A Supplementation	Bi-annual doses for children. Used in the management of measles infection	Children 6-59 months	Health Facilities Community Structures Campaigns/Outreaches
Zinc Supplementation	As part of diarrhoea management	Children 6-23 months of age	Health Facilities Community structures Campaigns/Outreaches
Multiple Micro nutrient powders	Micronutrient powders for in-home fortification of complementary foods	Children 6-23 months of age	Health Facilities Community Structures Campaigns/Outreaches
Deworming	Two rounds of treatment per year	Children 12 months-59 months of age	Health Facilities Community structures Campaigns/Outreaches.
Nutrition Education on Bio-fortified foods	Promote consumption of fortified foods.	Parents and caregivers	Health Facilities Community structures Campaigns/Outreaches.

*Sources: Nutritional policy-National strategic plan of action for nutrition in Nigeria (2014-2019).*

### Diet Related Non Communicable Diseases (DRNCD):

Diet related non-communicable diseases (DRNCD) such as obesity, diabetes mellitus and cardiovascular diseases are increasing in public health importance in Nigeria. Researchers have empirically identified the link between non-communicable diseases and globalization, urbanization, demographics, lifestyle transition socio-cultural factors, poverty, poor maternal, foetal and infant nutrition.

**Table 4: Intervention focusing on DRNCD**

<b>Intervention</b>	<b>Description</b>	<b>Target Population</b>	<b>Potential Platform</b>	<b>Delivery</b>
Awareness of DRNCD	Identify risk factors providing education and increasing service for DRNCD	General population	Health Community Campaigns/Outreaches.	Facilities structures

*Sources: Nutritional policy – National strategic plan of action for nutrition in Nigeria (2014-2019)*

Self-Assessment Question 4. List the anthropometric measurements you can use in the community

#### **4.0 CONCLUSION**

The methods utilized to assess nutritional problem have been presented to you. This will help you to be more effective in your community practice

#### **5.0 SUMMARY**

The assessment of individuals in the community is another aspect that will help you to function better in your place of work. Anthropometric measurement is presented to you here. It is the best way to identify malnutrition in the community.

#### **6.0 TUTOR MARKED ASSIGNMENTS**

1. Describe growth development and monitoring in Children
2. Discuss nutritional assessment of under five children
3. Describe the use of Body Mass Index in assessing adult health.
4. Discuss management of malnutrition in adults

#### **7.0 REFERENCES/FURTHER READING**

Nutritional policy – National strategic plan of action for nutrition in Nigeria (2014-2019)

## **UNIT 2      FAMILY HEALTH RECORDS**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Meaning of Family Health Records
    - 3.1.1 Purposes of Family Health Records
    - 3.1.2 Criteria for Recording Family Health Records
    - 3.1.3 Types of Family Health Records
  - 3.2 Filing and Storage of Records
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

Records are necessary for the continuation of delivery of family health care services. Family records include information based on factual events, observation of results or measurements taken such as height, weight, body circumference or laboratory investigations carried out like hemoglobin, urine test, stool test and sputum examination depending upon the problem of the family. In this Unit, you will learn about health records; type of health records maintained for family health; the type of information recorded and criteria for recording. The purpose of documenting family health history which is an important component of family health records is to provide facts that are necessary for evaluating health situation of the family. This also helps in filing and storing health records.

### **2.0 OBJECTIVES**

In this unit you will learn about family health records and evaluation of family health service. After going through this unit, you will be able to:

- explain the meaning of family health record
- list the purpose for family health records
- state the criteria for recording family health records
- identify different family health records maintained in the agency you are working
- evaluate the importance of information included in family records for further health care planning
- arrange family records as per filing and storage system of records in the agency you are working

### **3.0 MAIN CONTENT**

#### **3.1 Family Health Records**

Family health record is a record of health information about a person and his or her close relatives.. Maintenance of family health records is one aspect of the total records system of a health agency. In most of the agencies the record system comprises a mixture of prescribed and standard forms often identical to those of other agencies, which can be designed or modified to meet the needs of particular agency. Use of common forms for records facilitates inter-agency and inter-unit comparisons and makes reporting of service data easier. Even if these forms are supplemented or modified still they retain enough similarity to provide a base for comparison.

Maintenance of family health records and evaluation of the family health service are complementary to each other. Records are necessary for continuation of delivery of family health care services and its evaluation. Evaluation of family health services is necessary to identify current and continuing family health needs.

These also have records of immunization, nutritional status, medical prescriptions and curative procedures carried out. Demographic data and individual personal history is also included in the family folders. We shall now discuss about purposes of records, criteria for recording in family health records and types of family health records in the following subsections. Let us begin with purposes.

##### **3.1.1 Purpose for Family Health Records**

The purpose for family health records are to:

1. serve as guides to nursing care,
2. provide the practitioner or community health nurse with data that is required for improvement of family health care,
3. provide the staff, administrator or governing body with documentation of services that have been rendered, and
4. provide data that are essential for programme planning and evaluation.

The purpose for documenting family health history, which is an important component of family health records are to:

1. provide facts that are necessary for evaluating health situation of the family
2. describe the nature and impact on health threat.
3. describe the health condition and interacting forces within the family in their daily living

4. provide opportunity for mutual exploration of the health situation by the nurse and by the family so that they can explain to each other their concerns, expectations and probable actions
5. provide baseline and periodic data from which to estimate the long-term changes, services provided and response of the family to these changes and services.

Family health records should represent a comprehensive, systematically organized data and information that are essential for nursing care decisions. The community health nurse must ensure adequate record support for her actions. It is the grass-root level workers who write most of the family history and progress record. You as a community health nurse and other grass-root level workers have much to gain if these records are comprehensive, available and relevant to service needs.

Though each agency has its own system of recording, the community health nurse can find her own ways of adapting family history and progress record to her own practice, style and informational needs. Her records may be a valuable resource when agency records are being revised or the system is being reorganized.

The community health nurse may need to build into the records, methods for incorporating information necessary for case planning and assessing health service utilization.

### **3.1.3 Criteria for Recording in Family Health Record**

The criteria should:

1. Reflect both the purpose and process of community health nursing practice.
2. Record should concentrate on the family and community as focus of care. It should reflect not only the health of the members of the family but also the ways in which the functioning of the family as a unit has an impact on the health of the family as a whole. It should also specify the ways in which family functions within its physical and social environment.
3. Family health records should serve as guides for comprehensive care. These should include health threats and health behaviours that have significance for family health. For example, an adequately immunized family may have a health threat from emotionally immature and impulsive parents. Also an apparently healthy family may have poor nutritional habits and poor housekeeping practice inviting accidents. It is important that records show the problem as it develops so that the change can be identified.

4. The record should indicate the expected outcomes and also the degree to which outcomes are achieved. This means that the goals of care to a family are also defined in the records.
5. The family health record should have specific actions planned for the family, Actions taken should be recorded in such a way that it can be easily located and future planning can be done.
6. The family record should indicate family response to nursing action.  
Since initial planning and implementation can redefine a problem the record must show revision in the status of the problem so that further planning can be done accordingly.
7. Record systems should possess sufficient uniformity to make recording, tabulation and collection easy and to permit inter-unit in-service comparisons and easy reference.
8. Maintenance of records should require minimal amount of time. Unimportant and irrelevant data reading may also require more time and lengthy records may result in errors.
9. Family records should be quickly available to the user. Accessibility is not always easy to achieve. Compiled individual and family records can be made available at a central location for easy reference, only for professional use.
10. Family records require reasonable storage space. As the number of individuals are added, the records also increase and require more storage space and facilities.
11. Depending upon the number of years, records should be retained, according to agency policies and storage space will be required.
12. Family record system should provide confidentiality of record content. For example, sometimes a mother in the family may not like information about family planning methods she has adopted to be shared with other members of the family or her neighborhood women. There should be provision for such confidential information and sometimes official records in the agency do not have provisions for such recording. The community health nurse must find her own ways to incorporate such summarization into her recording so that priority needs can be attended to first.

### **3.1.4 Types of Family Health Records**

Different family health records which are commonly used are grouped in different ways. These may be grouped according to:

Age of family member for whom records are used such as:

1. Newborn care
2. Road to health card
3. Toddler card

4. Adult card
  5. Old age or elderly card
  6. Mother-child link card
- Health care requirement cards as per health conditions and morbidity status
7. Pregnant women or antenatal card
  8. Labor record
  9. Person with illness: for example
    - Tuberculosis record
    - Diabetic record
    - Hypertension care card
    - Malaria record.
  10. Drug addicts or alcoholics record
  11. Any chronic care record
  12. Immunization record.

Records used in the Clinic, Home and Head Office. These records are in the form of Cards, Folders, File, Charts, etc.

Usually for family health services a family folder including different cards is maintained. This includes socio-demographic information, children health status (including height, weight, immunization and feeding habits, etc.) maternal records, morbidity records and observations -of general health status of family and the environment of the family. These records have individual formats and styles of recording which is prescribed for each agency. The method of recording is usually a standard one and general instructions are provided. Examples of records for infant, toddler, antenatal women, immunization and family planning are shown in Appendices 1 to.3 (which is given at the end of this block) and, similar records you may find in the agency where you are working.

### **3.2 Filing and Storage of Records**

Filing means keeping documents in a safe place and being able to find them easily and quickly. The essence for caring for documents is to prevent them from tearing, being dirty or even getting lost. A filing system is the central record keeping system for any organization. It helps you to be organized, systematic efficient and transparent. To have quick access to records for efficient use of records, a proper filing system must be adopted. In a primary health care set up, filing and storage of records needs special attention by the community health nurse. The filing will depend upon the type of records. If it is a family folder, it is filed as per geographical location or as per house number in the area. These family folders may be filed as per the name of the head of family. If community members and the health worker are familiar with house numbers, it is as per house number in the area. In a rural community where a family is

known by the name of the head of the family, the folder is filed as per the name and arranged alphabetically. Since these records are preserved for a long period of time and needs frequent handling, they should be kept in a filing cabinet or in a shelf with labels so that a file can be easily traced when a family member is visiting the health centre or a family visit is to be planned.

At a health centre, when cards are maintained as per age groups or type of morbidity conditions, these may be filed under these headings. The record system requires reasonable space for storage. The proliferation of records as well as increase in number of people under care may create a serious problem for storage. The period for which records are maintained is usually the agency's policy; often the period of retention is as low as five years. A short retention period does save space but it also presents problems, since community health needs and methods are changing and the period over which care is provided to the family is likely to be more prolonged.

Self Assessment Question 5. What are the purposes for documenting family health history

#### **4.0 CONCLUSION**

The use of family history and progress records is as important as developing and maintaining them. It is important to find and read the record as a basis for planning and taking nursing action for the family. Thus the nurse who uses records can value and monitor her own recording programme.

#### **5.0 SUMMARY**

In order to assemble in one place the comprehensive family information needed by a community nurse providing general family care, it is necessary to have a record system that permits quick and easy transfer of information among the care providing team members. The individual practitioner on the community health team must be able to ensure adequate record support for her own actions. It is mostly the grass root level practitioner who writes most of the family history and progress records. She benefits if records are comprehensive, available and relevant to service needs.

## **6.0 TUTOR-MARKED ASSIGNMENTS**

- (1) Explain the criteria for recording information in family health records
- (2). List the different types of family health records maintained in the agency you are working
- (3) Discuss the importance of family health records

## **7.0 REFERENCES/FURTHER READING**

Hunt R (2009). Introduction to Community-Based Nursing. Wolters Kluwer Health Publishers, New York

## **UNIT 3     EPIDEMIOLOGICAL PERSPECTIVE**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Definition of Epidemiology
    - 3.1.2 Epidemiological Process
    - 3.1.3 Epidemiological Tools
    - 3.1.4 Epidemiological Methods
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading
- 8.0

### **1.0. INTRODUCTION**

Epidemiology refers to the study of the distribution of disease in human populations against the background of their total environment. It includes the study of the patterns of diseases as well as a search for the determinants of diseases. Epidemiology relies on statistical evidences to determine the rate of spread of diseases and the population of people affected by the diseases. It is used to:

Evaluate the effectiveness of disease prevention and health promotion activities.

Determine the extent to which goals of health promotion is active.

Determine if disease prevention initiatives have been met.

### **2.0. OBJECTIVES**

By the end of this unit you should be able to:

- Discuss the role of epidemiology in Community Health Nursing
- Describe the use of epidemiology in community health nursing.
- Discuss the steps in the epidemiological process.
- Apply the use of proportion and ratio to determine disease incidence, prevalence, morbidity rate and outlook rates.

### **3.0. MAIN CONTENT**

#### **3.1 Definition of Epidemiology**

Uses of Epidemiology in Community  
Steps in Epidemiological Process  
Epidemiological Tools  
Epidemiological Methods

##### **3.1.1 Definition of Epidemiology**

Epidemiology refers to the study of the distribution of diseases in human population against the background of their total environment. It is useful for public-community based nursing in providing a broad understanding of the spread and transmission of disease. This understanding often forms the basis of community health presentation using the scientific problem – solving method, the nurse is able to pinpoint health needs in the community and develop appropriate approaches. Community/public health nurses are in the unique position of being able to identify cases, recognize patterns of diseases, eliminate barriers to disease control and provide education and counseling targeted of a disease condition or specific risk factors.

##### **3.1.2 Uses of Epidemiology in Community Health**

Epidemiology is useful to community health in the following ways

1. For disease surveillance to identify which hazards are the most important
2. Identify risk factors which may represent critical control points in the food production
3. Describe the distribution and magnitude of health and disease problems
4. Identify etiological factors in the pathogenesis of disease
5. Provides data essential in the planning, implementation and evaluation of services for the prevention, control and treatment of disease
6. Asses the health of the community
7. Public-Community health nurses use epidemiological information for decision making

##### **3.1.3 Epidemiological Process**

Epidemiology utilizes an organized approach to problem solving. The purpose is to identify a problem, collect data, formulate and test hypothesis. It involves the collection and analysis of more facts or data to determine the cause of illness and to implement control measures to

prevent additional illness. Epidemiological process involves the following steps.

Determine the nature, extent and possible significance of the problem. During this step, the nurse collects information from as many sources as possible. This information is then used to determine the scope of the problem.

Utilization of the gathered data to formulate a possible theory. At this step, the possible explanation are projected and explored for consideration.

Gather information from a variety of sources in order to narrow down the possibility. At this step assessment of all possible sites to gather information related to the disease process. The plausibility of the proposed hypothesis is evaluated.

Make the plan: In this step, the nurse focuses on breaking the cycle of disease. All factors influencing the spread of the disease must be considered and identified. Priorities are established to break the chain of transmission and to control the spread of the diseases.

Put the plan into action: The nurse utilizes all available means. The plan for controlling the disease is put into action.

Evaluation of plan: The nurse gathers all pertinent information to determine the success of the plan. Using this plan, she evaluates the success in prevention of the spread of the diseases.

Report and follow up: The nurse synthesizes evaluation data into a format that is understandable. She evaluates success and failures and base follow-up on the evaluation information.

#### **3.1.4. Epidemiological Tools-**

The basic tool of epidemiology is rate – This relates the number of cases to the population at risk. In order to compare populations of different sizes easily, the rate is usually expressed as the number of events in an arbitrary total, e.g. 1000 or 100000

(1) Incidence rate: This indicates the occurrence of cases within a stated period. It is calculated by

$$\text{Incidence Rate} = \frac{\text{Number of new cases in a stated period} \times 1000}{\text{Population at risk}}$$

- (1) Prevalence rate(Point prevalence rate): This is the number of cases which are present within the population at a particular point in time.

$$\text{Prevalence Rate} = \frac{\text{Number of current cases at a specific time} \times 1000}{\text{Population at risk}}$$

- (3) Incidence Rate: This describes the frequency of occurrence of new cases of a disease or spells of illness

$$\text{Incidence Rate} = \frac{\text{Number of persons who start a spell of illness during a defined period} \times 1000}{\text{Average number of persons exposed to risk during the period}}$$

- (3) Mortality rate: The rate of death per 1000 no of death X 1000  
Total population

- (4) Mortality rate or attack rate

$$\frac{\text{No of people at risk, who developed a certain disease}}{\text{Total number of people at risk}}$$

### 3.1.5. Epidemiological Methods

There are three main designs of epidemiological studies

- (1) Descriptive epidemiology:- This is a study in which the distribution of disease is described in terms of the three major variables: people, place and time. This is the first phase of epidemiological studies in which one answers the question: Who is affected? In what place? And at what time? The answers to these questions together with knowledge of the clinical and pathological features of the disease and information about the population and its environment assist in developing hypothesis about the determinants of the disease. These hypotheses can be tested by analytical studies.
- (2) Analytical epidemiology: In this method, two types of study are employed- case history (retrospective studies) or case control studies and cohort studies
- (i) Case Control Studies:- In this type a group of affected people is compared with a suitable matched control group of non-affected persons. Case history studies have the advantage of being relatively quick, easy and cheap. A

significant number of cases can be assembled and a variety of hypotheses can be rapidly screened.

- (ii) Cohort study:- In this study a group of persons who are exposed to the suspected etiological agent are compared with matched control subjects who have not been similarly exposed. Cohort studies have the advantage of giving a more direct estimation of the risk from exposure to each factor.
3. Experimental Epidemiology:- This involves studies in which one group which is deliberately subjected to an experience is compared with a control group which has not been in a similar experience. Field trials of vaccines are examples of experimental epidemiology

### **SELF-ASSESSMENT EXERCISE**

Why are epidemiological tools important in Public-Community health nursing

### **4.0 CONCLUSION**

This unit presented the epidemiological methods used in public health. This unit tried to help you understand better ways to care for clients in the community using epidemiological principles

### **5.0 SUMMARY**

Epidemiology is used in prevention and control of diseases. It is one of the tools in preventive health care. The steps have been presented to you and is expected that you will use them in your care.

### **6.0 TUTOR MARKED ASSIGNMENTS**

- 1) Describe the use of epidemiology in community health nursing.
- 2) List the steps in the epidemiological process
- 3) Discuss the methods used in epidemiology.

### **7.0 REFERENCES/FURTHER READING**

Goldsteen RC Goldsteen K and Dwelle (2015) Introduction to Public Health practices. Springer publishing company New York page 133-134.

Lucas AO and Gillas H M (2003) short textbook of Public Health Medicine for the Tropics. Revised Edition. Georgina Benttiff page 29-36.

## **UNIT 4    EPIDEMIOLOGY    AND    CONTROL    OF COMMUNICABLE DISEASES**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 The epidemiological Triangle
    - 3.1.2. Factors Affecting Host Community
    - 3.1.3. Mode of Transmission
  - 3.2 Control of Communicable Diseases
    - 3.2.1 Methods of Controlling Community Diseases
  - 3.3 Surveillance of Diseases
    - 3.3.1 Types of Surveillance
    - 3.3.2 Uses of Surveillance
  - 3.4 Investigation of Disease Outbreak
  - 3.5 Prevention of Epidemics
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References/Further Reading

### **1.0. INTRODUCTION**

A communicable disease is an infection or illness which arises through transmission of an infectious agent or its product from an infected person, animal or inanimate reservoir to a susceptible host.. Epidemiology of communicable diseases involves the study of the relationships between an agent, a host and the environment. These three are referred to as the epidemiological triangle. Their interactions determine the development and cessation of communicable diseases. They form a web of causalities which increases or decreases the risk for disease.

### **2.0. OBJECTIVES**

By the end of this unit you should be able to:

- Explain the epidemiological triangle
- Identify factors affecting host immunity
- Discuss the control of communicable diseases.
- Describe the methods used in the surveillance of disease
- Discuss the prevention of Epidemics

### 3.0 MAIN CONTENT

#### 3.1 The Epidemiological Triangle

A number of models of disease causation have been proposed. Among the simplest is the epidemiologic triad or triangle,- the traditional model for infectious disease. The triad consists of an external **agent**, a susceptible **host**, and an **environment** that brings the host and agent together. In this model, disease results from the interaction between the agent and the susceptible host in an environment that supports transmission of the agent from a source to that host. Agent, host, and environmental factors interrelate in a variety of complex ways to produce disease. Different diseases require different balances and interactions of these three components. Development of appropriate, practical, and effective public health measures to control or prevent disease usually requires assessment of all three components and their interactions.

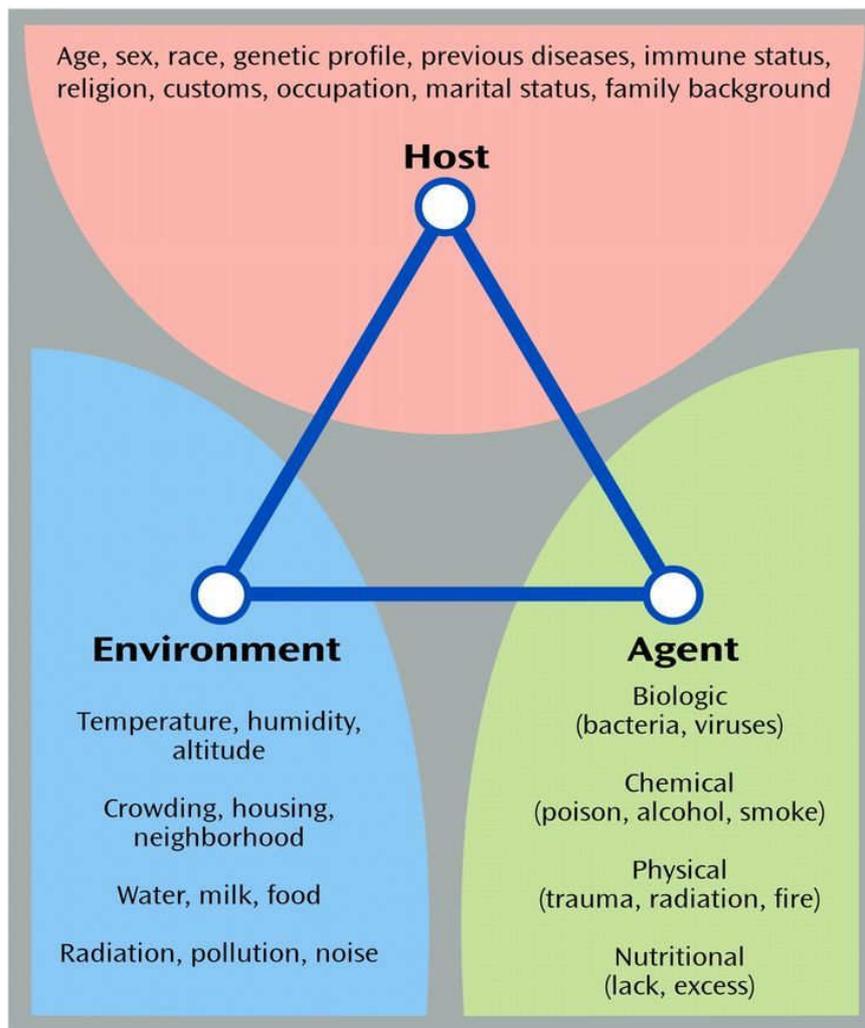


Fig 1 Epidemiological Triangle showing relationship between the agent host and the environment

**Agent:** This could be animate or inanimate objects that cause disease. They include:

- (a) Infectious agents e.g. viruses, bacteria, parasite, fungi or other microbes.
- (b) Physical agents that may be mechanical injury or trauma, genetics, noise and temperature
- (c) Chemical agents that may be drugs, fumes and toxins

Generally, the agent must be present for disease to occur; however, presence of that agent alone is not always sufficient to cause disease. A variety of factors influence whether exposure to an organism will result in disease, including the organism's pathogenicity (ability to cause disease) and dose.

**HOST:** - This is. a person (can also be an animal) who may be susceptible to invasion by infectious agent. The occurrence of infection and its outcome are in part determined by host factors. The availability of susceptible hosts depends upon many things, the most important is the level of immunity or resistance of the individual to a disease or disease agent. The term immunity is used to describe the ability of the host to resist infection.

Resistance to infection is determined by non-specific and specific factors

i. Non-specific Resistance

This depends on the protective covering of the skin which resists penetration by most infective agents and the mucous membranes some of which include ciliated epithelium which mechanically destroys particulate matter. Certain secretions like mucus, tears and gastric secretions contain enzymes which have anti-bacterial activity. Reflex responses such as coughing and sneezing also assist in keeping susceptible parts of the respiratory tract free from foreign matter.

ii. Specific Immunity

Specific immunity may be due to genetic or acquired.

a. Genetic

Certain infective agents which infect other animals do not infect man and vice versa. Specific genetic factors have been associated with resistance to infection e.g. persons who have haemoglobin S are more resistant to infection with plasmodium falciparum than those with normal haemoglobinAA

b. Acquired Immunity: This may be active or passive. In active immunity the host manufactures antibodies in response to an antigenic stimulus. Active may be naturally acquired following

clinical or subclinical infection or it may be induced artificially by administering living or killed organisms or their products.

In passive immunity, the host receives pre-formed antibodies. Passive immunity is artificially induced by the administration of antibodies from the sera of immune human beings (homologous) or animals (heterologous). The newborn baby acquires passive immunity by the transplacental transmission of antibodies. In this way newborn babies of immune mothers are protected against infections like measles, malaria and tetanus in the first few months of life. However, protection from passive immunity tends to be of short duration especially when heterologous serum is used.

The level of immunity in the community as a whole is termed herd immunity. Just as individual immunity decreases the probability of an individual to develop a particular disease when exposed to an infectious agent, herd immunity indicates a decreased probability of a group or of a community developing an epidemic upon introduction to an infectious agent. Thus a disease may be brought under control when a high proportion of the population has been immunized..

### **3.1.2. Factors affecting Host Immunity**

The resistance of the host to infection is affected by factors such as age, sex, pregnancy, nutrition, trauma and fatigue

- i. **Age**  
For some infections, children and the elderly tend to be most severely affected. Age may also influence the clinical pathological form of an infection
- ii. **Sex:**  
Some infective diseases show marked differences in their sex. Such infections as poliomyelitis and diphtheria often show preponderance in females
- iii. **Pregnancy**  
Pregnancy increases susceptibility to certain infections. These infections occur more frequently, show more severe manifestations and have a worse prognosis than in non-pregnant women of a similar age group e.g. viral infections such as poliomyelitis, bacterial infections such as pneumococcal infection and protozoal infection such as malaria.

- iv. Nutrition  
Good nutrition is generally accepted as an important measure in enhancing resistance to infection. Poorly nourished children are more liable to succumb to gastroenteritis and measles
- v. Trauma and Fatigue  
Stress in the form of trauma and fatigue may render the host susceptible to infections

The Environment: -refers to extrinsic factors that affect the agent and the opportunity for exposure. Environmental factors include physical factors such as geology and climate, biologic factors such as insects that transmit the agent, and socioeconomic factors such as crowding, sanitation, and the availability of health services. The ability of the infective agent to survive in man's environment is an important factor in the epidemiology of the infection. Each infective agent has its precise habitat on which it depends for its survival. The term reservoir of infection is used to describe the natural habitat of the infective agent. The environmental reservoir may be man, animal or non-living material

1. Reservoir in Man

The human reservoir includes both active cases and carriers.

Carriers: A carrier is a person who harbours the infective agents without showing signs of disease but is capable of transmitting the agent to other persons. Carriers could be classified as healthy or convalescent. A healthy carrier is a person who remains well throughout the infection while convalescent carriers are persons who continue to harbor the infective agent after recovering from the illness. Carriers play an important role in epidemiology of certain infections e.g poliomyelitis, meningitis and typhoid.

Incubation Period: This is the interval of time from infection of the host to the first appearance of symptoms and signs of the disease. Knowledge of the incubation period of an infection can be used in the control of infections as well as in the clinical assessment of patients.

2. Reservoir in Animals

Some infective agents which affect man have their reservoir in animals. The term zoonosis is applied to those infectious diseases of vertebrate animals which are transmissible to man under natural conditions. Such conditions include:

- a. Where man uses the animal for food e.g taeniasis
- b. Where there is a vector transmitting the infection from animals to man e.g. mosquito
- c. Where the animal bites man e.g. rabies
- d. Where the animal contaminates man's environment including food e.g. salmonellosis

### 3. Reservoir in Non-Living Things

Many of these agents are basically living in soil and are fully adapted to living free in nature. Biologically, they are equipped to withstand marked environmental changes in temperature in humidity. Apart from the vegetative forms some develop resistant forms such as spores which can withstand adverse environmental conditions e.g. clostridial organisms, the infective agents of tetanus (*Clostridium tetani*), gas gangrene (*C. welchii*) and botulism (*C. botulinum*).

#### 3.1.3 Mode of Transmission

This refers to the mechanism by which an infectious agent is transferred from one person to another or from the reservoir to the new host. Transmission may occur by

1. Contact: This may be either directly, person to person or indirectly through contaminated objects called fomites. This is common in places of overcrowding.
2. Penetration of skin: This may be directly by the organism itself (e.g. hookworm larvae, schistosomiasis) or by bite of a vector e.g. malaria or through wound by tetanus.
3. Inhalation: Through air-borne infection:- Poor ventilation, overcrowding in sleeping quarters and in public places are important factors in the epidemiology of airborne infections
4. Ingestion:- This is from contaminated hand, food or water.
5. Transplacental infection:- Infective agents cross the placenta to infect the foetus in the womb.

#### 3.2. Control of Communicable Diseases

A programme for the control of communicable disease should be based on a detailed knowledge of the epidemiology of the infection and on effective public health organization to plan, execute and evaluate the programme. The information should include knowledge of the distribution of the infection in the local area, of the major foci of infection and overall effect of the infection on the population. The programme should include some mechanisms for:

- a. recognizing the infection and confirmation of the diagnosis
- b. notifying the disease to appropriate authority
- c. finding the source of infection
- d. assessing the extent of the outbreak by finding other cases and the other exposed persons
- a. Recognizing the infection; This is the responsibility of the Public health Physicians and the public-community health nurses who are treating the patients. For early recognition, it is important that

physicians and other healthcare providers should be able to recognize the clinical manifestations of the major infective diseases in the area. Laboratory services should be used to support clinical diagnosis

- b. Notification of disease: A notifiable disease is one in which the occurrence must be reported to appropriate health authority. This includes major epidemic diseases and other communicable diseases about which health authorities require information. Some diseases are also notifiable internationally
- c. Identification of the source of infection; Epidemiological investigations are directed to finding the source of infection. This involves analysis of the information about time of occurrence of cases and the history of the movements of the patients. Knowledge of the incubation period of the infection is of great value in interpreting data
- d. Assessment of the extent of outbreak: This involves finding other infected persons in addition to those who have been notified and identifying others who also have been exposed to the risk of infection.

### **3.2.1. Methods of Controlling Communicable Diseases**

There are three ways to control communicable diseases. They include elimination of reservoir of infection, interrupting the pathway of transmission, and protecting the susceptible hosts

1. Elimination of the Reservoir:-
 

Where the reservoir is in man, the objective is to find and treat all infected persons, both patients, and carriers thereby eliminating sources of infection. For some infections, segregation of infected persons through isolation or quarantine is required

  - a. Isolation of Patients
 

This is indicated when there is an acute epidemic disease such as cholera. In addition infections with the following epidemiological features require isolation. The features include:

    - High morbidity and mortality
    - High infectivity
    - No significant extra-human reservoir
    - No significant reservoir or carriers
    - Easily recognizable infectious cases
  - b. Quarantine
 

Quarantine refers to the limitation of movement of persons who have been exposed to infection. The restriction

continues for a period of time equal to the usual longest duration of the incubation period of the disease.

Where the reservoir of infection is in animals (Zoonoses), the appropriate action will be determined by the usefulness of the animals, the level of association of the animal with human and the feasibility of protecting susceptible animals. If it is a pet, the animal will be treated and vaccinated where possible. If vectors like rat effort is made to eliminate them from human environment. Animals that are used as food should be examined and the infected ones eliminated.

## 2. Interruption of Transmission

This involves maintenance of personal hygiene and environmental hygiene such as (provision of safe water, sanitary disposal of sewage, avoidance of overcrowding, food hygiene) as well as control of vectors by the use of pesticidal agents.

## 3. Protection of the susceptible host:

This may be achieved by active or passive immunization. Protection can also be obtained by the use of antimicrobial drugs e.g. chemoprophylaxis for the prevention of malaria.

### 3.3. Surveillance of Diseases

Surveillance of disease refers to the exercise of continuous scrutiny of and watchfulness over the distribution and spread of infections and the related factors with sufficient accuracy and completeness to provide the basis for control. It is an information based activity involving the collection analysis and interpretation of large volumes of data originating from a variety of sources. The sources of data include the following:

- a. Registration of deaths
- b. Notification of diseases and reporting of epidemics
- c. Laboratory investigations
- d. Investigation of individual cases and epidemics
- e. Epidemiological surveys
- f. Distribution of animal reservoir and the vector
- G Production, distribution and care of vaccines ,sera and drugs
- g. Demographic and environmental data.

The information collected is used in a number of ways to

Evaluate the effectiveness of control and prevent health measures

Monitor changes in infectious agents e.g. trends in the development of antimicrobial resistance

Support health planning and the allocation of appropriate resources within the health care system

Identify high risk populations or areas to target interventions

- Provide a valuable archive of disease activity for future reference. Effective surveillance depends on the synthesis of all the data derived from the sources which are relevant to the particular problem. The main objective in surveillance of communicable diseases is the recognition of acute problems which demand immediate action.

### 1.3.1. Types of Disease Surveillance

There are two primary types of disease surveillance: passive and active.  
 Passive: Begins with healthcare providers or laboratories initiating the reporting to state or local officials. Reportable diseases are submitted on a case by case basis, based on a list of published conditions

Advantages:

- It is effective because it casts a wide net and can be more easily conducted on an ongoing basis.
- It is useful for routine surveillance activities

Disadvantage:

- It may result in underreporting and incomplete data

Active: This is when state or local officials actively search for information by contacting healthcare providers, laboratories, schools, work places to find out whether the clinician has treated any patient with any outbreak of disease

Advantages:

- Data collected through active surveillance provides more accurate and complete information
- It is used to investigate diseases with a high risk to public health

Disadvantage

It is resource intensive

### 3.3.2 Uses of Surveillance

1. Provide a broad assessment of specific problems in order to discern long term trends and epidemiological patterns.
2. Provide a scientific basis for ascertaining the major public health problems in an area
3. Serves as a guide for planning, implementation and assessment of programmes for the control of communicable diseases.
4. Essential for the proper assessment of priorities in public health programmes

5. Surveillance systems are important in supporting a public health emergency response

### **3.4 Investigation of Disease Outbreak**

Investigating an outbreak/epidemic is a set of procedures used to identify the cause responsible for the disease, the people affected, the circumstances and mode of spread of the disease and to take effective actions to contain and prevent spread of the disease. The steps to conduct investigation of infectious disease outbreak include

1. Verify the diagnosis of the disease that is suspected. In doing this, the following factors are considered.
  - i. Laboratory test: - The investigator must ensure that the results are reliable from confirmed test and from a reliable laboratory.
  - ii. Use clinical criteria that are in tandem with the laboratory results.
2. There should be established existence of outbreak.
  - i. Identify unreported cases that may be part of the outbreak.
  - ii. Determine the population at risk for developing the disease in question.
  - iii. Compare the incidence of new cases of the disease in the population with previous period.
3. Characterize the distribution of cases by person, place and time.
  - i. The variable time is used to construct an epidemic curve. This graph provides a simple visual display of the outbreak's magnitude and time trend. A point source of exposure is suggested if all cases occur within one incubation period of the disease. Common source outbreak of disease results from exposure of individuals to the same causal factor.
  - ii. The place can be used to detect a source of infection by identification of spatial clustering of cases. Cases can be plotted by the place individuals reside, work or attend.
  - iii. Person can be used to compare the characteristics of the population contracting the disease to the characteristics of the population without the disease.
4. Develop and test the hypothesis.
  - i. Demonstrate the difference in the attack rates of people who were exposed and not exposed to the sources of infection.
  - ii. Apply statistical tests to the data to indicate statistical differences between cases and control.
  - iii. Collect clinical and environmental specimens if they are available for processing in an appropriate laboratory.
  - iv. Formulate conclusion based on evidence from the result.
  - v. Report all aspect of the investigation for it to be replicated.

### 3.5 Prevention of Epidemics:-

**Prevention of epidemics could be primary, secondary and tertiary.**

**Primary Prevention:** This involves preventing disease onset.

- Elimination of the organism in their natural reservoir.
- Environmental protection:- This is done by ensuring a safe drinking water supply and safeguarding the food supply.
- Interrupting the chain of transmission: This is done by controlling the insect vector, rodents and modifying behaviour and personal hygiene.
- Reducing susceptibility in the host: This is done by reversing malnutrition and micronutrient deficiency to boost people's immunity in low income countries and to help prevent the spread.
- Vaccination:- This is the most successful preventive measure. It helped in the global eradication of smallpox.
- Health Education and community participation: This helps to promote vector control programmes, personal protection like insect repellents and mosquito nets.

**Secondary Prevention:-**This involves early arrest of the progression of established disease. It includes:

- Screening: Where there is an asymptomatic or pre-asymptomatic period in the infection process screening programmes are useful
- It also involves outbreak/epidemic investigation which is aimed at identifying the causative agent, route of transmission and risk factors for outbreak.
- It also involves developing and implementing control and prevention strategies and the provision of advice to prevent a similar event in the future.

**Tertiary Prevention:** This involves limiting the consequences of established diseases. This is the rehabilitation of the clients that suffered the infection.

### SELF-ASSESSMENT EXERCISE

Describe the Epidemiological Triangle.

### 4.0 CONCLUSION

This unit has presented the use of epidemiology in the control of communicable diseases. The epidemiological triangle consisting of the agent, host and the environment have been described. Mode of disease transmission and methods of disease control and investigating outbreak of disease have been presented to enable you work effectively in the community

## **5.0 SUMMARY**

Epidemiology is used in prevention and control of communicable diseases. It is one of the tools in preventive health care. It is expected that your exposure in the field of epidemiology will enable you function effectively in your work place.

## **6.0 TUTORMARKED ASSIGNMENTS**

- 1) List factors that affect host immunity
- 2) Discuss the methods used in the control of diseases
- 3) As a public health nurse how will you investigate the outbreak of a disease
- 4) What are the steps involved in the prevention of epidemics

## **7.0 REFERENCES/FURTHER READING**

Goldstein RC Goldstein K and Dwelle (2015) Introduction to Public Health promises and practices and Ed springer publishing company New York page 133-134.

Lucas AO and Gillas H M (2003) short textbook of Public Health Medicine for the Tropics. Revised Edition. Georgina Bentiff page 29-36.

## **MODULE 3            MANAGEMENT IN PUBLIC HEALTH**

Management in public health has been defined as the optimal use of resources towards the improvement of the health experience of the population. It is directed towards managing systems based on health outcomes both at the level of population –based health programmes and at the level of patient care. Above all, it is about leadership and managing change. It is about capacity building in order to improve the chances of effective policy implementation. Management is a pillar of public health practice. It is only through effective management can research, theory and scientific innovation be translated into successful public health action

Unit 1	Principles of Delegation and Supervision in Public – Community Health
Unit 2	Conflict and Conflict Resolution
Unit 3	Staff Development and Time Management in Public-Community Health Nursing

### **UNIT 1            PRINCIPLES OF DELEGATION AND SUPERVISION IN PUBLIC – COMMUNITY HEALTH**

#### **CONTENTS**

1.0	Introduction
2.0	Objectives
3.0	Main Content
3.1	Principles of Delegation
3.1.1	Factors to be considered in Delegation
3.1.2	Guidelines for Delegation
3.1.4	Reasons why some Managers do not Delegate
3.1.5	Barriers to Delegating
3.2	Supervision
3.2.1.	Human Relations in Supervision
3.2.2.	Benefits of supervision
4.0.	Conclusion
5.0.	Summary
6.0.	Tutor Marked Assignment
7.0.	References/Further Reading

#### **1.0            INTRODUCTION**

The Unit head has two responsibilities in drawing up work assignment – appropriate delegation of duties i.e. assigning people duties within their scope of practice and adequate supervision of personnel under her control.

Delegation is the process of assigning part or all of one person's responsibility to another person or persons. Delegating is an effective management competency by which managers get the work done through the employees. Simply put, delegation is the organizational process that permits the transfer of responsibility and authority from a superior to a follower. Supervision on the other hand is a management function that oversees, observes and assesses performance of team members in all their activities to ensure adequacy of standard and achievement of objectives already stated. It is a process of helping the follower to improve on his/her knowledge and skills through objective monitoring of work performance to ensure that one delivers the best possible care to the client.

## 2.0 OBJECTIVES

By the end of this unit, you should be able to:

- Explain the principles of delegation
- Outline factors to be considered when delegating duties
- Discuss guidelines for delegation of duties
- Outline the techniques in supervision

## 3.0 MAIN CONTENT

### 3.1 Principles of Delegation

There are three major functions required in delegation:

1. First, is the assigning of a responsibility by a superior officer to a junior officer who expects result.
2. Second,, authority is given to the follower to enable her perform that function.
3. Thirdly, there must be accountability.

#### a. *Authority and Responsibility*

A key problem often associated with delegation is that managers want to delegate responsibility without giving the follower authority. The principle of delegation states that for delegation to be effective, it must be backed with equal power or authority. It must be clearly stated that no delegated responsibility can be performed efficiently if the person discharging the responsibility is not given authority. Responsibility and authority can be delegated, but accountability cannot be delegated.

#### b. *Accountability*

Accountability is a key issue when powers are delegated to a follower. When a unit head delegates responsibility to any staff, she expects the staff to give account of her stewardship.

Accountability is the ability and willingness to assume responsibility for one's actions and to accept the consequences of one's behaviour.

### 3.1.1 Factors to be considered in delegation.

The factors have been categorized as client, healthcare team, task and delegate factors

1. Client factors
  - Complexity of care needed
  - Specific care needed
  - Need for special precautions
2. Health care team factors
  - The skill of the staff
  - Experiences of the staff
  - Nurse-to-patient ratio
3. Task Factors:-
  - (a) Predictability of outcome
    - Will the completion of the task have a predictable outcome?
    - Is it a routine procedure?
    - Is it a new treatment?
  - (b) Potential for harm
    - Is there a chance that something negative may happen to the client?
    - Is the client's condition unstable?
  - (c) Complexity of care
    - More computer task should not be delegated.
  - (d) Need for problem solving and innovation
    - Will a judgment need to be made while performing the task?
    - Does it require nursing assessment skill?
  - (e) Level of interaction with the client or community
    - Is there a need to provide psychological support or education during the performance of the task?
4. Delegate factors:- Consideration for selection of on appropriate delegate include:
  1. Education; training and work experiences
  2. Knowledge and skill to perform the task
  3. Level of critical thinking required to complete the task.
  4. Ability to communicate the task
  5. Demonstrated competence
  6. Agency policy and procedure
  7. Licensing legislation

### 3.1.3 Guidelines for Delegation

1. Right task
  - Identify what tasks are appropriate to delegate for each specific client
  - Delegate activities to appropriate level of team members based on professional standards of practice, legal and facility guidelines.
2. Right circumstances
  - Assess the health status and complexity of care required by the client.
  - Match the complexity of care demands to the skill level of the health care team member.
  - Consider the workload of the team member
3. Right person
  - Assess and verify the competency of the health care team member. The task must be within the team member's scope of practice and the team member must have the necessary competence/training.
  - Continually review the performance of the team member and determine care competency.
  - Assess team performance based on standard and when need be, take steps to remedy future standards.
4. Right direction/communication:- The communication may be in writing or oral.
  - State the data to be collected
  - Method and timeline for reporting, including when to report concerns.
  - Specific task to be performed with expected results
5. Right supervision:- The delegating public health nurse should:
  - Provide supervision directing or indirectly.
  - Provide clear directions and understandable expectation of the task to be performed
  - Monitor performance
  - Provide feedback
  - Intervene if need be
  - Evaluate the client and determine if outcomes were met.

### 3.1.4. Reasons Why Some Managers do not Delegate

In spite of the fact that delegation is a key organization process, some managers find it difficult to delegate. From research findings some of the reasons given by managers for not delegating include:

- lack of confidence in their followers
- lack of trust;
- fear that delegation will diminish their authority;

fear that the effectiveness of their followers will be made prominent and noticed; they do not want to take chances.

### 3.1.5 Barriers to Delegating

#### Barriers in the Delegator

- Preference for operating by oneself
- Demand that everyone “know all the details”
- “I can do it better myself” fallacy
- Lack of experience in the job or in delegating
- Insecurity
- Fear of being disliked
- Refusal to allow mistakes
- Lack of confidence in followers
- Perfectionism, leading to excessive control
- Lack of organizational skill in balancing workloads
- Failure to delegate authority commensurate with responsibility
- Uncertainty over tasks and inability to explain
- Disinclination to develop followers
- Failure to establish effective controls and to follow up

#### Barriers in the Delegatee

- Lack of experience
- Lack of competence
- Avoidance of responsibility
- Over dependence on the boss
- Work Overload

### 3.2. Supervision

Supervision is a management function. It is the act of overseeing observing and assessing performance of workers in all their activities to ensure adequacy of standard and achievement of objectives already stated. It is a process of helping team members to improve on their knowledge and skills through objective monitoring of work performance to ensure that one delivers the best possible care to the client. Sufficient clinical competence is needed at each level to teach, direct and evaluate the activities of members. Good supervision means creating opportunities for people to perform what they already are committed to perform.

For supervision to be thorough in the community or any healthcare setting the following techniques must be applied:

1. Objectives must be properly stated and communicated to every member of staff.

2. Job description of each category of staff must be clearly delineated.
3. The supervisor should develop uniform supervision checklist or criteria for each type of service rendered.
4. The supervisor should be physically present to monitor work performance of staff.
5. Supervision should be carried out during and after each procedure to ensure that workers do the right thing at the right time.
6. In the community, the supervisor should occasionally pay unscheduled visits to health centres or posts to enable her see the workers in their normal behaviour.

### **3.2.1. Human Relations in Supervision**

The successful supervisor must possess certain personal qualities:

- The unit head must command respect and loyalty from workers in order to ensure maximum efficiency in the work assigned.
- Ability to know how to treat followers as human beings.
- Don't be too intimate with followers because with intimacy comes leniency and with leniency comes the loss of respect.
- Don't too strict.
- Obtain cooperation of your workers.
- Be a leader and not a boss.
- impartiality, open-mindedness and fairness are required of the supervisor in dealing with everyday problems, which at times threaten to disrupt the efficient functioning of the work.
- The unit head must be ready and willing to see both sides of a problem and solve them fairly and reasonably so that no rancour remains in those against whom the decision goes.
- She must be available for advice when approached by followers and must be patient and understanding in dealing with personal problems.
- Finally a good supervisor should be able to keep her promises to staff.

### **3.2.2 Benefits of Supervision**

1. Helps in overseeing planned activities.
2. Helps in achieving stated objectives.
3. Helps in maintaining staff morale and confidence.
4. Provision of technical assistance where and when necessary.
5. Identifies training needs for team members.
6. Provides prompt feedback for improvement of job performance.
7. Helps the supervisor in evaluating the programme and making corrective actions.
8. Encourages adequate communication between the supervisor and the subordinate.

## **SELF-ASSESSMENT EXERCISE**

Define the terms authority, responsibility and accountability in relation to delegation of duties

### **4.0 CONCLUSION**

Delegation and supervision are important managerial tools in providing a good community care services. This unit provides you an in-depth knowledge and skills you need to manage your staff for effective performance of the job.

### **5.0 SUMMARY**

The principles of delegation and supervision have been presented to ensure adequate performance of workers in their activities and to achieve the set goals.

### **6.0 TUTOR MARKED ASSIGNMENTS**

- (1) Describe the principles of delegation
- (2) Describe factors to be considered when delegating duties to staff.
- (3) Discuss guidelines for delegation of duties
- (4) Explain the techniques in Supervision

### **7.0 REFERENCES/FURTHER READING**

Lucas AO and Gillas H M (2003).Short textbook of Public Health Medicine for the Tropics. Revised Edition. Georgina Bentiffpage 29-36.

Okoronkwo IL(2021). Nursing Service Administration and Management.Revised edition. Institute for Developing Studies ,Enugu.,

Sullivan E J (2012); Effective Leadership and management in Nursing. Pearson Publishers.

## **UNIT 2 CONFLICT AND CONFLICT RESOLUTION**

### **CONTENTS**

- 1.0. Introduction
- 2.0. Objectives
- 3.0. Main Content
  - 3.1 Sources of Conflict
    - 3.1.2. Types of Conflict
    - 3.1.3. Advantages and Disadvantages of Conflict
  - 3.2. Organizational Conflict in Public-Community Health Nursing
  - 3.3. Organizational Negotiations in Conflict Resolution
    - 3.3.1 Organizational Communication in Conflict Resolution
  - 3.4. Methods of Conflict Resolution
  - 3.5. Managing Unit Conflict.

### **1.0 INTRODUCTION**

Conflict is an inherent part of an individual's personal and professional life. It may result from divergence of opinions, incompatibility, transmission of erroneous information, or competition of scarce resources. Although often seen as a negative manifestation of human interaction, conflict can have positive as well as negative aspects. It is an inevitable part of professional, social and personal life and can result in constructive or destructive consequences. Lack of conflict in an organization creates organizational stasis, while too much conflict can be demoralizing, produces anxiety and contributes to burnout. The desired goal in resolving conflict is for both parties to reach a satisfactory resolution. This is called a win-win resolution. A win-win solution is not always possible. There is the possibility of a solution in which one party wins while the other loses as well as a lose-lose solution in which both parties lose.

### **2.0 OBJECTIVES**

By the end of this unit you will be able to

- Define Conflict
- Discuss Sources of Conflict in the Work Place
- Outline Methods of Conflict Resolutions
- List the Advantages and Disadvantages of Conflict in Public Health Organizations

### **3.0 MAIN CONTENT**

#### **3.1 Sources of Conflict in the Work Place**

1. **Work Demands**  
Work demands such as workload as a result of shortage of nurses, shift duties and all other demands nursing practice makes on nurses can be a major source of conflict. Additionally the home environment of nurses may be significant sources of conflict too. This conflict may be brought into the work setting, disrupting organizational functions.
2. **Economic Factors**  
The allocation of fund to the health sector has always been inadequate to support health delivery services. Nurses in most countries generally do not have major influence in the distribution and utilization of funds. This situation often results in the marginalization of nursing services. This may lead to opposing views about health finances and conflict among other health personnel and nurses.
3. **Political Factors**  
Opposing views and expectations between government and the nursing profession may result in conflicts, which often lead to crisis situations such as strikes, demonstration and withdrawal of services. Political influence of government may conflict with that of nursing in the issue of professional standards and nursing education.
4. **Stagnation of Nurses**  
A nurse who is not promoted following an appraisal and promotion exercise may feel unjustly treated and may resist orders/instructions from those promoted who may be her juniors in the system. This scenario brings conflict in the nursing system.

#### **3.1. 2 Types of Conflicts**

1. **Intrapersonal conflict**  
This occurs within the person. This may involve internal struggle related to contradictory values or wants.
2. **Interpersonal-conflict**  
This occurs between two or more people with different values, goals and/or belief. Interpersonal conflict in the health care setting involves disagreement among nurses, clients, family members and within a health care team. This is the issue in nursing, especially in

relation to new graduates nurses, who bring new personalities and perspectives to various health care settings. Interpersonal conflicts contribute to burnout and work-related stress.

### 3. Inter-group conflict.

This occurs between two or more groups of individuals, departments or organizations. This may be due to new policy or procedure, a change in leadership, or a change in organizational structure.

#### **3.1.3. Advantages of Conflicts**

- Conflict leads to growth and open honest communication
- It increases group cohesion and commitment to common goals.
- Facilitates understanding of problem solving
- It motivates groups to change
- It stimulates creativity

#### Disadvantages of Conflicts

- Conflict brings divisiveness if not resolved well.
- Where it is not resolved it causes misperception, distrust and frustration among members.
- It leads to group dissatisfaction

### **3.2 Organizational Conflict in Public –Community Health Nursing:-**

Organizational conflict disrupts the working relationship and creates a stressful work environment. It inhibits community involvement. It must not be allowed to exist. If conflict exists to the level that productivity and quality of care are compromised, the unit leader must do everything possible to identify the cause and attempt to resolve it.

The common causes of organization conflict include

- Ineffective communication in the unit
- Unclear expectations in the team members in their various roles.
- Poorly defined or actualizing organization structure.
- Conflicts of interest and variance in standards.
- Incompatibility of individuals
- Management of staffing
- Variation in age, gender and training

### **3.3. Organizational negotiations in conflict resolution:**

Negotiation is the process in which the parties involved in the conflict try to resolve the conflict by agreeing upon courses of action. They bargain for collective advantage by attempting to design outcome that serve the organization mutual interest.

### 3.3.1 Organization Communication in Conflict Resolution

Open communication among the parties in conflict can help resolve the conflict. The two-way process in communication is needed.

The communication must be assertive to allow each parties to express directly, honestly and appropriately ways that do not infringe upon the right of the other parties. Assertive communication is a communication style that acknowledges and deals with conflict, recognizes others as equal partners, and provides a direct statement of feeling.

### 3.4 Methods of Conflict Resolution

There are about five major ways conflicts can be resolved.

1. **Compromising:-** This method involves each party to give up something. It is considered a win-win solution because something most valuable must be fulfilled. If one party gives up more than the other, it becomes a win-lose solution. There must be some compromise both sides which may be equal or unequal.
2. **Competing:-** This method involves one party pursues a desired solution at the expense of others. This is usually a win-lose solution. Managers may use this when a quick or unpopular decision must be made. The party that loses something usually feels angry, frustrated, and desires for retribution.
3. **Cooperating/Accommodating:-** In this method one party sacrifices something, allowing the other party to get what it wants. This is the opposite of competing. This is a lose-win solution. The original problem may not actually be resolved. The solution may contribute to future conflict.
4. **Smoothing:-**In this method one party attempts to “Smooth” another party. This decreases the emotional component of the conflict. It is often used to preserve or maintain a peaceful work environment. The focus may be on what is agreed upon but this will leave the conflict area mostly unresolved. This is a lose-lose solution.
5. **Avoidance:-**In this method both parties know there is a conflict, but they refuse to face it or attempt to resolve it. This is appropriate for minor conflicts or when one party holds more power than the other party or if the issue may work itself out over time. Since the conflict still remains on resolved, it may re-surface again at a later date and escalate over time. This is also a lose-lose solution.

### **3.5 Managing Unit Conflict**

Managing conflict effectively requires an understanding of its origin. Some common causes of unit conflict include:

1. Poor communication
2. Inadequately defined organization structure
3. Incompatibilities based on differences in temperament or attitudes
4. Unclear expectations
5. Individual or group conflicts of interest
6. Staffing changes
7. Diversity in gender, culture or age

All of these types of unit conflicts can disrupt working relationships and result in lower productivity. It is imperative that the unit head identifies the origin of the conflict and intervene as necessary to promote cooperative if not collaborative conflict resolution. Studies have shown that leadership style and years of experience of unit heads influenced the strategy selected to solve such conflicts. Conflict is inevitable in any organization. Community health nurses should develop their skills and competences in identifying conflict situations and plan effective strategies to resolve them. The problem solving approach, which is well established in the nursing process, is an effective method in conflict resolution.

#### **SELF-ASSESSMENT EXERCISE**

Outline the methods of conflict resolution

### **4.0 CONCLUSION**

In every work setting there is high chances of having conflict. This unit presented to you sources of conflict and methods of conflict resolution in public health nursing. This is to help you have control of conflict in the community

### **5.0 SUMMARY**

Conflict is something that cannot be avoided completely. The best way to handle the situation is to master the causes of conflict and ways to resolve it. As a public health nurse you will be faced with conflict in the community, homes and place of work. This course has equipped you.

## **6.0 TUTOR MARKED ASSIGNMENTS:**

1. Outline the sources of conflict in a work place
2. Describe type of conflicts in community health nursing
3. List the advantages and disadvantages of conflict in public health organizations.

## **7.0 REFERENCES/FURTHER READING**

OkoronkwoIL(2021) Nursing Service Administration and Management. Revised edition. Institute of Developmental Studies, Enugu

Whitebead D K, Weiss S A and Tappin R M (2010) Essentials of Nursing Leadership and Management. F C Davis Company ,Philiadelphia.

## **UNIT3 STAFF DEVELOPMENT PERFORMANCE AND TIME MANAGEMENT IN PUBLIC - COMMUNITY HEALTH NURSING**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Methods of Staff Development
    - 3.1.2 Objectives for Staff Development
    - 3.1.3 Advantages of Staff Development
  - 3.2 Concept of Performance Improvement
    - 3.2.1 Objectives of Staff Performance
    - 3.2.2 Steps in Staff Performance
  - 3.3 Time Management
    - 3.3.1 Principles for Time Management
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

Staff Development is a continuing liberal education to develop ones full potentials. It deals with technical and professional education and may include activities planned within or without the organization such as orientation, conferences, seminars, in-service training, and continuing education courses to meet licensure requirements. Staff development is vital not only as a means of helping the staff acquire up-to-date knowledge and ideas in the field but also as a preparation against future higher positions in the organization. The staff development is intended to enhance the competency of all staff and help to meet standards set for the community programmes. The quality of care given to the community is directly related to the educational and competency of health care providers.

### **2.0 OBJECTIVE**

By the end of this unit you will be able to

- Identify Methods of Staff Development.
- List the Objectives for Staff Improvement
- Outline Advantages of Staff Training and Development
- Outline the Steps in Performance Improvements.
- Discuss the Principles for Time Management in Public Health

### 3.0 MAIN CONTENT

#### 3.1 Methods of Staff Development

Staff development begins during interview and orientation. Staff orientation helps new public health nurses translate knowledge, principles, skills and nursing theories into practice. It helps new nurses to gain competence, which is the ability to meet the requirement of a particular role. Staff can be developed by

1. Training: This is an aspect of staff development, which ensures that staff are exposed to latest development in their areas of specialty ensuring the provision of quality output. In the health sector, training appears to be a very important tool for ensuring quality of care. It is a process of inculcating in the worker the skills and knowledge necessary for effective job performance. Training could be off the job or on the job.
  - a. Off the job training by allowing staff to undertake a study leave for higher education. programmes outside the workplace. The study leave could be with or without pay.
  - b. On the job training through seminars, conferences or workshops. Here staff is allowed to attend these programmes while on the job.
2. Indoctrination:- This is the process by which a person is taught the beliefs or ideology of a culture without discouraging independent thought.
3. Socialization: - This is a process by which a person learns the values and culture of a new setting.

The unit heads can maintain competencies by

Use of checklist to provide a record of opportunities and the level of proficiency in relation to skills.

Use peer observation to assess competence.

##### 3.1.1 Objectives of Staff Development

1. improve performance to enable one to do ones job more efficiently.
2. utilize ones potential to the fullest
3. update ones knowledge, skills and competence.
4. fit one for new job on promotion
5. enhance ones career.
6. for self-growth and personal satisfaction.
7. for professional recognition and renewal of professional registration for practice.

### 3.1.2 Advantages of Staff Training and Development

A planned and systematic training and development programme has the following advantages among others:

- Increased productivity – an increase in skill and ability usually results in increase in both quantity and quality of output.
- Higher Morale – possession of needed skill and knowledge increases confidence, ego satisfaction and leads to reduced supervision and greater independence. All these enhance worker morale.
- Reduced Cost – an increase in skill and knowledge helps to reduce accidents, spoilages etc. leading to lower cost of operation.
- Increased Organizational Stability and Flexibility – stability is the ability of an organization to sustain its effectiveness despite the loss of key personnel. This is achieved through having a reservoir of trained replacements. Flexibility is the ability to adjust to short run variations if the volume of work requires personnel with multiple skills that make it possible for them to be moved to jobs where the demand is highest.
- Career Enhancement – training and development programmes meet the needs of individuals for meaningful life-long career.

### 3.2 Concept of Performance Improvement

Performance improvement is the process used to identify and resolve performance deficiencies. Performance improvement includes measuring performance against a set of predetermined standards. It is an important task of the nurse manager and forms part of the controlling function. The major purpose of performance improvement is to improve employee's productivity thereby making the organization more effective, more viable and better able to achieve the goals of the organization. Performance improvement should measure job specific performance criteria. This implies that a clear and concise job description is necessary in order for the nurse manager to complete a performance evaluation. Unfortunately majority of managers lack adequate knowledge as regards to appropriate techniques of measuring performance such that their style of rating tend to have negative effect on their followers. It is essential that they develop their competencies in the use of this system in their management functions.

### 3.2.1 Objectives of Performance Improvement

1. It facilitates the management of staff resources by assisting employees to realize and fully utilize their potentials while striving to achieve organization goals.
2. Provides a systematic judgment to back up salary increases, promotion, demotion or discharge and disciplinary action as the case may be.
3. It is a means of informing a follower how well or otherwise she is getting on and suggesting needs/changes in her behaviour, attitudes, skills or job knowledge and letting her know where she stands with her superior.
4. It leads to more effective work assignment that is, matching the employee to the appropriate job.
5. It identifies the training needs of a staff, new skills and potentials for future plans.

### 3.2.2 Steps in Staff Performance Improvement

The steps in performance improvements include

Step 1: This is the standard developed and approved by programme committee.

Step 2: Here is where the care is provided according to the set standard and includes performance audit. The audits can be classified in terms of time. Timing of audits includes.

- Retrospective audits which is done after the care has been given
- Concurrent audit occurs while the care is being given
- Prospective audit is used to predict future outcome of care.

Audits can also be classified as types. This include

- Structure audits that evaluate the influence of elements that exist separate from or outside of the community and/or patient-staff interaction.
- Process audit:- this reviews how care is provided and the relationship between the nurse and quality of care provided.
- Outcome audit: This is used to determine results of the care provided.

STEP 3: At this step corrective actions in form of education is provided if the standard is not met.

### 3.3 Time Management in Public Health Nursing

Time management is the art of making the best use of time available to achieve specific tasks. Most of the activities in public-community health are time specific. Judicious use of time is important in nursing because 'we cannot bring back the hand of the clock'. The question is how can one make the most use of the time? Time management experts have produced a variety of guidelines to answer the above question. It should be noted that an effective time manager is a good manager of time. The following strategies deal with how time can be managed.

#### 3.3.1 Principles of Time Management

1. Plan your day – Adequate planning must be given to tasks.
2. Prioritize your work – workers and especially managers should be able to outline things they hope to accomplish each day. They should be able to prioritize them in order of importance. This helps them to have a clear idea of how to spend time.
3. Delegate work to followers – some managers find it difficult to assign work to their followers. Some due to lack of trust, while others get worried about the abilities of their staff. When managers perform work, which their followers should be doing, this results in work overload. The unit head should learn how to encourage others to do it.
4. Learn to take a break – working for a long period without break is not an effective use of time.
5. Manage or reduce interruptions in form of phone calls, visitors etc.
6. Do not procrastinate – Procrastination is usually a deeply rooted habit but we can change it as other habits.

#### 3.3.2 Advantages of Time Management

The advantages include:

- facilitates greater productivity
- decreases work-related stress
- helps to ensure the provision of quality care
- helps appropriate prioritizing of community care
- decreases burnout by increasing personal and professional satisfaction

Poor time management leads to

- Stress
- Dissatisfaction with care provided
- Increases the omission of care
- Results in error of care

Time can be wasted on

- Socialization
- Poor planning that leads to crisis
- Reluctance to delegate work
- Not having the right equipment for a procedure
- Poor proficiency
- Procrastination

Priority setting in time management includes to determine

- What needs to be done immediately
- What needs to be completed by a specific time to ensure client safety.
- What must be done by the end of the shift
- What can be delegated

### **SELF-ASSESSMENT EXERCISE**

List the outcomes of poor time management

## **4.0 CONCLUSION**

This unit focused on giving you the necessary knowledge and skills you need to develop and manage your staff and clients in the community.

## **5.0 SUMMARY**

Staff development is one of the ways to improve the efficiency of the organization. Staff perform better when they are allowed to develop their talents. Organizations also improve their efficiency through proper time management. Applying these principles will help you in your work as a public health nurse.

## **6.0 TUTOR MARKED ASSIGNMENTS**

- (1) Outline the methods in staff development
- (2) State the advantages of staff development
- (3) Explain the steps in performance improvements.
- (4) Discuss the principles of time management in public health

## **7.0 REFERENCES/FURTHER READING**

OkoronkwoIL(2021) Nursing Service Administration and Management. Revised edition., Institute of Developmental Studies, Enugu.

Whitebead D K, Weiss S A and Tappin R M (2010) Essentials of Nursing Leadership and Management. F C Davis Company ,Philiadelphia.

## **MODULE 4            VIOLENCE AND DISASTER NURSING**

Violence is often seen as an inevitable part of the human condition- a fact of life to respond to rather than to prevent. Encouraged by the success of public health approaches to other environmental and behavioural related health problems, these assumptions are changing. Violence at home and in the community is an issue of concern in public – community health nursing. Violence consists of no accidental acts that result in physical or emotional injury. Disaster on the other hand is a destructive event that disrupts the normal functioning of a community. It includes earthquakes, floods, tornadoes, hurricanes

Unit1            Violence in Community  
Unit 2            Disaster Nursing

### **UNIT1            VIOLENCE IN COMMUNITY**

#### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Basic Facts about Violence
    - 3.1.2. Factors associated with Risk of Violence
    - 3.1.3. Types of Violence
    - 3.1.4. Cost of Violence
  - 3.2. Roles of Public-Community Health Nurse in Control of Violence
  - 3.3 Prevention of Violence
  - 3.4 Bullying
  - 3.5 Gang Violence
- 4.0. Conclusion
- 5.0. Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

#### **1.0 INTRODUCTION**

Violence is often seen as an inevitable part of the human condition- a fact of life to respond to rather than to prevent. WHO defined violence as the intentional use of physical force or power, threatened or actual, against oneself, another person or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation. The definition encompasses interpersonal violence as well as suicidal behaviour and armed conflict. It

goes beyond physical act to include threat and intimidation, psychological harm, deprivation and mal-development that compromise the well-being of individuals, families and communities.

Encouraged by the success of public health approaches to other environmental and behavioural related health problems, these assumptions are changing. Violence at home and in the community is an issue of concern in public – community health nursing. Violence consists of no accidental acts that result in physical or emotional injury.

## **2.0 OBJECTIVES**

By the end of this unit you will be able to:

- Describe the nature of violence.
- Discuss factors associated with violence
- State types of violence
- Discuss the control of violence
- Discuss the cost of violence in public health.

## **3.0 MAIN CONTENT**

### **3.1 Basic Facts about Violence**

- Men are likely victims of violent crimes by strangers whereas women are more likely to be victimized by intimate partners, relatives, friends or acquaintances.
- Close to 8 in 10 sexual assaults against women are committed by intimate partners, relatives, friends or acquaintances.
- After spousal homicides, children killed by their parents are the most frequent type of family homicide. Most children who are killed are male and offenders are male.
- About 16% of male murder victims and 9% of female murder victims were killed by strangers, and strangers were responsible for about 42% of all violent crimes.
- Intimate partner violence is the primary crime against women.
- Overall, violence crimes are more likely to occur during the day (6am to 6pm) except rape, which occurs at night (6pm to 6am).

#### **3.1.2 Factors Associated with Risk of Violence**

The following are factors associated with violence.

1. Sociological factors include
  - Low socioeconomic status
  - Involvement with gangs

- Drug dealings
  - Access to guns
  - Media exposure to violence
  - Community exposure to violence
2. Psychological factors
    - Alcohol or drug abuse
    - Rigid gender role expectations
    - Peer pressure especially adolescents
    - Poor impulse control
    - History of mental health problems
    - Unemployment
    - Younger than 30 years
  3. Family factors
    - History of intergenerational abuse
    - Social isolation
    - Verbal threatening of children by parents
    - High levels of family stress

### 3.1.3 Types of Violence

There are three broad categories of violence :

1. **Self-directed violence** which includes suicidal behaviour and self-abuse.
2. **Family/Partner violence:** It is violence between family members and intimate partners, usually though not exclusively, taking place in the home.
3. **Community violence:** This is violence between individuals who are unrelated and who may or may not know each other, generally taking place outside the home.

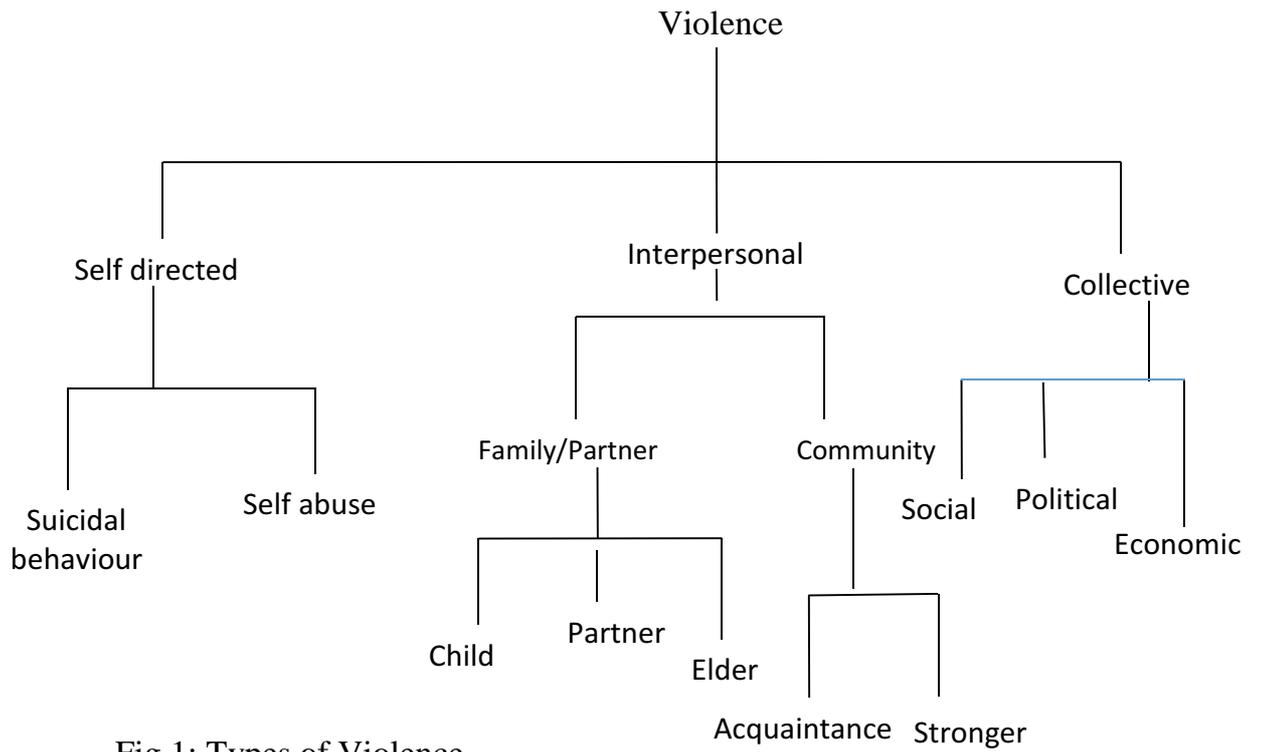


Fig 1; Types of Violence

Data on violence are collected from;

1. Health data on disease, injuries and other health conditions resulting from violence.
2. Self-reporting data on attitude, beliefs, behaviours, cultural practices, victimization and exposure to violence.
3. Community data on population characteristics and level of income, education and employment.
4. Crime data on the characteristics and circumstances of violent event and violent offenders.
5. Economic data related to costs of treatment, social services and prevention activities.
6. Policy and legislative data.

These data can come from a variety of sources including individuals, agency, institutional record, local programmes, community and government record and population based and as well as special studies.

### **3.1.4. Cost of Violence**

The following are taken into consideration in calculating the cost of violence to a nation's economy besides the direct cost of medical care and criminal justice:

1. The provision of shelter or other places of safety and long term care.
2. Lost productivity as a result of premature death, injury, absenteeism, long-term disability and lost potential.
3. Diminished quality of life and decreased ability to care for one's self or others.
4. Damage to public property and infrastructure leading to disruption of services such as health care, transport and food distribution.
5. Disruption of daily life as a result of fears for personal safety.
6. Disincentives to investment and tourism that hamper economic development.

### **3.2 Roles of Public-Community Health Nurse in Control of Violence**

The health sector has both a special interest and a key role to play in preventing violence. A key requirement for addressing violence in a comprehensive manner is for people to work together in partnership of all kinds and of all levels to develop effective response. The public health nursing approach to dealing with violence threat involves the following four steps:

1. Defining and monitoring the extent of the problem.
2. Identifying the causes of the problem.
3. Formulating and testing ways of dealing with the problems.
4. Applying widely the measures that are found to work.

### **3.3 Prevention of Violence**

1. Create, implement and monitor a national action plan for violence prevention. A national plan of action is important for preventing violence and for promoting effective response that can be sustained over time. It should take into account the human and financial resources that are and will be made available for its implementation and should include elements such as the review and return of existing legislation and policy, building data collection and research capacity, strengthening service for victims and developing and evaluating preventive responses.
2. Enhance capacity for collecting data on violence: The national capacity to collect and analyze data and violence is necessary in order to set priorities, guide programme design and monitor progress. System must be designed that are simple and cost-effective to implement, appropriate to the level of skills of the staff using them and confirming to both national and international standards.
3. Define priorities for and support research on the causes, consequences, costs and prevention of violence. There are many reasons to undertake research on violence, but the main priority is to gain a better understanding of the problem in different cultural context so that appropriate responses can be developed and evaluated.
4. Promote primary prevention responses. Some of the primary prevention interventions for reducing violence include:
  - a. Prenatal and perinatal health care for mothers, as well as preschool enrichment and social development programmes for children and adolescents.
  - b. Training for good parenting practices and improved family functioning.
  - c. Improvement to urban infrastructure, both physical and socioeconomic.
  - d. Measures to reduce firearm injuries and improve firearm related safety.
  - e. Media campaigns to change attitudes, behaviour and social norms.
5. Strengthen responses for victims of violence: National health system as a whole should aim to provide high quality care to victims of all types of violence as well as rehabilitation and support services needed to prevent further complications priorities. This should include:

- a. Improvements to emergency response systems and the ability of the healthcare sector to treat and rehabilitate victims.
- b. Recognition of signs of violent incident or on-going violent situations and referred of victims to appropriate agencies for follow-up and support.
- c. Ensuring that health, judicial, policing and social services avoid a renewed victimization of earlier victims and that those services effectively deter perpetrations from re-offending.
- d. Social support, prevention programme and other services to protect from him at risk of violence and reduce stress on caregivers.
- e. Incorporation of modules on violence prevention into the curricula for medical and nursing students.
6. Integrate violence prevention into social and educational policing and thereby promote gender and social equality: Much of violence has links with gender and social inequalities that place large sections of the population of increased risk. Wage full, basic infrastructure deterioration and steady reductions in the quality and quantity of health, education and social services are linked with violence.
7. Increase collaboration and exchange of information on violence prevention: Better working relations between international agencies, governor, researchers, networks and NGO engaged in violence prevention are needed to achieve better sharing of knowledge, agreement on prevention goals and coordination of action.
8. Promote and monitor adherence to international treaties, laws and other mechanisms to protect human right.
9. Seek practical internationally agreed responses to global drugs trade and the global aims trade.

### **3.4. BULLYING**

This is a pattern of physical, verbal or other behaviours directed by one or more children toward another child that are intended to inflict physical, verbal and emotional harm. Bullying is common in high schools. Boys use more physical forms of bullying whereas girls use more relational forms of bullying like exclusion, isolation and initiation of rumours. Bullying has health implications like bedwetting, headaches, anxiety, fatigue and loneliness.

The school nurse is likely to identify students who are bullies or who have been bullied.

### **3.5. GANG VIOLENCE**

Gangs are flourishing in both rural and urban communities. In Nigeria they are cult members. Gang members may be male or female and the age range is 8 to 55 years.

The reason people join gangs are:

- No job available
- Peer pressure
- For protection
- Companionship
- Excitement

Violence is part of everyday life for gang members.

### **SELF ASSESSMENT EXERCISE**

List the factors associated with the risk of violence

### **4.0 CONCLUSION**

The world today is a world of violence. This unit is to equip you on how to cope with this current problem in our community.

### **5.0 SUMMARY**

Violence is a common problem in the community. The rate is even increasing in today's world. Causes of violence and the management have been presented to help you. You have been guided on how to manage victims of violence.

### **6.0 TUTOR MARKED ASSIGNMENTS**

- 1) Outline types of violence
- 2) Discuss the role of the nurse in the control of violence in the community
- 3) As a public-community health nurse describe how you will prevent violence from occurring in the community
- (4) Discuss the cost of violence in public health.

### **7.0 REFERENCES/FURTHER READING**

Veenema T G (2007) ; Disaster Nursing and emergency preparedness for Chemical, Biological and Radiological Terrorism and other Hazards.

## UNIT 2     **DISASTER NURSING**

### CONTENTS

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Types of Disaster
    - 3.1.2 Impact of Disaster
    - 3.1.3 Dimensions of Disaster
    - 3.1.4 Phases of Disaster
  - 3.2 Role of Community Health Nurse in Disaster Planning
  - 3.3 Role of Community Health Nurse in Disaster Management
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References/Further Reading

### 1.0. INTRODUCTION

Disaster is a threatening or occurring event that is natural or man-made. It causes human suffering and creates human needs that victims cannot alleviate without assistance (American Red Cross 2008). It can also be defined as any material catastrophe (including hurricane, tornadoes, storm, high water, tidal wave tsunami, earthquake) regardless of causes like fire or explosion that cause damage of sufficient severity and magnitude to warrant major assistance from the Government.

### 2.0 OBJECTIVES

- Define Disaster
- Explain Types of Disaster
- Describe Triage in Disaster Nursing
- Discuss the Care of Communities in Emergency

### 3.0 MAIN CONTENT

#### 3.1 Types of Disaster

**There are two types of disaster:** Natural and man-made: Natural disaster includes tornadoes, flood, typhoon while man-made include war, accidents, food and water contamination.

### 3.1.1 Impact of Disaster

The impact of disaster is determined by the following factors:-

- Vulnerability of population: the people that are mostly affected by disaster are the vulnerable people like those that are physically handicapped, mentally challenged and young children.
- Environmental factors:- The environmental factors include time, weather condition, utilities like electricity, water supply.
- Warning time:- Situational variables include the amount of warning time before disaster occurs, the nature and severity and availability of emergency response.

### 3.1.2 Dimensions of Disaster

The dimensions of disaster include:

- Predictability:- Some events are more easily, predicted while some cannot be predicted.
- Frequency and location:- Most disasters appear in certain geographical location e.g. typhoon in Asia, and holocaust in Caribbean islands.
- Controllability:- Some disasters have control measure. Mitigation is a term used in disaster planning that describe actions that can be used to reduce the damage
- Scope and intensity:- Scope refers to the geographical area and social space dimension impacted by the disaster agent. Intensity refers to a disaster agent's ability to inflict damage and injury. The scope and intensity of disaster is considered reportedly in planning.

## 3.2 Phases of Disaster

The phases of disaster are

**Prominent Phase:-** This is the phase before a disaster. This is the time for disaster planning and mitigation before the actual occurrence. This is the time for assessment of probabilities and risks of occurrence of certain types of disaster. The role of the nurse during the warning period varies depending on employer's role in disaster responsibility. Public Health Nurse may assist in preparing shelters, and establish contact with other emergency service group. Help the families to establish their own emergency responses. Emergency communications are also established.

**Impact Phase:-** This is the phase at which the disaster occurs. It is time of hardship, injury and people try to survive. It is time to render help. The impact phase continues till the threat is over. The nurse is responsible for assigning health needs and providing physical and psychological support

to victims in the shelter. The nurses apply triage and morgue facilities are established and coordinated. Search and rescue operations are organized.

**Post-Impact Phase:-**This phase has two components.

- The emergency phase begins at the end of the impact phase and ends when there is no longer any immediate threat of injury and destruction.
- Recovery phase begins during the emergency phase and ends with the normal community order and function. The nurse takes part in the debriefing and the modification of disaster planning if need be.

### **3.3 The Role of Community Health Nurse in Disaster Planning**

- Helps in developing a disaster response plan based on the threats.
- Educates the community on the disaster warning system and how to access it.
- Makes a list of agencies that are available and coordinates training for them.
- Defines the role of nurses and principles of triage.
- Locates all equipment and supplies needed for disaster management.
- Checks the equipment to be sure they are working.
- The nurse takes part in disaster response by
  - Activating the disaster plan
  - Performing triage and directs the disaster victims
  - Treats the victims physically and psychologically. At the post-disaster phase the nurse:
    - Evaluates the area affected.
    - Creates on-going assessment and surveillance report
    - Evaluates the efficiency of the disaster response team
    - Estimates the length of time for recovering of the community.

### **3.4 Role of Community Health Nurse in Disaster Management**

The Public health nurse takes part in the risk assessment by

- Determining population at risk within the community.
- Reviews the previous disaster history of the community. This includes natural and man-made.
- Identifies the community disaster plan.
- Identifies the warning system available in the community.
- Outlines the members of the disaster team e.g. volunteers, nurses, doctors, firemen etc.

- Evaluates the resources available in the hospital, shelter, food and water storages.
- Identifies means of evacuation.

### **SELF-ASSESSMENT EXERCISE**

What do you understand by disaster preparedness

### **4.0 CONCLUSION**

This unit has discussed the types, dimensions, and phases of disaster. The roles of the nurse in planning and management of disaster have been presented. They have been designed to help you provide care in emergency situation before, during and after disaster.

### **5.0 SUMMARY**

Disaster may or may not be predictable. It may be man-made or natural. Whichever way, man has learnt to prepare for it. Whenever it occurs the public health nurse is involved in the management. You have been equipped with the knowledge and skill in disaster preparedness and management.

### **6.0 TUTOR MARKED ASSIGNMENTS**

1. Describe triage in disaster nursing
2. Discuss the care provided for a community before, during and after a disaster.
3. Discuss the role of the community health nurse in planning and management of disaster

### **7.0 REFERENCES AND FURTHER READING**

Veenema T G (2007) ; Disaster Nursing and emergency preparedness for Chemical, Biological and Radiological Terrorism and other Hazards.