Community Health Nursing III

NSG412



University of Ibadan Distance Learning Centre Open and Distance Learning Course Series Development

Copyright © 2016 by Distance Learning Centre, University of Ibadan, Ibadan.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN 978-021-789-4

General Editor: Prof. Bayo Okunade

University of Ibadan Distance Learning Centre
University of Ibadan,
Nigeria

Telex: 31128NG

Tel: +234 (80775935727) E-mail: ssu@dlc.ui.edu.ng Website: www.dlc.ui.edu.ng

Vice-Chancellor's Message

The Distance Learning Centre is building on a solid tradition of over two decades of service in the provision of External Studies Programme and now Distance Learning Education in Nigeria and beyond. The Distance Learning mode to which we are committed is providing access to many deserving Nigerians in having access to higher education especially those who by the nature of their engagement do not have the luxury of full time education. Recently, it is contributing in no small measure to providing places for teeming Nigerian youths who for one reason or the other could not get admission into the conventional universities.

These course materials have been written by writers specially trained in ODL course delivery. The writers have made great efforts to provide up to date information, knowledge and skills in the different disciplines and ensure that the materials are user-friendly.

In addition to provision of course materials in print and e-format, a lot of Information Technology input has also gone into the deployment of course materials. Most of them can be downloaded from the DLC website and are available in audio format which you can also download into your mobile phones, IPod, MP3 among other devices to allow you listen to the audio study sessions. Some of the study session materials have been scripted and are being broadcast on the university's Diamond Radio FM 101.1, while others have been delivered and captured in audio-visual format in a classroom environment for use by our students. Detailed information on availability and access is available on the website. We will continue in our efforts to provide and review course materials for our courses.

However, for you to take advantage of these formats, you will need to improve on your I.T. skills and develop requisite distance learning Culture. It is well known that, for efficient and effective provision of Distance learning education, availability of appropriate and relevant course materials is a *sine qua non*. So also, is the availability of multiple plat form for the convenience of our students. It is in fulfilment of this, that series of course materials are being written to enable our students study at their own pace and convenience.

It is our hope that you will put these course materials to the best use.

Prof. Abel Idowu Olavinka

Vice-Chancellor

Foreword

As part of its vision of providing education for "Liberty and Development" for Nigerians and the International Community, the University of Ibadan, Distance Learning Centre has recently embarked on a vigorous repositioning agenda which aimed at embracing a holistic and all encompassing approach to the delivery of its Open Distance Learning (ODL) programmes. Thus we are committed to global best practices in distance learning provision. Apart from providing an efficient administrative and academic support for our students, we are committed to providing educational resource materials for the use of our students. We are convinced that, without an up-to-date, learner-friendly and distance learning compliant course materials, there cannot be any basis to lay claim to being a provider of distance learning education. Indeed, availability of appropriate course materials in multiple formats is the hub of any distance learning provision worldwide.

In view of the above, we are vigorously pursuing as a matter of priority, the provision of credible, learner-friendly and interactive course materials for all our courses. We commissioned the authoring of, and review of course materials to teams of experts and their outputs were subjected to rigorous peer review to ensure standard. The approach not only emphasizes cognitive knowledge, but also skills and humane values which are at the core of education, even in an ICT age.

The development of the materials which is on-going also had input from experienced editors and illustrators who have ensured that they are accurate, current and learner-friendly. They are specially written with distance learners in mind. This is very important because, distance learning involves non-residential students who can often feel isolated from the community of learners.

It is important to note that, for a distance learner to excel there is the need to source and read relevant materials apart from this course material. Therefore, adequate supplementary reading materials as well as other information sources are suggested in the course materials.

Apart from the responsibility for you to read this course material with others, you are also advised to seek assistance from your course facilitators especially academic advisors during your study even before the interactive session which is by design for revision. Your academic advisors will assist you using convenient technology including Google Hang Out, You Tube, Talk Fusion, etc. but you have to take advantage of these. It is also going to be of immense advantage if you complete assignments as at when due so as to have necessary feedbacks as a guide.

The implication of the above is that, a distance learner has a responsibility to develop requisite distance learning culture which includes diligent and disciplined self-study, seeking available administrative and academic support and acquisition of basic information technology skills. This is why you are encouraged to develop your computer skills by availing yourself the opportunity of training that the Centre's provide and put these into use.

In conclusion, it is envisaged that the course materials would also be useful for the regular students of tertiary institutions in Nigeria who are faced with a dearth of high quality textbooks. We are therefore, delighted to present these titles to both our distance learning students and the university's regular students. We are confident that the materials will be an invaluable resource to all.

We would like to thank all our authors, reviewers and production staff for the high quality of work.

Best wishes.

Professor Bayo Okunade

Director

Course Development Team

Content Authoring Abimbola O. Oluwatosin

Content Editor Prof. Remi Raji-Oyelade

Production Editor Ogundele Olumuyiwa Caleb

Learning Design/Assessment Authoring Folajimi Olambo Fakoya

Managing Editor Ogunmefun Oladele Abiodun

General Editor Prof. Bayo Okunade

Contents

About this course manual	1
How this course manual is structured	1
Course Overview	3
Welcome to Community Health Nursing III NSG412Course outcomes	
Getting around this course manual	4
Margin icons	4
Study Session 1	5
Introduction and Overview of the Course	5 6 8 8 11
Study Session 2	15
Community Health Nursing Process	1516171920212121
2.4.2 Community Diagnosis2.4.3 Planning	24 24

2.4.4 Implementation	
2.4.5 Evaluation	
Study Session SummaryAssessment	
Assessment	20
Study Session 3	27
Community Needs	27
Introduction	
Terminology	27
3.1 Types of Needs	
3.1.1 FELT NEED	
3.1.2 Expressed Need	
3.1.3 Normative Need	
3.1.4 Comparative Need	
Study Session Summary	
Assessment	
Study Session 4	30
Community Assessment Process	30
Introduction	30
Terminology	30
4.1 Defining Community Assessment	
4.2 The Steps to Community Assessment	30
4.2.1 Identification of Available Resources	
4.2.2 Establishment of Project Team and Steering Committee	
4.2.3 Development of Research Plan and Time Frame	
4.2.4 Collection and Analysis of Information Already Available	
4.2.5 Completion of Community Research	
4.2.6 Analysis of Result	
4.1.7 Reporting Back to the Community	
4.2.8 Setting Priorities for Action	
4.2.9 Determination of Responses to the Needs Identified	
4.2.10 Planning and Implementation	
Study Session Summary	
Assessment	
Study Session 5	35
Community Participation	35
Introduction	
Terminology	
5.1 Defining Community Participation	
5.2 Importance of Community Participation	
5.3 Levels of Community Participation	
5.4 Incentives for Community Participation	
5.5 Disincentives to Community Participation	

Study Session Summary	39
Assessment	39
Study Session 6	40
Infant Welfare Clinic	40
Introduction	
6.1 Defining Child Health	
6.2 Infant Welfare Clinic	
6.3 Organizing and Administration of IWC	
6.4 Components of an Infant Welfare Clinic	
Study Session Summary	
Assessment	
Study Session 7	44
-	
Major Health Challenges/Problems of Children in Contemporary Days	
Introduction	
Terminology	
7.1 Major Health Challenges of Children	
7.1.1 Childhood Malaria	
7.1.2 Childhood Diarrhoea	
7.1.3 Acute Respiratory Infections (ARIs)	
7.2 Problems of Children in the Contemporary Days	
7.2.1 HIV/ AIDS and Children	
7.2.2 Child Abuse	
7.2.3 Child Neglect	
7.2.4 Gun Violence	
7.2.5 Poverty	
7.2.6 Health implications of problems in children	
Study Session Summary	
Assessment	56
Study Session 8	57
Immunization Theory, Time Schedule, and Rules Governing Immunization Admi	nistration57
Introduction	
Terminology	
8.1 Immunization Theory	
8.2 Immunization Schedule	
8.3 Rules Governing Immunization Administration	
8.3.1 Spacing of Multiple Doses of the Same Antigen	
8.3.2 Simultaneous Administration	
8.3.3 Contraindication and Precautions	_
8.3.4 Health Education	
8.3.5 Vaccine Administration	
8.3.6 Storage and Handling of Immunobiologics	64

Study Session Summary	65
Assessment	65
Study Session 9	66
Historical Overview of School Health Services	66
Introduction	66
Terminology	
9.1 Historical Perspectives of School Health Nursing	
9.2 Present State of School Health Service	
9.3 Rationale School Health Services	69
Study Session Summary	70
Assessment	70
Study Session 10	71
Objectives and Components of School Health	71
Introduction	
10.1 Objectives of School Health Services	
10.2 Who Criteria for A Health Promoting School	
10.3 Components of School Health	
10.3.1 Healthful School Environment	
10.3.2 Nutritional Care/ School Feeding Service	
10.3.3 Skill-Based Health Education	
10.3.4 School Health Services	
10.3.5 School, Home and Community Relationship	
Study Session Summary	
Assessment	
Study Session 11	77
Organisation of School Health Services	70
Introduction	
Terminology	
11.1.1 Minimum Requirements for setting up a School Health Centre	
11.1.1 Millimum Requirements for Setting up a School Health Centre	
11.2.1 Pre-entry Medical and Dental Screening	
11.2.2 School Health Record	
11.2.3 Routine Health Screening and Examination	
Study Session Summary	
Assessment	
	0.5
Study Session 12	85
School Nurses	
Introduction	
Terminology	
12.1 Roles of a School Nurses / School Health Worker	
12.2 Functions of the School Nurse	
12.3 Levels of Prevention in School Health Nursing	
12.4 Challenges of School Health Nursing in Nigeria	88

Study Session SummaryAssessment	
Notes on Self-Assessment Questions	90
References	101

About this course manual

Community Health Nursing III NSG412 has been produced by University of Ibadan Distance Learning Centre. All course manuals produced by University of Ibadan Distance Learning Centreare structured in the same way, as outlined below.

How this course manual is structured

The course overview

The course overview gives you a general introduction to the course. Information contained in the course overview will help you determine:

- If the course is suitable for you.
- What you will already need to know.
- What you can expect from the course.
- How much time you will need to invest to complete the course.

The overview also provides guidance on:

- Study skills.
- Where to get help.
- Course assignments and assessments.
- Margin icons.

We strongly recommend that you read the overview *carefully* before starting your study.

The course content

The course is broken down into Study Sessions. Each Study Session comprises:

- An introduction to the Study Session content.
- Study Session outcomes.
- Core content of the Study Session with a variety of learning activities.
- A Study Session summary.
- Assignments and/or assessments, as applicable.
- Bibliography

Your comments

After completing Community Health Nursing III we would appreciate it if you would take a few moments to give us your feedback on any aspect of this course. Your feedback might include comments on:

- Course content and structure.
- Course reading materials and resources.
- Course assignments.
- Course assessments.
- Course duration.
- Course support (assigned tutors, technical help, etc.)

Your constructive feedback will help us to improve and enhance this course.

Course Overview

Welcome to Community Health Nursing III NSG412

The emphasis of this course is on the development of student's competence in the planning, organization and administration of the community health nursing services. The course is designed to assist students in applying community health nursing process into nursing practice to assess and identify community health problems and needs. School health programme is integrated to equip students with the skills to formulate strategies for meeting the needs of students and staff in the school health programme. It is a 4 credit unit compulsory course.

Course outcomes

Upon completion of Community Health Nursing III NSG412, you will be able to:



Outcomes

- Describe the process and issues involved in home visits
- Describe the various tools used in community assessment
- Assess and identify community health needs/ problems
- Describe the role of the community health nurse in school health programme
- Evaluate strategies for meeting the needs of students and staff in the school health programme.

Getting around this course manual

Margin icons

While working through this course manual you will notice the frequent use of margin icons. These icons serve to "signpost" a particular piece of text, a new task or change in activity; they have been included to help you to find your way around this course manual.

A complete icon set is shown below. We suggest that you familiarize yourself with the icons and their meaning before starting your study.



Study Session 1

Introduction and Overview of the Course

Introduction

In this study session, we will consider and discuss the historical perspective of community health nursing. We will also explain the goals of community health nursing and list its characteristics.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

- 1.1 discuss the historical perspective and focus of community health nursing
- 1.2 explain the goals and list the various characteristics of community health nursing

Terminology

Community health	a subject of study within the medical and clinical sciences which focuses on population groups and communities as opposed to individual patients
Health Protection	a term used to encompass a set of activities within the Public Health function

1.1 Historical Perspective of Community Health Nursing

We will summarize the development of Public health/Community Health Nursing in the following four general phases as:

- The early home care nursing stage which was before the mid-1800s
- The district nursing stage which was in the mid-1800s to 1900
- The Public Health nursing (1900 to 1970)
- The Community Health nursing stage (1970 to the present)

Ouestion

List the phases of the development of community health nursing in their order

Feedback

Early home care nursing \rightarrow District nursing \rightarrow Public health nursing \rightarrow Community health nursing

1.1.1 The Early Home Care Nursing Stage Which Was Before the Mid-1800s

In the period before the mid-1800s, the focus of early care was to reduce suffering and promote healing. The early roots of home care nursing began with religious and charitable groups; the first visiting nurses who were sponsored by St. Vincent de Paul in Paris, Sisterhood of Dames de Charite introduced the principles of visiting nurses and social welfare in 1669, they emphasized the belief that home visiting required not just kindness and intuition but also sound knowledge of scientific principles. It was documented as early as 1244, when a group of monks in Florence, Italy, provided 24-hour first aid care for accident victims. The social upheaval after the Reformation, from the late 1600s to the mid-1800s, resulted in a decline of religious orders and a decrease in the nursing care of the sick and the poor, but the Industrial Revolution caused serious health problems, such as epidemics, high infant mortality rates, occupational diseases and injuries, and high rates of mental illness, and a resulting increased attention to community health.

Much of the foundation for Community Health nursing came from Florence Nightingale's work during the Crimean War (1854-1856), when she provided nursing care, established kitchens, and implemented sanitary procedures that resulted in hundreds of lives being saved. At this same time, another major healer and nurse was Mary Seacole (1805-1881), who helped populations in Central America, Panama, and the Caribbean. She was called the "Black Nightingale" and was hailed as a national heroine in Great Britain and awarded a commendation from Queen Victoria.

ITQ

Question

In what ways did the 1600s to the mid-1800s increase the attention to community health?

Feedback

Decline of religious orders and a decrease in the nursing care of the sick and the increase in the poor and serious health problems, such as epidemics, high infant mortality rates, occupational diseases and injuries, and high rates of mental illness,

1.1.2 The District Nursing Stage Which Was in The Mid-1800s To 1900

In the mid-1800s to 1900, district nursing began to develop and this was owed to Williams Rathbone of Liverpool, a Quaker, he promoted the establishment of district nursing or visiting nursing services for the sick and poor of Liverpool which was born out of the way his wife was given nursing care when she had fatal illness. He believed that if nursing care could help his wife who had the money to purchase services, those who were sick and poor might benefit from the needed services even more. Rathbone went ahead to employ Mary Robinson who was the first nurse to visit the sick poor in their homes. In 1877, he sought for the assistance of Florence Nightingale who helped him in establishment of training school for visiting nurses in affiliation with the Roy Infirmary of Liverpool; this was very successful and later expanded to the national level under voluntary agencies. While Florence Nightingale was busy helping Rathbone establish a visiting nurse service for the sick and poor, Frances Root was doing the same pioneering work in New York City. Soon after that, district nurses associations were founded in Buffalo, NY (1885) and Philadelphia, PA (1886). The district nurses' work focused primarily on the care of individuals. They also instructed family members on personal hygiene. Financial sponsorship changed over time from religious organizations to private philanthropy. Eventually, the district nurses began to receive support from public funds.

ITO

Question

What informed William Rathbone's conviction of district nursing care?

Feedback

He believed that if nursing care could help his wife in her fatal illness who had the money to purchase services, those who were sick and poor might benefit from the needed services even more.

1.1.3 The Public Health Nursing (1900 to 1970)

A greater need arose by the beginning of 20th century which brought about consciousness of the need to include the health and welfare of the entire public, not just the poor. By 1910, a new federal law made states and communities accountable for the health of their citizens. These trends resulted in the development of specialized programs, such as infant welfare, Tuberculosis clinics, and Venereal Disease control clinics.



Note

The nursing role was expanded during 1900-1970, and Lillian Wald was the first person to use the term public health nursing.

Lillian Wald was the first person to use the term public health nursing. Her contributions were enormous and she and a nurse friend, Mary Brewster, started the Henry Street Settlement in 1893 to provide nursing and welfare services to New York's poor and needy. By the 1920s, Public Health nursing was acquiring a more professional stature. Also during this period, the family began to emerge as a unit of service and became the primary focus of care in all Community Health settings.

ITQ

Ouestion

The federal law which made states and communities accountable for the health of their citizens was established in what year

Feedback

1910

1.1.4 The Community Health Nursing Stage (1970 to the Present)

By the late 1960s and early 1970s, many nurses who were not practicing traditional family and population-based Public Health were working in the community. The practice settings included community-based clinics, offices, work sites, and schools. Community health nursing was introduced as a term in 1980 by the American Nurses' Association to broadly identify those nurses whose focus of practice is in total community and oriented to population health. The services address health promotion and illness prevention. This resulted in confusion for both professionals

and consumers. In 1984, the U.S. Department of Health and Human Services, Bureau of Health Professionals, Division of Nursing, convened the Consensus Conference on the Essentials of Public Health Nursing Practice. This group concluded that Community Health nursing was the broader term, referring to all nurses who practice in the community, and Public Health nursing was a part of Community Health. Debate over these terms continues, but the purpose of the professional practice remains the same: the provision of quality care to people in the community.

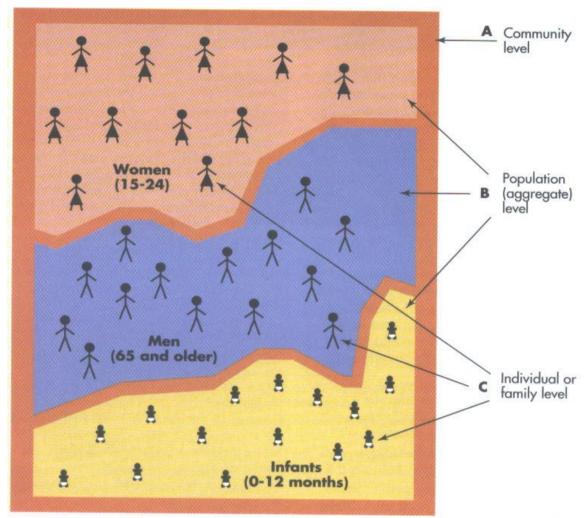


Figure 1.1 Levels of health care practice.

Source: basic.shsmu.edu.cn/jpkc/sqhl/ppt/1.ppt



Figure 1.2 Early public health nurses provided a range of services for families. Source: *basic.shsmu.edu.cn/jpkc/sqhl/ppt/1.ppt*



Figure 1.3 Public health nurse demonstrating well-child care during a home visit (Courstesy the visiting Nurse Service of New York)

Source basic.shsmu.edu.cn/jpkc/sqhl/ppt/1.ppt

Question

What is the purpose of the professional practice of Community Health Nursing?

Feedback

The purpose of Professional practice of community health nursing is provision of quality care to people in the community.

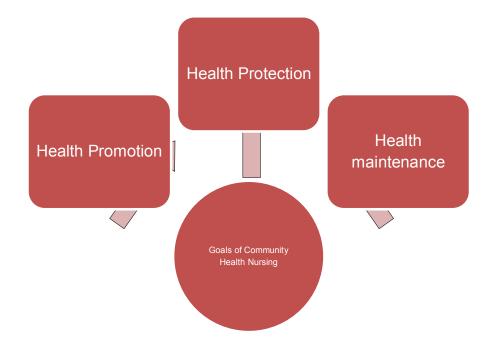
1.2 Goals of Community Health Nursing

The major goal of community health nursing is the preservation of the health of populations through a focus on health promotion, health protection and health maintenance.

Health promotion can be defined as those activities related to individual lifestyle and choices and designed to improve or maintain health. There is an individual as well as community components of health promotion. The individual component seeks to improve health potential through immunizations, adequate nutrition, education, counselling, exercise and social support.

The community component aims to improve the health of the community through multi-sectoral, holistic, political, legislative and administrative efforts and this is sustained through the maintenance or establishment of health services, healthy working environments, information networks and self-help programs.

Health protection activities refers to activities designed to actively prevent illness, detect illness early, thwart disease processes or maintain functioning within the constraints of illness



Question

What are the goals of community health nursing

Feedback

Did you identify health promotion, health protection and health maintenance as goals of community health nursing? Then you are correct!

Health maintenance activities involve:

- Perception of health
- Motivation to change direction, if necessary
- Adherence to management goals
- Available social and economic resources

Disease and injury prevention refers to those activities designed to protect persons from disease and injuries and their consequences. This is in three levels:

- Primary prevention: activities directed at reducing the incidence of a disease or prevent a disease before it occurs
- Secondary prevention: activities directed at reducing the prevalence of a disease, it involves screening, early diagnosis and treatment.

 Tertiary prevention: activities directed at reducing the residual defect of a disease, to prevent it from further progressing. Involves rehabilitation service.

primary prevention • immunization

secondary preventior screening

tertiary prevention Rehabilitation services

ITQ

Question

With examples, classify the levels of disease prevention.

Feedback

- A. Primary prevention eg immunization
- B. Secondary prevention eg Screening
- C. Tertiary prevention eg Rehabilitation services

1.2.1 Characteristics of Community Health Nursing

- It is a field of nursing
- It combines public health and nursing
- It focuses on population and environmental factors that may impact people's health
- It emphasizes health promotion, illness prevention, and wellness
- It promotes client responsibility and self-care
- It uses aggregate measurement and analysis
- It uses principle of organizational theory
- It involves inter-professional collaboration.

Question

True or False, community health nursing focuses on the individual and environmental factors that may impact individual's health.

Feedback

False (the focus is on the population group not individual based)

Study Session Summary



Summary

In this Study Session, we were able to consider and discuss the historical perspective of community health nursing. We as well explained the goals of community health nursing and listed its characteristics to include that it is a field of nursing, it combines public health and nursing, it focuses on population and environmental factors that may impact people's health etc.

Assessment



Assessment

SAQ 1.1 (tests learning outcome 1.1)

What is the focus of community health nursing?

SAQ 1.2 (tests learning outcome 1.2)

What are the characteristics of community health nursing?

Study Session 2

Community Health Nursing Process

Introduction

In this study session, we will clarify with befitting explanation the definition of nursing process. We will as well list and examine the depth of those processes.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

- 2.1 define the term nursing process
- 2.2 present a perspective on community
- 2.3 discuss the various concepts in community health Nursing
- 2.4 outline the stages of community health nursing process

Terminology

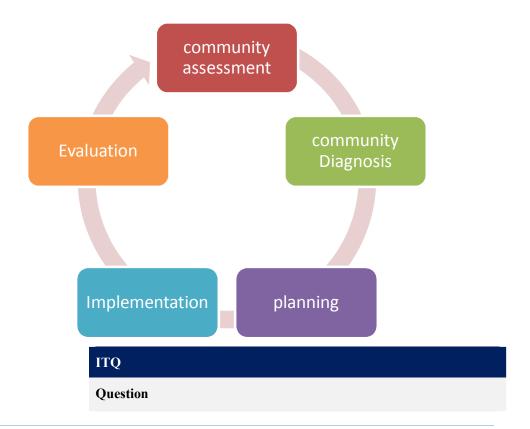
Nursing process	A five-part systematic decision-making method focusing on identifying and treating responses of individuals or groups to actual or potential alterations in health
Health	A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity and/or the state of being free from illness or injury
Community diagnosis	The identification and quantification of health problems in a community as a whole in terms of mortality and morbidity rates and ratios, and identification of their correlates for the purpose of defining those at risk or those in need of health care.
Community health nursing	The synthesis of nursing and public health practice applied to promote and protect the health of population

2.1 Focus on Community Nursing Process

Having examined the historical perspective of community health nursing, we shall examine in this section the nursing process which is seen as a systematic, scientific, dynamic, on-going interpersonal process in which the nurses and the clients are viewed as a system with each affecting the other and both being affected by the factors within the behaviour. It is a systematic way of determining a client's health status, isolating health concern and problems, developing the plans to remediate them, initiating actions to implement the plan, and finally evaluating the adequacy of the plan in promoting wellness and problem resolution. It defines interactions and interventions with the client system, whether that system is an individual, a family, an integrate or a community

Community health purposes and goals are realized through the application of a series of steps that lead to described result. The steps are:

- Community assessment;
- Community diagnosis;
- Planning;
- Implementation
- Evaluation



True or False: in community health nursing the nurse-client relationship is unidirectional?

Feedback

False (the relationship is mutual)

2.2 Perspectives on Community

The community can be defined as a collection of people who interact with one another and whose common interest or characteristics gives them a sense of unity and belonging. A community involves group of people living within a specified geographical boundary, it may consist of different subgroups.



A community is a group of people in a defined geographical area with common goals and objectives and the potential for interacting with one another

The function of any community includes its members' sense of belonging and shared identity, values, norms, communication, and supporting behaviours. There is usually a leader but there may be many formal or informal leaders.

Communities are not always homogenous in that within a community, many different views, languages, ideas and approach to life are often represented.

2.2.1 Types of Communities

These are:

- Geographic community
- Virtual community
- Professional community
- Community based on identity
- Community of culture

As earlier noted, Communities have several contexts, meanings and purpose.

Geographic community: Here we define a community in terms of its geographic boundaries

Community of interest: Groups of people who share beliefs, values, or interests in a particular issue but whose membership may or may not be restricted to a particular geographical area.

Emotional Communities: this may be difficult to define as they center on feelings

Belonging Communities: it may be viewed as a place where you belong or where you have roots.

Special Interest communities: communities are bound together by common set of interests or needs that create similarities. It may not be stable but dependent on the rising and falling of issues.

Structural Communities: this type of community may involve time and space relationships among people. They are physical ones such as towns and cities.

Aggregates: the most general structural definition of a community is any aggregate of people regardless of where or why they gathered. The emphasis is on togetherness for the sake of it: special risk groups /aggregates communities of problem: Ecology Geopolitical Communities Organizations

Communities of solution

Functional Communities:

Communities of identifiable need based on common problems e.g. immigrants similar to communities of special interest

Critical Mass communities may also be referred to as community of resources Critical mass generally means sufficient resources to support programme or services.

ITQ

Ouestion

Name the major parameters for the definition of a community

Feedback

geographical boundaries and common interests

The Holographic Community

The holographic community enables the Community Health Nurse (CHN) to assess the community as a whole entity. The eight patterns of the hologram is a reflection of who we are as individuals in totality. The word *hologram* is derived from the Greek words *holos* meaning whole or complete and *gram* meaning message (Hitchcock, Schubert & Thomas, 2003).

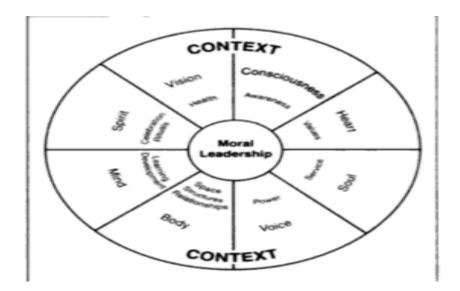


Figure 2.2 The Holographic community. Reproduced from Hitchcock...

A community embodies a "living being" of community which lives within each of us. It has eight dimensions which include:

The consciousness: awareness

The heart: values
The soul: service
The voice: power

The body: space, structure, relationships

The mind: learning, development
The spirit: celebration, ritual

The vision: health

2.2.2 Functions of a Community

- Sense of belonging
- Shared identity
- Values
- Norms
- Communication
- Supporting behaviours
- Resource

2.2.3 Healthy Community

A healthy community is one in which all systems function as they should and work together to make the community function well. It is to a large extent, the result of all citizens getting what they need not only to survive but to flourish. It is one in which all citizens can

be assured of a decent quality of life – economically, physically, environmentally, socially, and politically. The determinants of a healthy community refer to the context of people's lives which include:

- Income and social status
- Education
- Physical environment
- Social support networks
- Genetics
- Access and use of health services
- Gender

ITQ

Question

a healthy community is one in which all citizens can be assured of a decent quality of life, true or

Feedback

True

2.2.4 Community as a Client

Community is seen as a client who directly influences the health of the individuals, families, groups, and populations who may be part of it. The community as a client is viewed in three dimensions based on the following features:

- Location
- Population
- Social system

Location: physical community carries out daily existence in a specific geographic location. The health of a community is affected by this location including the placement of health services, the geographic features, plants, animals and the human made environment. The variables in the location are community boundary, location of health services, geographical features, climate, flora and fauna and human made environment.

Population: consists not only of a specialized aggregate, but also of all the diverse people, who live within the boundaries of the community. A community's health is greatly influenced by the population that lives in it. Different features of the population suggest the health needs and provide basis for health planning; and they include size, density, composition, rate of growth or decline, cultural differences, social class and educational level, mobility.

Social system: involves variables like health, family, economic, educational, religious, welfare, legal communication, recreational, and the political systems.

ITO

Question (True / False)

A community's health is influenced by the population that lives in it.

Feedback

Indeed, the population is a major criteria for health planning

2.3 Community Health Nursing Concepts

In the last study section, we were able to discuss the perspectives on the community. Let us now examine some other concepts of community health nursing.

2.3.1 Health

Health is defined as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.

2.3.2 Community Health

This is achieved by meeting the collective needs of the community and society by identifying problems and supporting community participation in the process.

2.3.3 Community Health Nursing

Community health Nursing is a synthesis of nursing practice and public health practice applied to promoting and preserving the health of the populations. The practice is general and comprehensive; it is not limited to a particular age group or diagnosis and is continuing not episodic. The dominant responsibility is to the population as a whole, nursing directed towards individuals, families, or groups contribute to the health of the total population within the context of promoting and preserving the health of the community.

Ouestion

people living across boundaries with a common purpose make up a community, true or false

Feedback

false (the geographical boundary must be specified)

2.4 Stages of Community Health Nursing Process

2.4.1 Community Assessment

This is the process of searching for and validating relevant community based data according to a specified method, to learn about the interaction among the people, resources and environment. It includes:

- Collecting pertinent community data
- Analyzing and
- Interpreting the collected data.

The eight major aspects of community assessment are:

- 1. Physical environment: this involves examination of the physical environment through the use of the five senses.
- 2. Inspection: this is carried out by walking survey in the community, or micro-assessment of housing, open spaces, boundaries, transportation service centers, markets places, meeting street people, signs of decay, ethnicity, religion, health and morbidity, political media.
- 3. Auscultation: this is carried out by listening to the community residents about the physical environment
- 4. Vital signs: carried out by observing the climate, terrain, natural boundaries such as rivers and hills.
- 5. Community resources: look for signs of life such as notices, posters, new housing and buildings.
- 6. System review: involves architecture, building materials used, signs of disrepair, running water, plumbing, sanitation, and windows (glasses) .etc. also business facilities and churches.
- 7. Laboratory studies: census data or planning studies for community mapping
- 8. Health and social system: this differentiates between facilities located within the community and those located outside. Hospital includes number of beds, staffing, budget, health center, clinics, or health posts, public health services, private clinics, pharmacies, dental and other services. Signs

- of drugs or substance abuse, alcoholism. Social services include counseling and support, clothing, food, shelter and special needs as well as markets and shops.
- 9. Economics: Financial characteristics median household income, percentage of households living in poverty less than a dollar per day. Labor force characteristics, employment status of the general population greater than 18 years of age. Occupational categories and percentage of persons employed by government, farmers, skilled, unskilled, professional, types of business/industry
- 10. Safety and Transportation: involves assessment of police service, sanitation (water source, solid waste disposal, sewage and air quality) and fire services. Primary means of transportation; walking, mule, taxi, bus, train, private car, and air services. Frequency and affordability of public/private transport, and standard of roads.
- 11. Politics and government: involves assessment of peasant association, business alliances, religious groups, youth and women's associations, professional associations, ethical associations, political activism...etc.
- 12. Communication: Bulletin boards, posters, oral messages, radio, television, newspapers, postal services, telephone. Look for TV aerials, telephone wires, magazines, and satellite dishes.
- 13. Education: Types of schools, colleges and universities. Note languages used, grades, courses offered, percentage of attendants (male, female), adequacy, accessibility, and acceptability of education. Average number of years completed by people at school.
- 14. Recreation: Note facilities such as stadium, recreational areas, volley ball court, playground, picnic areas, museum, music/dancing, theatre/cinema. Who is going out about during the evening and in the morning? Teenagers, mothers and children, the homeless?

Question

As a community nurse, what areas of the community will you be interested in for community assessment?

Feedback

We don't know what is in your list, but areas of community interest to nursing include: physical environment like the housing, health and social system, economy, safety and transport, communication, politics and government.

2.4.2 Community Diagnosis

In order to arrive at a diagnosis, analysis of all the data gathered during the community assessment is carried out by categorizing data, summarizing data, comparing data and drawing inferences. Community nursing diagnosis involves a statement that defines the health strength, health problems or health risks of the community. A community diagnosis forms the basis for community based intervention. It involves three parts:

- Description of the problem (specific target or groups)
- Identification of factors/etiology related to the problem
- The sign and symptoms (the manifestations) that characterize the problem.

ITQ

Ouestion

Community diagnosis is done via community assessment. True or false?

Feedback

True, in order to arrive at a diagnosis, analysis of all the data gathered during the community assessment is carried out by categorizing data, summarizing data, comparing data and drawing inferences.

2.4.3 Planning

Planning is a logical, decision making process of design an orderly, detailed programs of action to accomplish specific goals and objectives based on assessment of the community and the nursing diagnosis formulated it involves:

- setting priorities
- establishing a specific, measurable, achievable, relevant and time bound goals and objectives
- · planning action
- outcome measurements
- recording the plan

ITQ

Question

As a community nurse, you are allowed to make planning for a community outside the outcome of the community diagnosis. True or false?

Feedback

False! Community and the nursing diagnosis informs the objectives of the planning.

2.4.4 Implementation

It entails putting the plans into action. *Community interventions* are the therapeutic actions designed to promote and protect the community health, treat and remediate community health problems and support the community as it changes over time.

Areas of nursing intervention in the community are:

- link the community members with the available resources
- pulls together information and resources to assist community in addressing its health concern and problems
- marinating its strength through facilitation, education, organization, consultation and direct care

2.4.5 Evaluation

It is systematic, continuous process of comparing the community's response with the outcome as defined by the plan of care. The ultimate purpose of evaluating interventions in community health nursing is to determine whether planned actions met client needs, if so how well they were met, and if not why not. Evaluation requires a stated purpose, specific standards and criteria by which to judge and judgment skills.

ITO

Ouestion

Evaluation is a systematic one time process, true or false?

Feedback

False, evaluation can be formative.

Study Session Summary



Summary

In this Study Session, we examined the process of community nursing. We also discussed various perspectives on community.

Assessment



Assessment

SAQ 2.1 (tests learning outcomes 2.1 and 2.2)

- 1. Explain the following terms:
 - a) Community
 - b) Healthy Community
 - c) Holographic community
- 2. What is community health nursing process?

SAQ 2.2 (tests learning outcome 2.3)

What are the steps involved in community health nursing process?

Study Session 3

Community Needs

Introduction

In the just concluded session, we discussed about the perspectives on community and stages of community nursing. Indeed, in order to plan actions for community health promotion or disease prevention efforts, a prerequisite is identifying needs. In this study session therefore, we will point out and explain the types of needs in a community.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

3.1 explain the types of needs in a community

Terminology

Felt needs	a lack or shortage felt subjectively by members of a particular population group and it expresses their point of view regarding the need for intervention
Normative needs	emerges when an individual or group fails to meet certain established standards

3.1 Types of Needs

No matter how small or big a community is, irrespective of who live there, there are some certain needs that will be of paramount.

We will highlight these needs first and subsequently we will explain them one after the other.

- felt need
- expressed need
- normative need
- comparative need

3.1.1 Felt Need

Felt needs refers to that which people say they need. For example, community members may mention that building a secondary school is their topmost priority. Felt need is important because it reflects that which the people identify as their problems. However, it has certain weaknesses:

- People may say that they need only those things that they believe are within the realm of possibility for them.
- They may not be able to identify those needs that they are unaware of or those needs that they believe will not be met
- They may identify needs that they believe the person who is conducting the needs assessment wants to hear.
- It may be easily influenced by opinion leaders and the mass media.
- People may not have opportunities for informed decision making
- The felt needs of a few community members may not reflect the perspective of the whole community; hence, a representative sample is necessary.

However, felt need is important because it is determined by community members.

3.1.2 Expressed Need

Expressed need is described as felt need turned into action demonstrated by the number of people applying for a skills acquisition training programme for example. It is a little more concrete than felt needs but has its own weaknesses;

- People may sign up for programmes that already exist
- Demand for a service may occur simply because the service represents the only solution currently offered for a particular problem.

3.1.3 Normative Need

Normative needs refer to needs determined by experts on the basis of professional analysis. It is regarded as objective and unbiased. Its weaknesses include:

- Professional judgement is based on values in the same way as felt need.
- It is also influenced by political agendas, which may make professionals more or less willing or able to publicly present their opinions.

3.1.4 Comparative Need

This is determined by comparing the resources or services of one group or area with those of another similar group or area. For example, a town may be designated as needing a tertiary institution because the adjourning town has a school. The main shortcomings include:

- The assumption that similarity exist between the areas
- The response to the need in the area of comparison was the most appropriate response to the problem; neither of which may be true

ITQ

Question

Normative need is the most objective need, true or false

Feedback

True

Study Session Summary



Summary

In this Study Session, you have learnt about the various types of needs in a community. These includes:

- felt need
- expressed need
- normative need
- comparative need

Assessment



Assessment

SAQ 3.1 (tests learning outcomes 3.1)

Identify the types of needs in a community

Study Session 4

Community Assessment Process

Introduction

In this study session, we will focus on community assessment. In doing so, we will examine the steps in community assessment.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

- 4.1 define and use correctly the term "community assessment"
- 4.2 outline the steps in community assessment

Terminology

Community	
assessment	

A description of a community and its people with the purpose of identifying the needs of a community in order to provide services appropriate to those needs

4.1 Defining Community Assessment

This can be defined as the process of critically examining the characteristics, resources, assets, and needs of a community, in collaboration with that community, in order to develop strategies to improve the health and quality of life of the community. It is also called community profiling and community analysis. The process involves the above highlighted steps, each are described as follows:

4.2 The Steps to Community Assessment

We will highlight steps to be followed in community assessment process. These steps include:

- Identification of available resources
- Establishment of project team and steering committee

- Development of research plan and time frame
- Collection and analysis of information already available
- Completion of community research
- Analysis of result
- Reporting back to the community
- Setting priorities for action
- Determination of responses to the needs identified
- Planning and implementation

4.2.1 Identification of Available Resources

It is necessary to ascertain the time and money available in order to correlate the size of the project with the available resources. Also need to determine the skills and time required of the team involved in the assessment. Proper review of resources will help ensure that adequate resources are allocated to address the issues identified in the community assessment.

ITO

Question

What is community profiling?

Feedback

This can be defined as the process of critically examining the characteristics, resources, assets, and needs of a community, in collaboration with that community, in order to develop strategies to improve the health and quality of life of the community. The same as community assessment.

4.2.2 Establishment of Project Team and Steering Committee

Community assessment is best conducted by a group of people with complementary skills.

<u>THE PROJECT TEAM</u> is the group of people who will conduct the community assessment. The team must include a number of people with varying expertise, such that, together the team has a broad range of skills. It may be made up of outside experts.

<u>THE STEERING COMMITTEE</u> is a group of people from outside the project team who oversee the project, provide outside advice, and ensures that the project achieves its goals. It comprises members of 3 groups:

- Community health professionals from the area
- Representatives from other organizations that are able to respond to the findings of the community assessment
- Representative community members

The steering committee should be of a manageable size ranging between 6 and 12 people. The committee has the following functions: A valuable source of expertise, direction and support for those conducting the community assessment, ensures a link between the community and the project team; compensate for difficulties that may be encountered by a project team made up of total outsiders who are not aware of community interests and values and makes recommendations for action on the basis of community assessment.

4.2.3 Development of Research Plan and Time Frame

This enables the team to keep more or less on schedule and makes the two teams aware of the time commitment expected of them. It however, requires flexibility when circumstances change. Developing time frames can be achieved using the Gantt chart and some other already designed soft-ware systems.

4.2.4 Collection and Analysis of Information Already Available

This is important in order to prevent waste of resources from repeating extensive processes of assessment and interventions. It also helps the team to identify the need for further information. Information can be obtained from literature reviews to identify ways whereby similar issues have been dealt with and also from secondary sources including data collected by local, state and federal government bodies – epidemiological and demographical data

4.2.5 Completion of Community Research

The next step is to plan ways to collect needed additional data. Such data are likely to include needs identified by community members as well as health personnel. Community assessment tools come into play at this time for data collection. Community assessment tools include surveys, focus group discussions, key informant interviews, community & asset mapping and community forums or meetings.

4.2.6 Analysis of Result

This includes analysis of both community resources and needs. In needs analysis, it is important to express the need as a problem rather than a potential solution to the problem. Making explicit difference between problems (needs) and solutions helps the project team and steering committee to a number of possible causes and solutions to each need identified.

4.1.7 Reporting Back to the Community

This provides an opportunity for verification of the findings and identification of any problem areas prior to final publication. Results can be presented in both verbal and written forms such as through the newspapers, public meeting, press releases, etc. Conclusions and recommendations from the community assessment direct both the community and health agencies toward appropriate action.

4.2.8 Setting Priorities for Action

This must begin with a confirmation of those values that will guide the process. It must also ensure that everyone has an equal opportunity to participate and to influence any decisions. Group rules that recognize everyone's right to speak are important as are voting processes that allow everyone an equal vote.

4.2.9 Determination of Responses to the Needs Identified

Contributions from community members are vital. Discussions and idea-generating processes are important at this stage to enable the group identify a range of innovative ideas. The steps of brainstorming are ideal to encourage creativity with zero tolerance for judgemental attitudes.

The steps of brainstorming

- Present the issue to the group
- Invite the group to suggest solutions to the issue
- Encourage group members to be creative and not to judge the value of an idea before suggesting it
- Write down all suggestions without comment or criticisms
- Continue the process until all ideas are exhausted
- When no suggestions are forthcoming, analyze the responses
- Discuss the merits and shortcomings of each suggestion
- Scale suggestions according to their usefulness

4.2.10 Planning and Implementation

This involves planning the ways that these strategies will be implemented. Assessment is continuous and requires flexibility and sensitivity to changing circumstances and the needs of the community throughout the planning and implementing phases.

ITQ

Question

If you asked as a Community Healthy Nurse to constitute a project

committee, who would you include in your team, the medical team alone?

Feedback

No, that will be counter-productive. The team should include those in other professions to bring in a broader range of views.

Study Session Summary



Summary

In this Study Session, we identified steps to be followed in community assessment process. We listed those steps to include, identification of available resources, establishment of project team and steering committee, development of research plan and time frame, collection and analysis of information already available, completion of community research etc

Assessment



Assessment

SAQ 4.1 (tests learning outcome 4.1)

Define community analysis

SAQ 4.2 (tests learning outcome 4.2)

Highlight the steps to community assessment

Study Session 5

Community Participation

Introduction

In this study session, you will consider the concept of community participation. You will thereafter examine the importance of community participation and describe its levels. You will cap the session by highlighting incentives and disincentives for community participation.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

- 5.1 define community participation
- 5.2 list the importance of community participation
- 5.3 discuss the levels and ladder of community participation
- 5.4 highlights the incentives and disincentives for community participation

Terminology

Community participation	a proven approach to addressing health care issues and has been long utilized in HIV prevention in the United States and in development internationally, in projects varying from sanitation to child survival, clean water, and health infrastructure.	
Incentives	a thing that motivates or encourages one to do someth	

5.1 Defining Community Participation

This refers to involvement of community members at all stages of assessment, planning, implementation and evaluation of programmes and projects. Successful community involvement is based on information and dialogue through mechanisms such as meetings, focus groups, surveys, nominal group processes, etc

5.2 Importance of Community Participation

- Identify useful information about history, values, and opinions.
- Streamline efforts to relevant problems and strengths within the community
- Gain acceptance because community members had input from the beginning
- Improves information flow
- Allows for community advocacy
- Fosters collaboration
- Minimizes conflicts
- Promotes environmental health

5.3 Levels of Community Participation

Community participation can be defined as the involvement of people in a community in projects to solve their own problems. It is held to be a basic human right and a fundamental principle of democracy. Community should participate in activities/project right from the initial level, the levels of community participation are:

- Needs assessment expressing opinions about desirable improvements, prioritizing goals and negotiating with agencies
- Planning formulating objectives, setting goals, criticizing plans.
- Mobilizing raising awareness in a community about needs, establishing or supporting organizational structures within the community
- Training participation in formal or informal training activities to enhance communication, construction, maintenance and financial management skills
- Implementing engaging in management activities; contributing directly to construction, operation and maintenance with labour and materials; contributing cash towards costs, paying of services and so on.
- Monitoring and evaluation participating in the appraisal of work done, recognizing improvements that can be made and redefining needs

THE LADDER OF CITIZEN PARTICIPATION

The ladder of citizen participation (shown in figure 2) has eight steps, each representing a different level of participation. From bottom to top, the steps explain the extent of citizen participation and how much real power citizens have to determine the process and outcomes.



The ladder is a useful tool for interpreting what is meant when programmes and policies refer to 'participation

Arnstein uses the terms 'the powerful' and 'citizens' as shorthand, but emphasises that neither are homogenous entities; and that each grouping contains actors with more or less power.

At the lowest end of the ladder, forms of non-participation are used by powerful actors to impose their agenda. Participation as tokenism occurs when participants hear about interventions and may say something about them, which power holders denote as 'input'. However, the voices of participants will not have any effect on the intervention; thus participation does not lead to change. At the higher end of the ladder, participation is about citizens having more power to negotiate and change the status quo. Their voices are heard and responded to (Ghulam, 2014).

Citizen control Delegated power Partnership Placation Consultation Informing Therapy Manipulation Citizen power Degrees of citizen power Consultation Topic power No power Manipulation Citizen power Degrees of citizen power No power Manipulation

Arnstein (1969) Ladder of citizen participation

Figure 5.1: Arnstein's ladder of citizen participation.

ITQ

Question

In Arnstein Ladder of citizen participation, therapy level has the highest community participation.

Feedback

False

5.4 Incentives for Community Participation

The following are some of the main reasons why people are motivated to participate in community projects:

- Community participation motivates people to work together
 people feel a sense of community and recognize the benefits of their involvement
- Social, religious or traditional obligations for mutual help
- Genuine community participation people see a genuine opportunity to better their own lives and for the community as a whole
- Remuneration in cash or kind

5.5 Disincentives to Community Participation

The following are some of the main reasons why individuals and/or community may be reluctant to take part in community participation:

- An unfair distribution of work or benefits amongst members of the community
- A highly individualistic society where there is little or no sense of community
- The feeling that the government or agency should provide the facilities
- Agency treatment of community members if people are treated as being they are more likely to act as if they are helpless.

ITQ

Question

true or false, community members are always willing to community participation.

Feedback

False

Study Session Summary



Summary

In this Study Session, we considered community participation as a concept; we listed the importance of community participation and described its levels. Lastly, we highlighted incentives and disincentives for community participation.

Assessment



Assessment

SAQ 5.1 (tests learning outcome 5.1)

Define community Participation

SAQ 5.2 (tests learning outcome 5.2)

Why is community participation important? (in your own words)

SAQ 5.3 (tests learning outcome 5.3)

At what level should the community be involved in any project in to be done in the community and what are the levels of participation

SAQ 5.4 (tests learning outcome 5.4)

What are the disincentives to community participation?

Study Session 6

Infant Welfare Clinic

Introduction

In this study session, we will discuss child health and infant welfare clinic (IWC). In doing so, you will examine the organization, planning and administration IWC.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

- 6.1 define and use correctly the following terms in bold
 - child health
 - infant welfare clinic
- 6.2 outline how to organize and administer IWC
- 6.3 identify the components of the infant welfare clinics

6.1 Defining Child Health

Child health is a state of physical, mental, intellectual, social and emotional well-being and not merely the absence of disease or infirmity. Child health care focuses on preventing acute and chronic illness while promoting normal growth and development (Hitchcock et al., 2003). Healthy children live in families, environments, and communities that provide them with the opportunity to reach their fullest developmental potential.

6.2 Infant Welfare Clinic

This is a medical facility that specializes in the health and well-being of young babies. It is a department in the hospital or health centre where both sick and healthy newborns between 0 to 5 years are cared for. This clinic starts as soon as the child is born.

These clinics have different names that are used inter-changeably such as:

- Under five clinics
- Well baby clinics
- Children welfare clinics.

ITQ

Ouestion

Child Welfare Clinics are for those within 0-5 months, true or false

Feedback

False (0-5 years)

6.3 Organizing and Administration of IWC

Infant welfare clinic is present at the teaching hospitals, state hospitals and primary health centres. It is usually organized and planned by the hospital management in various health institutions. The clinic is usually administered by nurses especially community health nurses, public health nurses, community health extension workers etc. Doctor usually a paediatrician or family medicine practitioner is usually present to attend to sick babies.

ITQ

Question

The Child Welfare Clinics are usually administered by a community nurse, true or false

Feedback

True

6.4 Components of an Infant Welfare Clinic

The following activities make up the infant welfare clinic:

- Registration of new born babies
- Weighing and charting of weights
- Interviewing of mothers about their children's feeding, sleeping and playing pattern.
- Physical examination of children
- Giving of health education
- Immunization of babies
- Nutritional demonstration
- Treatment of minor ailment

Registration

This is the first thing that is done for all new born babies at the infant welfare clinic. Appointment cards are given to the mothers. This card also contains information that would assist the mother to raise her child well

Weighing and charting

Babies are weighed per clinic. The height, head circumference, upper arm circumference (UAC) etc, are all taken and recorded. All these enable the health workers to know whether the child is growing well or not and necessary steps are taken.



The weight of the child helps in growth monitoring

Interviewing of mother about the welfare of their babies

The health workers hold brief private interview with each mother pertaining to her baby's health and advice/ health education is given as necessary.

Physical examination

Head to toe examination is done for each child to ensure healthy living.

Health education

Group and individual health talk is done at the IWC. A lot of encouragement is also given to these mothers. Topics that can be discussed at the IWC includes: importance of breastfeeding, disadvantages of female genital mutilation, family planning, immunization, prevention of home accidents, personal hygiene, food preservation etc.

Immunization

Babies are immunized against the killer diseases. These include tuberculosis, Poliomyelitis, Tetanus, Diphtheria, Whooping cough etc.

Nutritional demonstration

Preparations of some local but nutritious food is done for mothers, especially on food that can be given to malnourished children and foods that can serve as weaning diet.

Treatment of minor ailments

Minor ailments are treated while others are referred to Paediatricians in the hospital or through a two way referral system.

NOTE- As a community health nurse you must have good observational skill, good sense of judgement etc. to be able to identify any ailments in children.

ITQ

Question

Name three parameters that must be chatted at every visit to a child welfare clinic

Feedback

Weight, head circumference and upper arm circumference

Study Session Summary



Summary

In this Study Session, we defined child health and examined infant welfare clinic as well as organization, planning and administration of IWC

Assessment



Assessment

SAQ 6.1 (tests learning outcome 6.1)

Define: a. child health

b. Infant welfare clinic

SAQ 6.2 (tests learning outcomes 6.2 and 6.3)

List the activities that make up the Under - 5 clinic

Study Session 7

Major Health Challenges/Problems of Children in Contemporary Days

Introduction

In this study session, we will focus our discussion on the major health challenges of children. We will also consider examining those health wise problems that children may be faced with in the contemporary days

Learning Outcomes



Outcomes

When you have studied this session, you should be able to

- 7.1 discuss extensively the health challenges of children
- 7.2 explain the problems of children in the contemporary days in terms of contributory factors and health implications

Terminology

Diarrhea	Unusually loose or watery stools.
----------	-----------------------------------

7.1 Major Health Challenges of Children

Children under the age of five years die from preventable and treatable illnesses such as diarrhea, acute respiratory diseases, measles and malaria. Illness is usually complicated by malnutrition. UNICEF and WHO developed the integrated management of childhood illness in 1992 with the aim of preventing and early detection and treatment of these childhood killers.

7.1.1 Childhood Malaria

Children under five years of age are one of most vulnerable groups affected by malaria. There were an estimated 584,000 malaria

deaths around the world in 2013, of which approximately 78% were in children under five years of age. Young children are particularly vulnerable because of their low immunity.

The major symptoms usually seen in children are:

- Fever
- Headache
- Shivering and sweating
- Joint pain
- Loss of appetite,
- Vomiting etc.

Complications include:

- Anaemia
- Cerebral malaria,
- Convulsion and even death.

Prevention is by utilization of preventive measures like:

- Screening of windows and doors with nets,
- Spraying the house with insecticides aerosol,
- Application of insecticide repellent creams,
- Wearing of long sleeved clothes and
- Destruction of mosquito breeding sites and
- Use of long lasting insecticides treated nets.

ITO

Ouestion

what contributes most to the susceptibility of children to malaria infection

Feedback

Low immunity

7.1.2 Childhood Diarrhoea

Diarrhoeal disease is the second leading cause of death in children under five years old, and is responsible for killing around 760,000 children every year. Diarrhoea can last several days, and result to loss of water and salts that are necessary for survival from then body.



Diarrhoea a condition in which faeces are discharged from the bowels frequently and in a liquid form.

Most people who die from diarrhoea actually die from severe dehydration, electrolyte imbalance and fluid loss. Children who are malnourished or have impaired immunity as well as people living with HIV are most at risk of life-threatening diarrhoea.

TYPES OF DIARRHOEA

There are three clinical types of diarrhoea:

- Acute watery diarrhoea lasts several hours or days, and includes cholera;
- Acute bloody diarrhoea also called dysentery; and
- Persistent diarrhoea lasts 14 days or longer.

Causative organisms

The common causative organism of diarrhoea is the rotavirus thus it cannot be cured with antibiotics. Occasionally, bacteria cause diarrhea, e.g. campylobacter, salmonella, shigella and E.coli. Some bacteria diarrhoea can be treated with antibiotics.

HOW DIARHOEA SPREADS

Diarrhoea is a disease of poverty and poor personal and environmental sanitation. Diarrhoea germs are easily spread from person to person especially from child to child. Infection is spread through contaminated food or drinking-water, from person-to-person as a result of poor hygiene.

SIGNS AND SYMPTOMS OF DIARRHOEA

- Passing of stools that are less formed and more watery than usual
- Fever
- Loss of appetite
- Nausea and vomiting
- Stomach pains
- Blood or mucous in the stool.

All these will result into dehydration which can result into death if not given prompt attention.

Signs of dehydration

Moderate dehydration

- Thirst
- Restless or irritable behaviour
- Decreased skin elasticity
- Dry skin, mouth and tongue
- Sunken eyes

- No tears
- Decreased urination

Severe dehydration

- Symptoms become more severe
- Lack of urinary output
- Shock
- Diminish consciousness
- Rapid and feeble pulse
- Low or undetectable blood pressure
- Pale skin

Prevention of Childhood Diarrhoea

Interventions to prevent diarrhoea, include:

- safe drinking-water,
- use of improved sanitation and hand washing with soap
- Use hand sanitizer when washing is not possible.
- exclusive breastfeeding for the first six months of life;
- good personal and food hygiene;
- health education about how infections spread
- Rotavirus vaccination

Management of Childhood Diarrhea

1. Rehydration with oral rehydration salts (ORS) solution

ORS is a mixture of clean water, salt and sugar. Diarrhoea can be treated with a solution of 1 litre of cooled clean boiled water, 5 cubes or 10 tea level spoon of sugar and I tea level spoon of salt with zinc tablets. The mixture contains Nacl (2.6g/l), trisodium citrate dihydrate (2.9g/l), glucose anhydrous (13.5g/l) and Kcl (1.5g/l). It is cost effective. ORS is absorbed in the small intestine and helps in the replacement of the water and electrolytes lost in the faeces

Zinc supplements: zinc supplements reduce the duration of a diarrhoea episode by 25% and are associated with a 30% reduction in stool volume.

Nutrient-rich foods: the vicious circle of malnutrition and diarrhoea can be broken by continuing to give nutrient-rich foods – including breast milk – during an episode, and by giving a nutritious diet – including exclusive breastfeeding for the first six months of life – to children when they are well.

2. Rehydration with intravenous fluids in case of severe dehydration or shock

ITQ

Question

What is the commonest cause of death in diarrhea?

Feedback

Dehydration

7.1.3 Acute Respiratory Infections (ARIs)

Acute respiratory tract infection is another cause of mortality and morbidity in children. It is a form of infection that can interfere with normal breathing. ARIs are infectious. They can spread from one person to another.

They can be classified as:

- Upper respiratory tract infections (URIs)
- Lower respiratory tract infections (LRIs)

CAUSES OF ARIS

Infection is usually caused by viruses, or bacteria and this can manifest in any area of the respiratory tract such as nose, middle ear, throat, voice box, air passage and lungs. Viruses that are responsible for ARIs include:

- Adenovirus- causes cold, bronchitis and pneumonia
- Pneumococcus-meningitis and also triggers pneumonia
- Rhinoviruses- common cold

Modes of transmission

Viral respiratory tract infections spread when children's hands come into contact with nasal secretions from an infected person. Infection can also spread when children breathe air containing droplets that were coughed or sneezed out by an infected person.

SYMPTOMS OF ARIS

Symptoms are:

- Nasal discharge,
- Nasal obstruction,
- Sore throat,
- Headache,
- Cough
- Hoarseness,
- Loss of taste and smell,
- Mild burning of the eyes,
- Feeling of pressure in the ears or sinuses, due to obstruction and/or mucosal swelling.

Other serious symptoms are:

- High fever and chills
- Difficulty in breathing
- Stridor when calm

- Low blood oxygen level
- Loss of consciousness

Cough is associated with 30% of colds and tends to start about the fourth or fifth day when nasal symptoms decrease. There may be a mild increase in body temperature. Infants and young children are more likely to develop higher temperatures. In infants there may be irritability, snuffles resulting in difficulty feeding.

Diagnosis may be difficult and fever can be the main symptom during the early part of the illness.

Management of Acute respiratory tract infection

The main emphasis of management is symptom relief of fever, nasal congestion and coughing.

Common constituents of such medication include first generation antihistamines, analgesics, antipyretics (paracetamol) or anti-inflammatory agents (ibuprofen), cough suppressants such as dextromethorphan, expectorants and decongestants. Adequate rest and fluid intake. Use of antibiotic in childhood URTIs remains contentious since more than 90% of the infections are of viral aetiology.

Prevention of ARIs

Routine vaccination to prevent influenza- This can be taken by children from 6months and above

Good hygiene - regular washing of hands by children and caregivers.

ITQ

Question

The main emphasis of management of acute respiratory tract infection is antibiotic administration.

Feedback

False (The main emphasis of management is symptom relief of fever, nasal congestion and coughing)

7.2 Problems of Children in the Contemporary Days

The health of today's infants and children is threatened by many factors that did not exist 50 years ago. Some problems are related to parental behaviour while some are related to socio-economic condition

These problems include:

- HIV/AIDS
- Gun violence
- Child abuse
- Drug trafficking in schools and neighbourhood

Problems related to parental behaviour are:

- Smoking
- Abuse of alcohol, and other drugs,
- Family violence.

Problem related to socio-economic factors are:

- Poverty
- Homelessness

7.2.1 HIV/ AIDS and Children

More than 240,000 children were infected with HIV during 2013 - around 700 new infections every day. In addition, millions of children every year are indirectly affected by the impact of the HIV epidemic on their families and communities.

Risk factors for HIV/AIDs among children

The majority of children living with HIV are infected via mother-to-child transmission, during pregnancy, childbirth or breastfeeding.

Symptoms of HIV in children

- Failure to thrive
- Failure to reach developmental milestone during expected time frame
- Enlargement of lymph nodes in several areas of the body
- Brain or nervous system problems- seizures, difficulty in walking
- Frequent childhood illnesses
- Opportunistic infections
- Oral thrush

It is vital that children who were infected via mother-to-child transmission receive treatment to keep them healthy and live to adulthood. If they are not on antiretroviral treatment (ART), a third of children who are living with HIV will not reach their first birthday, and half will not reach their second birthday.

ITO

Question

what is the commonest route of HIV transmission in children?

Feedback

Mother to Child during pregnancy, parturition or breastfeeding.

7.2.2 Child Abuse

Child abuse is the wilful infliction of physical injury or mental anguish on a child. It is a major child health problem in both developed and developing countries.

Each year, approximately 160,000 children are severally abused, over 3million are abused or neglected, and 1000-2000 die as a result of assault by their caretaker, generally a parent.

Children are vulnerable by virtue of their size, age, basic dependency on adult and lack of power. They are at greater risk of being injured in their own home by a family member or other care provider.

Family of any race, class, income bracket, religious background, and neighbourhood can be violent or neglect their children; hence the need for community health nurses to assess any child who comes to the clinic for any form of abuse.

Child abuse can be grouped into physical, emotional, sexual abuse or combination of the three.

Physical abuse

It is not accidental physical injury (ranging from minor bruises to severe fractures or death) as a result of punching, beating, kicking, biting, shaking, throwing, stabbing, choking, hitting (with a hand, stick, strap, or other object), burning, or otherwise harming a child, that is inflicted by a parent, caregiver, or other person who is responsible for the child.



Physical abuse is simply any intentional act causing injury or trauma to another person by way of bodily contact

Physical discipline, such as spanking or paddling, is not considered abuse as long as it is reasonable and causes no bodily injury to the child

Signs of Physical Abuse

Consider the possibility of physical abuse when the child:

- Has unexplained burns, bites, bruises, broken bones, or black eyes.
- Has fading bruises or other marks noticeable after an absence from school.

Tin

- Seems frightened of the parents and protests or cries when it is time to go home.
- Shrinks at the approach of adults.
- Reports injury by a parent or another adult caregiver.

Sexual Abuse

Sexual abuse includes sexual activities by a parent or caregiver such as fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the production of pornographic materials.



Sexual abuse is defined as "the employment, use, persuasion, inducement, enticement, or coercion of any child to engage in, or assist any other person to engage in, any sexually explicit conduct

Indicators of Sexual Abuse

- Child reports sexual abuse
- Frequent urinary tracts infections
- Frequent yeast infections
- Sexually transmitted diseases
- Perianal bruising or tears
- Decreased anal tone
- Genital pain or itching
- Encopresis/ enuresis at inappropriate developmental stage
- Genital trauma and /or bleeding
- Excessive masturbation
- Sexual acting out with younger children
- Age inappropriate sexualized behaviour or language

Emotional Abuse

Emotional abuse (or psychological abuse) is a pattern of behaviour that impairs a child's emotional development or sense of self-worth. This may include constant criticism, threats, or rejection, as well as withholding love, support, or guidance.



Emotional abuse is any act including confinement, isolation, verbal assault, humiliation, intimidation, infantilization, or any other treatment which may diminish the sense of identity, dignity, and self-worth.

Tip

Emotional abuse is often difficult to prove, and therefore, child protective services may not be able to intervene without evidence of harm or mental injury to the child. Emotional abuse is almost always present when other types of maltreatment are identified.

Indicators of Emotional Abuse

Indicators of emotional abuse include:

- Withdrawal
- Depression
- Suicide
- Anxiety/fear
- Self-destructive behaviours
- Substance abuse
- Sudden changes in behaviour
- Sudden school difficulties
- Dramatic mood extremes
- Sleep disorders
- Nightmares
- Repeated runaway
- Aggression

ITQ

Ouestion

Child abuse is a universal health problem, true or false?

Feedback

True

7.2.3 Child Neglect

Neglect is the failure of a parent, guardian, or other caregiver to provide for a child's basic needs. Neglect may be:

- Physical (failure to provide necessary food or shelter, or lack of appropriate supervision)
- Medical (failure to provide necessary medical or mental health treatment).
- Educational (failure to educate a child or attend to special educational needs).
- Emotional (inattention to a child's emotional needs, failure to provide psychological care, or permitting the child to use alcohol or other drugs).

Signs of child neglect are:

- The child is frequently absent from school
- Begs or steals food or money
- Lacks needed medical or dental care, immunizations, or spectacles
- Is consistently dirty and has severe body odour
- Lacks sufficient clothing for the weather
- Abuses alcohol or other drugs

• States that there is no one at home to provide care

It is important to recognize high-risk situations and the signs and symptoms of maltreatment.

Health workers especially nurses should possess skills which can enable them to identify any form of abuse in children. Any case of child abuse should be reported.

Other problems in children are: cigarette smoking, gun violence, poverty. Studies have shown that direct and indirect exposure to tobacco smoke has deleterious effect on health of a child.

Health implications

Environmental exposure to tobacco smoke (ETS) is associated with increased rate of respiratory disease, reduced lung growth in children, increase rate of lungs cancer and exacerbation of cancer in children. Screening of children whose parents smoke should focus special attention on respiratory complications.

Health education of parents must emphasize the direct and indirect effects of smoking on children.

Referral should also be made to smoking cessation programs to help to protect the health of the child.

ITO

Question

list the categories of child neglect

Feedback

Physical, Medical, Educational and Emotional

7.2.4 Gun Violence

This is becoming rampart in this contemporary world now as school children are now being abducted by violent men with guns.

Consider the abduction of 276 female students from government secondary school in the town of Chibok in Borno state Nigeria on the night of 14-15 April 2014 by the Boko Haram, an extremist and terrorist organisation based in the northeastern Nigeria.

ITQ

Question

what is the leading cause of gun violence among the children

Feedback

abduction of school children by violent men with gun

7.2.5 Poverty

Poverty is defined as either relative or absolute. Both are important determinant of health.

Absolute poverty is also called abject poverty and it means adequate needs such as food, shelter and health care cannot be provided. Relative poverty refers to inequitable distribution of wealth within the society. More than 40% of people living in developing countries live on less than \$2/day.

Children and poverty

Children are more likely to live in poverty than adults. One in five children live in poverty in developing countries and poor children are likely to die before their first birthday; they may go hungry, become malnourished, develop slowly and have more health problems. They are also likely to drop out of school and engage in criminal acts and have children while in their teens. These perpetuate the cycle of poverty. Children living in poverty have higher incidence of asthma, as poverty contributes to the aetiology, exacerbation, recognition and management of asthma.

Children living in poorer communities are at increased risk for a wide range of physical health problems:

- Low birth weight
- Poor nutrition which is manifested in the following ways: inadequate food which can lead to food insecurity/hunger, lack of access to healthy foods and areas for play or sports which can lead to childhood overweight or obesity
- Chronic conditions such as asthma, anaemia and pneumonia
- Risky behaviours such as smoking or engaging in early sexual activity
- Exposure to environmental contaminants, e.g., lead paint and toxic waste dumps
- Exposure to violence in their communities which can lead to trauma, injury, disability and mortality

Poverty has a negative effect on the health of children. It causes poor nutrition, decrease mental health, decreased productivity, inadequate access to health care, high infant mortality rate. Hence the need for a community that wants to remain healthy to look at the means of reducing poverty, thereby saving life of their population especially children who are their future.

Contributing factors to problems in children:

- Poverty
- Inequality/ relative poverty

- Lack of access to care
- Maternal education
- Conflict war / disaster
- Individual characteristics
- Teen parenting
- Substance abuse
- Intimate partner violence
- Divorce

7.2.6 Health implications of problems in children

The major health implication of all these problems in children is reflected in the child's mortality and morbidity rate in the countries.

The higher the rate of all these childhood problems, the higher the rate of infant mortality and morbidity.

ITQ

Question

List the medical effects of poverty on children

Feedback

Low birth weight, chronic health conditions such as asthma, anaemia and pneumonia

Study Session Summary



Summary

In this Study Session, we focused our discussion on the major health challenges of children. We also considered the health wise problems that children are faced with in the contemporary days.

Assessment



Assessment

SAQ 7.1 (tests learning outcome 7.1)

- a) List 5 major health challenges in Under 5 children
- b) Difference between Acute diarrhea and Persistent Diarrhoea
- c) What is the association between diarrhea and Zinc supplements?

d) Commonest causative organism of diarrhoea?

SAQ 7.2 (tests learning outcome 7.2)

Briefly describe the challenges of the children in this contemporary days

Study Session 8

Immunization Theory, Time Schedule, and Rules Governing Immunization Administration

Introduction

In the previous Study Session, we discussed the health challenges of children. Some of these challenges can however be mitigated or even eliminated with the application of immunization. We will therefore beam our study light on immunization theory. We will also explain in a tabular form the immunization schedule. To conclude, you will state the rules governing the administration of immunization vaccine.

Learning Outcomes



When you have studied this session, you should be able to:

- 8.1 discuss the immunization theory
- 8.2 draw the immunization table/schedule
- 8.3 state the rules governing immunization administration

Outcomes

Terminology

Immunization	the process whereby a person is made immune or resistant
	to an infectious disease, typically by the administration of

a vaccine

8.1 Immunization Theory

Immunization theory is the theory behind immunization. Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease. The act of administering *vaccines* is referred to as vaccination or immunization. Vaccinations are essentially prophylactic.

A person receiving a vaccination is injected with a dead or "stunned" (weakened) form of the virus. This is done so that the body can learn to identify the virus and make antibodies capable of neutralizing it by stimulating immune system. This is called **active immunity**. When an individual is now exposed to a disease, the virus enters the body and it will immediately be recognized and the proper antibodies will be released to kill the virus before it attaches to a host cell.



A vaccine is a biological preparation that improves immunity to a particular disease.

It is essential to know this theory for following reasons:

- Some parents consider vaccines as being dangerous
- Some do not believe their children are at risk for diseases such as polio, measles and tetanus, hence do not require vaccines
- Some do not believe the diseases are preventable by vaccines
- Others do not believe that certain vaccine-preventable diseases, such as chicken pox and measles, are particularly serious
- And many worry about the safety of vaccines. The concerns may
 be about immediate, well-defined side effects such as fever or
 may take the form of anxiety that vaccines might harm the
 immune system or cause chronic diseases years later.

8.2 Immunization Schedule

AGE	ANTIGEN	ROUTE/DOSAGE	DESCRIPTION OF THE INFECTIOUS DISEASE
At Birth	BCG, OPV0, HEPBO	Intradermal/0.05ml, Oral/2 drops, Intra muscular/, 0.5ml	BCG is the tuberculosis vaccine. OPV1 is also called oral polio vaccine. HEPBO is the

			Hepatitis B vaccine.
6 weeks	OPV1, Pentavalent 1, PCV (optional) Rotavirus 1 (optional)	Oral / 0.5ml Intramuscular/2 drops Oral/supplied in single dose (1.5ml) squeezed slowly drop by drop into infant mouth	Pentavalent vaccine is a combination of five vaccines-in-one that prevents diphtheria, tetanus, whooping cough, hepatitis B and haemophilus influenza type B, all through a single dose.
10 weeks	OPV2, Pentavalent 2, PCV (optional)	Oral/0.5ml Intramuscular/2 drops	See above
14 weeks	OPV3, Pentavalent 3, PCV, Rotavirus 2 (optional)	Oral/0.5ml Intramuscular/2 drops Oral/supplied in single dose (1.5ml) squeezed slowly drop by drop into infant mouth	See above
9 months	Measles	Subcutaneous/ 0.5ml	Measles vaccine is a highly effective vaccine used against measles.
12 months	Yellow fever	Subcutaneous/ 0.5ml	Yellow fever is a potentially fatal viral infection
15-18 months	MMR, OPV, chicken pox (optional)		MMR is the measles, mumps and rubella vaccine. The chickenpox (varicella) vaccine provides protection against the varicella zoster virus that causes chickenpox.
24 months	Meningitis, Thyphoid fever (optional)		Meningococcal vaccine is a vaccine used against Neisseria meningitides. Typhoid vaccine helps prevent typhoid fever.

ITQ

Question

What is active immunity?

Feedback

this is the ability of one's immune system to identify and produce antibodies against specific antigen.

Pneumococcal conjugate vaccine (PCV): Pneumococcal disease, an infection caused by bacteria pneumococcus can lead to bacterial meningitis, pneumonia. Dose is 0.5ml/IM.

Rotavirus vaccine is an oral vaccine against rotavirus infection, a common cause of diarrhoea. Two to three doses, four to ten weeks interval and must be completed before the child reaches 32weeks.

MMR can be given any time from 12month. Two doses are required, 4 weeks interval between 1st and 2nd dose in the thigh or upper arm.

Chicken pox vaccine can be given any time from 12month, 2 doses schedule but 3 months interval.

Typhoid and meningitis vaccine are one single dose schedule both IM however recommended age for typhoid is 2yrs and above

Diphtheria is a fatal disease. It is caused by bacteria; a severe throat and upper lung infection.

Tetanus is also a fatal disease. It is a bacteria causes weakness and paralysis when allowed to fester in a deep, dirty wound.

Whooping cough (also known as pertussis) is caused by bacteria; severe coughing fits. It can lead to fatalities especially in young infants.

Hepatitis B is a virus that causes severe liver damage. It can be fatal.

Haemophilus Influenza type B is a bacteria that causes meningitis and bloodstream infections. Most cases are in infants or the elderly. It can be fatal.

PCV is also called pneumococcal conjugate vaccine. Pneumococcal disease, an infection caused by the bacteria *Streptococcus pneumoniae* or *pneumococcus* can lead to bacterial meningitis, pneumonia and bacteremia.

Rotavirus vaccine is an oral vaccine against rotavirus infection, a common cause of diarrhoea and sickness. Rotavirus typically strikes babies and young children, causing an unpleasant bout of diarrhoea, sometimes with vomiting, tummy ache and fever.

Measles, mumps and rubella are very common, highly infectious, conditions that can have serious, potentially fatal, complications, including meningitis, swelling of the brain (encephalitis) and deafness.

Yellow fever is a potentially fatal viral infection, transmitted by mosquitoes in tropical regions. There is no specific treatment for yellow fever.

MMR is the measles, mumps and rubella vaccine.

The chickenpox (varicella) vaccine provides protection against the varicella zoster virus that causes chickenpox.

Meningococcal vaccine is a vaccine used against *Neisseria* meningitidis, a bacterium that causes meningitis, meningococcemia, septicemia, and rarely carditis.

Typhoid vaccine helps prevent typhoid fever. Typhoid is a serious disease caused by bacteria called *Salmonella typhi*. Typhoid causes a high fever, weakness, stomach pains, headache, loss of appetite, and sometimes a rash.

ITQ

Ouestion

What is the recommended age for typhoid vaccination

Feedback

2 years

8.3 Rules Governing Immunization Administration

8.3.1 Spacing of Multiple Doses of the Same Antigen

Health care providers should adhere strictly to recommended vaccination schedules. Vaccines should be administered at recommended ages and in accordance with recommended intervals between doses of multi-dose antigens. Vaccine doses should not be administered at intervals less than these minimum intervals or at an age that is younger than the minimum age. Before administering a vaccine dose, providers might need to verify that all previous doses have been administered after the minimum age and in accordance with minimum intervals. In practice, vaccine doses occasionally are administered at intervals less than the minimum interval or at ages younger than the minimum age. However, only vaccine doses administered ≤4 days before the minimum interval or age are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum interval or age should not be counted as valid doses and should be repeated as age appropriate. The repeat dose should be spaced after the invalid dose by the recommended minimum interval. For example, if the first and second doses of Haemophilus influenzae type b (Hib) were administered only 14 days apart, the second dose would be invalid and need to be repeated because the minimum interval from dose 1 to dose 2 is 4 weeks. The repeat dose should be administered ≥4 weeks after the invalid dose (in this case, the second). The repeat dose is counted as the valid second dose.

If the first dose in a series is given ≥5 days before the recommended minimum age, the dose should be repeated on or after the date when the child reaches at least the minimum age. If the vaccine is a live vaccine, ensuring that a minimum interval of 28 days has elapsed from the invalid dose is recommended. For example, if the first dose of varicella vaccine were inadvertently administered at age 10 months, the repeat dose would be administered no earlier than the child's first birthday (the minimum age for the first dose). If the first dose of varicella vaccine were administered at age 11 months and 2 weeks, the repeat dose should be administered no earlier than 4 weeks thereafter, which would occur after the first birthday.

Certain vaccines (e.g., pediatric diphtheria and tetanus toxoids [DT]; and tetanus toxoid) produce increased rates of local or systemic reactions in certain recipients when administered more frequently than recommended. Hence need for careful record keeping, maintenance of patient histories, and adherence to recommended schedules can decrease the incidence of such reactions without adversely affecting immunity.

8.3.2 Simultaneous Administration

Simultaneous administration of vaccines is defined as administering more than one vaccine on the same clinic day, at different anatomic sites, and not combined in the same syringe. With some exceptions, simultaneously administering the most widely used live and inactivated vaccines has produced sero-conversion rates and rates for adverse reactions similar to those observed when the vaccines are administered separately. Routine administration of all age-appropriate doses of vaccines simultaneously is recommended for children for whom no specific contraindications exist at the time of the visit.

8.3.3 Contraindication and Precautions

A vaccine should not be administered when a contraindication is present; for example, MMR vaccine should not be administered to severely immune-compromised persons. In contrast, certain conditions are commonly misperceived as contraindications (i.e., are not valid reasons to defer vaccination). Health care providers who administer vaccines should screen patients for contraindications and precautions to the vaccine before each dose of vaccine is administered by asking questions. The only contraindication applicable to all vaccines is a history of a severe allergic reaction (i.e., anaphylaxis) after a previous dose of vaccine or to a vaccine component.

A precaution is a condition in a recipient that might increase the risk for a serious adverse reaction or that might compromise the ability of the vaccine to produce immunity (e.g., administering measles vaccine to a person with passive immunity to measles from a blood transfusion or administering influenza vaccine to someone with a history of Guillain-Barré syndrome within 6 weeks of a previous influenza vaccination).

In general, vaccinations should be deferred when a precaution is present. However, a vaccination might be indicated in the presence of a precaution if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. For example a dose of DPT should be considered

for a person in a community with a pertussis outbreak even if that person previously developed Guillain-Barré syndrome after a dose.

Examples of precautions: The presence of a moderate or severe acute illness with or without a fever is a precaution to administration of all vaccines. A personal or family history of seizures is a precaution for MMRV vaccination.

NOTE: Clinicians or other health-care providers might misperceive certain conditions or circumstances as valid contraindications or precautions to vaccination when they actually do not preclude vaccination. These misperceptions result in missed opportunities to administer recommended vaccines. Among the most common conditions mistakenly considered to be contraindications are- diarrhea, minor upper respiratory tract illnesses (including otitis media) with or without fever, mild to moderate local reactions to a previous dose of vaccine, current antimicrobial therapy, and being in the convalescent phase of an acute illness. The decision to administer or delay vaccination because of a current or recent acute illness depends on the severity of symptoms and etiology of the condition. Vaccination should not be delayed because of the presence of mild respiratory tract illness or other acute illness with or without fever. Vaccination should be deferred for persons with a moderate or severe acute illness.

After screening recipient for contraindications, persons with moderate or severe acute illness should be vaccinated as soon as the acute illness has improved. Among persons whose compliance with medical care cannot be ensured, use of every opportunity to administer appropriate vaccines is critical. Routine physical examinations and procedures (e.g., measuring temperatures) are not prerequisites for vaccinating persons who appear to be healthy. The provider should ask the parent or guardian if the child is ill. If the child has a moderate or severe illness, the vaccination should be postponed.

8.3.4 Health Education

Parents and guardians should be informed about the benefits of and risks from vaccines in language that is culturally sensitive and at an appropriate educational level. Opportunity for questions should be provided before each vaccination. Discussion of the benefits of and risks from vaccination is sound medical practice and is required by law. Vaccine information materials should be given to care givers each time a vaccine is administered.

When a parent or patient initiates a discussion about a perceived vaccine adverse reaction, the health-care provider should discuss the specific concerns and provide factual information, using appropriate language. Health-care providers should reinforce key points about each vaccine, including safety, and emphasize risks for disease among unvaccinated children.

Modern vaccines are safe and effective; however, adverse events have been reported after administration of all vaccines thus health educate mothers to report if any is observe. An adverse event is an untoward event that occurs after a vaccination that might be caused by the vaccine product or vaccination process. These events range from common, minor, local reactions to rare, severe, allergic reactions (e.g., anaphylaxis).

8.3.5 Vaccine Administration

Health care provider administering vaccinations should follow appropriate precautions to minimize risk for spread of disease. Hands should be cleaned with an alcohol-based waterless antiseptic hand rub or washed with soap and water before preparing the vaccine and between each patient contact. It may not be necessary to wear gloves when administering vaccinations, unless persons administering vaccinations are likely to come into contact with potentially infectious body fluids or have open lesions on their hands. If gloves are worn, they should be changed between patients.

Needles and syringes used for vaccine injections must be sterile and disposable. A separate needle and syringe should be used for each injection. Changing needles between drawing vaccine from a vial and injecting it into a recipient is not necessary unless the needle has been damaged or contaminated. Different vaccines should never be mixed in the same syringe unless specifically licensed for such use, and no attempt should be made to transfer between syringes. Single-dose vials and manufacturer-filled syringes are designed for single-dose administration and should be discarded if vaccine has been withdrawn or reconstituted and subsequently not used within the time frame specified by the manufacturer. Vaccine doses should not be drawn into a syringe until when ready to administer. Needles should be properly discarded to prevent blood borne diseases (e.g., hepatitis B, hepatitis C, and human immunodeficiency virus [HIV]). These are occupational hazards common among health-care providers. It is also essential that injuries caused by needles and other medical sharp objects are well documented.

8.3.6 Storage and Handling of Immunobiologics

Failure to adhere to recommended specifications for storage and handling of immunobiologics can reduce or destroy their potency, resulting in inadequate or no immune response in the recipient. Recommendations in the product package inserts, including methods for reconstitution of the vaccine, should be followed carefully. Maintenance of vaccine quality is the shared responsibility of all handlers of vaccines from the time a vaccine is manufactured until administration. All vaccines should be inspected on delivery and monitored during storage to ensure that the recommended storage temperatures are maintained. Vaccines should continue to be stored at recommended temperatures immediately on receipt until use.

ITQ

Ouestion

what is simultaneous vaccination?

Feedback

Simultaneous administration of vaccines is defined as administering

more than one vaccine on the same clinic day, at different anatomic sites, and not combined in the same syringe

Good child health is important not only for children and families now, but also for good health later in adulthood. Children are both the makers and the markers of healthy sustainable societies, thus, in meeting up the targets for SDG 3- maintaining the health and wellbeing of individuals, Childs health cannot be over emphasized for they are the pillar of any society.

Study Session Summary



Summary

In this study session, we defined immunization as the process whereby a person is made resistant to an infectious disease, typically by the administration of a vaccine. We discussed immunization theory and explained in a tabular form the immunization schedule. Conclusively, we stated the rules governing the administration of immunization vaccine.

Assessment



Assessment

SAQ 8.1 (tests learning outcome 8.1)

Discuss briefly the Immunization theory

SAQ 8.2 (tests learning outcome 8.2)

What vaccines do you give at Birth, 6 weeks, 10 weeks, 14 weeks,

9 months and 12 months and their sites of administrations

SAQ 8.3 (tests learning outcome 8.3)

- a) State the rules governing immunization
- b) Explain one the rules

Study Session 9

Historical Overview of School Health Services

Introduction

In this study session, we will clarify important concepts in school health nursing. We will also state the historical and present state of school health nursing and explain the reasons for school health services

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

9.1 define important concepts in school health nursing and explain reasons for its services

Terminology

School is an institution for educating learners. It includes Early Child-Care Centres (ECCC), Primary and Secondary Schools, and Non-Formal Education Centres (NFE).

School Community refers to all the people living/working within the school premises including pupils / students, the teaching and non-teaching staff as well as members of their families.

Health, according to the World Health Organization (WHO) "is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

School Health Day refers to a day set aside annually to create awareness on health related issues in the schools.

School Health Programme (SHP) refers to all aspects of the school programme which contribute to the understanding, maintenance and improvement of the health of the school population

Health Promoting School: The World Health Organisation (WHO) defined a health promoting school as one that is constantly

strengthening its capacity as a healthy setting for living, learning and working.

9.1 Historical Perspectives of School Health Nursing

The earliest recorded organized effort to improve the health of the school child was made in Europe. School health professionals often state that the "modern school health era" began in 1850. In that year, the Sanitary Commission of Massachusetts, headed by Lemuel Shattuck, produced a report that had a significant impact on school health and has become a classic in the field of public health.

When New York City was faced with an outbreak of smallpox in the 1860s, no mechanism was in place to provide free vaccinations to those who needed them, so the Board of Health turned to the schools. Education officials agreed to permit inspection of school children to determine whether or not they had been vaccinated, and in 1870, smallpox vaccination became a prerequisite to school attendance.

In the late 1860s and early 1870s, the New York City Board of Health instituted a program of sanitary inspections of all public schools twice a year. These inspections revealed a filthy environment and excessive crowding. Modern plumbing was nonexistent, and schools were sometimes overrun by rats. Frequently, more than 100 students occupied a single small classroom. Classrooms lacked ventilation and fresh air, a problem exacerbated by using stoves for heating and gaslights for illumination. These problems continued in New York City even into the early twentieth century. In 1902, Lillian Wald demonstrated in New York City that nurses working in schools could reduce absenteeism due to contagious diseases by 50 percent in a matter of weeks. For minor conditions, nurses treated students in school and instructed them in self-care.

The 1st World War marked a turning point in the history of school health programs. It sensitized American educators and the public to the health needs of the school children. It was discovered that 34% of the examined draftees for the military had adverse physical, mental and emotional condition making them unfit for service. This raised the concern whether the school could have prevented or corrected these conditions. Great emphasis was thereafter placed on the health of the school child. However, this emphasis was erroneously skewed in favor of physical education, as if it was the same as health education. Hence, the desired improvements were not met. Again in 1944, during the second world war, four million out of thirteen million recruits aged between 18 and 37 years were found unfit for military service. The existing school health

programme was therefore adjudged a failure The efforts that followed has culminated in the present status of school health in Europe and America.

For major illnesses, nurses visited the homes of children who had been excluded from school

because of illness or infection, educated parents on their child's condition, provided information on available medical and financial resources, and urged the parents to have their child treated and returned to school. School nurses began to assume a major role in the daily medical inspection of students, treatment of minor conditions, and referral of major problems to physicians. By 1911, there were 102 cities employing cadres of school nurses. In 1913, New York City alone had 176 school nurses.

In Nigeria, an attempt was made in 1929 to introduce a medical service that could cater for school children. A scheme was proposed that entrusted school inspection to health practitioners with special training in that field and thrice a year examination of the children throughout their school years. In 1944, the Christian Council of Nigeria called attention to the high incidence of malnutrition among school children and hoped that government would inaugurate the proposed school medical service. In 1952, the government of western Nigeria published a policy white paper that contained a four-year plan to introduce a school medial service that will be free to all children.

In 1971, a school health service headed by a medical officer and nurses and other health practitioners emerged at the Federal Government level in Lagos. Special clinics were set up to serve as treatment points for school children with minor ailments in some state capitals and large

towns like: Ibadan, Enugu, Kaduna Benin City, Zaria and Jos.

In many states, the school health service units were manned by public health sisters with occasional inputs from physicians. School health Programme in Nigeria has passed through many phases to metamorphose into what we have today.

ITQ

Question

who pioneered the work of modern school health service?

Feedback

Lemuel Shattuck

9.2 Present State of School Health Service

Prior to the formulation of the National School Health Policy in 2006, there had been a gross neglect of School Health Programme in Nigeria. A national study of the school health system conducted by the WHO in collaboration with the Federal Ministries of Health and Education revealed that health care services in schools were sub-optimal.

A high proportion (80%) of head teachers did not know that preadmission medical examination should be made compulsory in their schools. Food handlers were screened in only 17% of schools before recruitment. A high proportion (83%) of the schools did not have school nurses and only smaller proportions (6%) of the schools have linkages with government-designated clinics.

Only 25% of the schools have ventilated pit latrine and just 46% had pipe-borne water/bore hole.

9.3 Rationale School Health Services

- It is one of the ways of improving the health of children
- The school is a centre of risk! The school child faces many risks like accidents, emotional stress, communicable diseases, etc.
- School children at this age undergo several physical, emotional and developmental changes which may have immediate and long term effect on their health in turn their education
- Teaching about health in the school is usually more effective than teaching about it elsewhere.

ITQ

Question

it is usually more effective to teach health in home than in schools, true or false?

Feedback

False (Teaching about health in the school is usually more effective than teaching about it elsewhere)

Study Session Summary



Summary

In this Study Session, we clarified some important concepts in school health nursing. We also stated the historical and present state of school health nursing and explained the reasons for school health services

Assessment



Assessment

SAQ 9.1 (tests learning outcomes 9.1, 9.2 and 9.3)

- a) Define the following terms:
- School
- · School Community
- School Health Day
- School Health Programme
- Health Promoting School
- b) List the rationale behind school health services

Study Session 10

Objectives and Components of School Health

Introduction

In this study session, we will present the objectives of school health services. We will also highlight the criteria for promoting a school health service as annunciated by WHO.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

10.1 highlight the objectives for school health services

10.2 state the criteria for a health promoting school by WHO

10.3 present the components of school health services

10.1 Objectives of School Health Services

We examined the concept of school health service in the previous study session. Here, we will present the objectives of school health services, which are:

- To promote healthful growth both mentally and physically among school children
- To produce a well-adjusted physically vigorous child who is free from disease
- To make sure every child is as fit as possible to gain maximum benefits from his or her education
- To make a child become aware of the importance of health and develop healthy practices, health knowledge, attitude and appreciation towards health
- To develop healthy physical and psychological environment for the child
- To promote a state of health, treat minor ailments, prevent diseases and maintain the health of school population
- To diagnose and treat any disability and illness before complication set in
- To prevent the occurrence of and spread of communicable diseases among school children

- To provide emergency care for school children and if necessary their teachers
- To instill principle of healthy living in the school children and members of staff through examples from health personnel and demonstration
- Create awareness of the collaborative efforts of the school, home and community in health promotion
- Develop health consciousness among the learners
- Create awareness on the availability and utilization of various health related resources in the community
- Promote collaboration in a world of interdependence, social interaction and technological exposure in addressing emergent health issue
- Build the skills of learners and staff for health promotion in the school community

10.2 Who Criteria for A Health Promoting School

The 12 WHO criteria for a health-promoting school

- Active promotion of self-esteem of all pupils by demonstrating that everyone can make a contribution to the life of the school
- Development of good relations between staff and pupils and among pupils in the daily life of the school
- 3. Clarification for staff and pupils of the social aims of the school
- Provision of stimulating challenges for all pupils through a wide range of activities
- 5. Use of every opportunity to improve the physical environment of the school
- 6. Development of good links between school, home and community
- Development of good links among associated primary and secondary schools to plan a coherent health education curriculum
- 8. Active promotion of the health and well-being of the school and staff
- 9. Consideration of the role of staff as exemplars in health-related issues
- Consideration of the complementary role of school meals (if provided) to the health education curriculum
- Realization of the potential of specialist services in the community for advice and support in health education
- Development of the education potential of school health services beyond routine screening and towards active support for the curriculum

Adapted from National School Health Policy. Federal Ministry of Education, Nigeria

10.3 Components of School Health

The 2006 National School Health Policy released by the Federal Ministry of Education Nigeria has identified the following as components of school health:

- 1. Healthful School Environment
- 2. Nutritional care/ School feeding Service
- 3. Skill –Based Health Education
- 4. School Health Service
- 5. School, Home and Community Relationship

10.3.1 Healthful School Environment

The following characteristics are indicative of an healthful school environment:

- Location of schools away from potential environmental hazards
- Protection of the school community from excessive noise, heat, cold and dampness
- Provision of adequate buildings, constructed in line with approved standards, with particular emphasis on facilities for physically challenged learners
- Provision of an appropriate and adequate amount of furniture for learners and staff
- Provision of an adequate number of gender-sensitive toilet facilities
- Provision of adequate safe water supply and sanitation facilities for the school community
- Provision of proper drainage and waste disposal facilities
- Provision of safe recreational and sport facilities
- Perimeter fencing of the school
- Observation of Annual School Health Days
- Promotion of healthy human relationships in the school community
- Promotion of health related-school policies
- Promotion of a maintenance culture

10.3.2 Nutritional Care/ School Feeding Service

This is important for physical, mental and immune development. School feeding services are aimed at providing an adequate meal a day to all children enrolled in schools nationwide.

Characteristics of School Feeding Services:

- Provision of, at least, one adequate meal a day to school children
- Adequate sanitation and hygiene practices among food handlers including routine medical examination and

vaccination, regular screening for infectious diseases, retraining programs for food handlers/vendors and regular inspections of their homes

- Food fortification and supplementation
- Regular de-worming
- Promotion of health related-school policies

The Case for School Meal Service

66 million primary school age children attend school hungry across the developing world with 23 million in Africa alone. There are 67 million school age children who do not attend school. Poor households must often choose between sending their children to school or to work in the fields.

A daily school meal provides a strong incentive to send children to school and keep them there and allows the children to focus on their studies, rather than their stomachs.

Why School Meal Service?

Nutrition: When combined with deworming and micronutrient fortification, school meals offer important nutritional benefits

Social Protection: School meals can break the cycle of poverty, hunger and child exploitation in the world's poorest areas. They can also reach children affected by HIV/AIDS, orphans, disabled

Education: School meals encourage poor households to send children to school and keep them there

Supplementary Benefits: Schools are the centre of many villages and communities. School meals connect teachers, parents, cooks, children, farmers and the local market.

School Meal Service: The Nigerian Picture

In April 2012, the <u>State of Osun</u> in <u>Nigeria</u> pioneered a statewide school meals programme for all public elementary school pupils. It is called the O'Meals programme (an <u>acronym</u> for the Osun Elementary School Feeding and Health Programme). As of July 2014, it was providing lunch to over 252,000 children in 100% of Osun's elementary schools. In addition to <u>staples</u> such as rice, beans, and yams served with stews, soups, and vegetables, the programme provides daily fruits. Its estimated cost is <u>N</u>50 (USD \$0.31) per child per day.

Within four weeks of the O'Meals launch, school enrollment increased by approximately 25%. According to the Nigerian National Bureau of Statistics July 2013 edition, Osun has the highest primary school enrollment rates in Nigeria – a feat largely attributable to O'Meals. Nigeria's first national **Home Grown School Feeding** programme which would affect about 5.5million

Nigerians in the first year of its operation would be rolling out soon in several states.

10.3.3 Skill-Based Health Education

Skill-based Health Education is to promote the development of sound health knowledge, attitudes, skills and practices among the learners. Health education is education for life; therefore emphasis should be placed on skills necessary for promoting appropriate behaviours and practices as against just theory-based lessons.

Areas to be covered by Skill-Based Education Curriculum

- Personal Health
- Diseases including HIV/AIDS
- Mental and Social Health
- First Aid & Safety Education
- Community Health
- Family Life Education
- Environmental Health
- Maternal and Child Health
- Nutrition
- Consumer Health
- Drug Education
- Ageing and Death (Bereavement) Education
- Parts of the human body
- Health Agencies

10.3.4 School Health Services

School Health Services are preventive and curative services provided for the promotion of the health status of learners and staff. The purpose is to help children at school to achieve the maximum health possible for them to obtain full benefit from their education.

School Health Services shall include:

Pre-entry medical screening; routine health screening /examination; school health records; Sick bay, First Aid and referral services. It shall also provide advisory and counselling services for the school community and parents.

Characteristics of School Health Service

- Appraisal of the health status of learners and school personnel through pre-entry screening, routine medical and psychological examinations
- Health counselling of the school community by counsellor / social worker
- Referrals and follow-up health services between the school, community and the health facilities
- Health screening and the maintenance of routine health records in the school

- Prevention and control of communicable and noncommunicable diseases, through inspections, exclusions, readmissions, educational measures, immunization, sanitation and epidemic control
- Provision of special health services for learners with special needs.

10.3.5 School, Home and Community Relationship

The first health educators of the child are the parents, who shape the child's habits from infancy. Long before the child is ready for school, the parents should secure needed immunization and medical care and inculcate good habits into the child.

The success of the School Health Programme depends on the extent to which community members are aware of, and willing to support health promotion efforts

Parents and community members should make inputs regarding the design, content and assessment of the SHP.

Characteristics of School, Home and Community Relationship

- Home visits by teachers, school nurses and social workers
- Regular visit of parents to school
- Regular meeting of teachers and parents (PTA)
- Regular communication of the health status of the learner to the home by the school health personnel and the teachers
- Active participation of the school in community outreach activities and campaigns
- Active participation of the school in community health planning, implementation, monitoring and evaluation
- Advocacy and community mobilization for the SHP through traditional and modern media
- The community shall be involved in the promotion of health related school policies.

ITQ

Question

List the components of School Health

Feedback

- 1. Healthful School Environment
- 2. Nutritional care/ School feeding Servic
- 3. Skill -Based Health Education
- 4. School Health Service
- 5. School, Home and Community Relationship

Study Session Summary



Summary

In this Study Session, we listed in an explicit way the various objectives of school health services. We also stated the criteria for promoting a school health service by WHO

Assessment



Assessment

SAQ 10.1 (tests learning outcome 10.1)

List 7 objectives of school health

SAQ 10.2 (tests learning outcome 10.2)

List 5 WHO criteria of a health promoting school

SAQ 10.3 (tests learning outcome 10.3)

List the characteristics of school feeding services

Study Session 11

Organisation of School Health Services

Introduction

In this study session, we will discuss organization of school health services by stating the minimum requirements for setting up a health centre and explaining the elements of school health services

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

- 11.1 discuss the organization of school health services
- 11.2 highlight the elements of school health services.

Terminology

School	health
service	

Any services provided through the school system to improve the health and well-being of children and in some cases whole families and the broader community

11.1 Organisation of School Health Services

School Health services, as an essential component of effective school health program, ensure that children are healthy and able to learn at all times. It is an essential component for achieving "Education for All" (EFA) inclusive of children with special needs. School Health Services are preventive and curative services provided for the learners and staff within the school setting.

The School Health Centre

The Federal Ministry of Education Nigeria has stated the following as crucial for organizing school health centre:

- Should be sited in the school premise
- Must be easily accessible
- The centre must operate every day during school/boarding hours

- The hours of duty must be convenient to learners and staff and include some hours before and after school for day schools
- Must allow participation of parents and guardians who wish to participate in the care of their child
- To the maximum extent possible permit scheduled appointments that do not unnecessarily interrupt the student's classroom time
- The centre must provide services to students in a manner which ensure the students and his/her family's right to privacy

11.1.1 Minimum Requirements for setting up a School Health Centre

- A space as wide as classroom for 30 50 students to be partitioned into;
 - A waiting room
 - Private examination room
 - A treatment/observation room with a minimum of 2 beds
 - Bathroom and toilet facility
- Provision of safe water e.g. solar powered bore hole or well
- Provision of a functional refrigerator powered by kerosene, solar or electricity as appropriate.
- Constant and regular supply of drugs and consumables according to the prevailing diseases in the community.
 Drugs should be provided according to the essential drug list.
- Provision of regular power supply either electricity or solar
- Provision of means of sterilization of equipments and instruments
- Provision of safe disposal of medical waste.
- Constant and regular supply of stationeries for proper record keeping
- Provision of adequate health record keeping system like record card, computer system etc.
- Provision of transportation to referral centres/ visits to school clinic if located elsewhere

11.2 Elements of SHS

- Pre-entry Medical and Dental Screening
- School Health Record
- Routine Health Screening and Examination

11.2.1 Pre-entry Medical and Dental Screening

This will assist with the evaluation of the health status of a child prior to entering school; that is, before commencing primary, secondary and tertiary education. A pre – employment medical/dental examination should also be conducted for all other members of the school community including food handlers. Pre – entry medical screening should be done by trained health personnel.

Purpose of Pre-entry Medical and Dental Screening

- To make a comprehensive appraisal of the child's health status
- To discover defects
- To give valuable information to parents and school personnel
- To provide professional counsel for any existing deviation
- To indicate the extent to which school health programme should be modified to benefit the child
- To determine the fitness of the child to participate in the school programmes

Components of Pre-entry Medical and Dental Screening

- Physical examination
- Mental health examination
- Dental examination
- Visual and hearing screening, and
- Laboratory investigations genotype and blood group, urinalysis, stool microscopy, heamatocrit mantoux, typhoid screening.

11.2.2 School Health Record

A record keeping system provides for consistency, confidentiality and security of records in documenting significant health information and the delivery of health care services. Pre-entry health form containing essential health information supplied by parents and primary health care giver must be filled and submitted to the school health centre. Information from the pre-entry form must be put in the health record card for the child.



A health record file or exercise book should be provided for each learner when he enters school for the first time (primary or secondary school)

The health information goes with the learner from class to class. If the learner transfers to another school the original should go with him and the duplicate should be retained by the original school. Each entry into the student's record must be dated and authenticated by the staff member making the entry indicating name and title.

Components of the School Health Record

- Personal and family history
- History of past illnesses/hospitalization with relevant information on treatment received and whether follow-up is necessary and being carried out
- Records of immunization
- Records of screening tests
- Records of heights and weights taking at regular intervals.
 This will help in appraisal of rate of physical development of each child.
- Results of teacher's routine observations

11.2.3 Routine Health Screening and Examination

This includes:

- Teacher's observation of Child
- Professional Screening
- First-Aid/Emergency Preparedness
- Referrals
- Special Needs Integration Services
- Counselling

Teacher's observation of Child

The main purpose of teacher's health observation is to enable early identification of those children who requires special attention.

The specific procedure to be carried out by the teachers includes:

Periodical inspection of the learners to assess their general cleanliness and detect discharging ears/eyes, squints, unusual colour of eyes, inability to see the blackboard, inability to hear or read properly as appropriate for age and skin rashes; early detection of tooth decay and bad breath.

Learners observed with such ailments as above should be referred to the school health centre. Measure the heights and weights of children at the beginning of every school term, results must be sent to the school health clinic within 48hours of measurements for recording into the child health records file.

Periodical observation by the teacher should be carried out at the beginning of every term.

Professional Screening

Visual screening:

To be done periodically at the school health services centre at the beginning of every session

The visual acuity test should be done in a well-illuminated room using the Snellen chart.

Each eye is tested separately. Any child with squinting, tilting of the head, and visual acuity of less than 6/9 in one or both eyes should be referred to the specialist.

Hearing screening:

To be done periodically at the school health services centre at the beginning of every session.

The pure tone audiometer will be used for assessing hearing acuity.

This test acuity at tones of various frequencies (pitches) over a wide range of intensities (loudness).

Children with diagnosed hearing loss are referred to the specialist.

Dental/oral health screening

To be done as a preventive and appraisal measure every six months at the school health services centre by a dentist.

The oral examination, especially the DMF (Decayed, Missing and Filled teeth) index should be recorded into health record file.

Those identified with oral health problem should be referred.

Regular de-worming exercise

Should be done at least once every 3 months

Routine immunization and missed opportunities.

Provision of booster doses of relevant vaccines should be available.

Food supplementation e.g. Vitamin A supplementation

First-Aid/Emergency Preparedness

Teachers and learners shall be trained in first aid. Provision of a standard first aid boxes with the following contents: iodine, crepe bandage, plaster, cotton wool, small scissors, paracetamol, gauze, gentian violet, glucose etc.

Referrals

Pre-identified (near-by) health facilities should be used.

Provision of pre-identified means of transportation

Special Needs Integration Services

This refers to adequately catering for children with special needs/disabilities e.g. Provision of walkways for wheelchairs

Counselling

There shall be fulltime counsellors in schools to offer counselling services to the school community and parents in all areas of living.

This should be done in a private room which is counselee-friendly.

Counselee can be self-referred or referred by teachers.

Learners should be encouraged to see the counsellor as a matter of routine.

Counsellor should also arrange to counsel every learner at least once during the school year.

Strategies of Implementation of SHS

The key strategies for implementing school health services include:

Advocacy and Coordination:

Advocacy to States, LGAs, PTAs, communities, development partners etc. on health services in the school community

Formulation of health related policies in schools – this refers to rules of practice e.g prohibition of smoking and substance abuse in schools,

Strengthening of existing coordinating mechanisms at all levels of government for school health services

Capacity Building:

Training of teachers and other categories of staff on medical and dental health screening and examination

Orientation of health workers to support school health services

Provision of health service facilities in schools for use by schools by relevant authorities

Control of Communicable Diseases:

Exclusion of children with contagious diseases from the larger body of children

Insisting to parents/guardians that children get fully immunized

Closure of school in times of severe outbreak of infectious diseases

Partnerships: Public and Private Partnerships for the implementation of SHS should be employed.

Monitoring and Evaluation: Effective monitoring at LGA, State and Federal levels.

ITQ

Question

what are the elements of School Health Services?

Feedback

Pre-entry Medical and Dental Screening

School Health Record

Routine Health Screening and Examination

Study Session Summary



Summary

In this Study Session, we discussed organization of school health services and stated the minimum requirements for setting up a health centre. We also explained the elements of school health services

Assessment



Assessment

SAQ 11.1 (tests Learning Outcome 11.1)

1. What are the fundamental requirements for organizing a school health care centre?

SAQ 11.2 (test learning outcome 11.2)

- a) List the elements of school health services
- b) Discuss one of them

Study Session 12

School Nurses

Introduction

In this study session, we will state the roles/functions of school health nurses. We will as well discuss the challenges of school nursing system in Nigeria and proffer solutions accordingly.

Learning Outcomes



Outcomes

When you have studied this session, you should be able to:

12.1 state the roles of a school nurse

12.2 highlight the functions of a school nurse

Terminology

School nurse	Α	professional	nurse that	advances	the	well-being,
	academic success, and lifelong achievement of students.					

12.1 Roles of a School Nurses / School Health Worker

The following are the roles of a school nurse and/or a school health worker:

- Collaboration with the school personnel, family, community and health care providers
- Provider of Student Health Care: Encompasses demonstrating vast amount of clinical knowledge in meeting the needs of all students especially those with special needs
- Communicator: Demonstrates adequate communication skills in relating with the children, teachers, parents and the community at large
- Client Teacher: Health Education is a paramount activity in school health
- Investigator: Carries out research to know how to better serve the school community

- Role within Nursing Profession: Many countries have a minimum of baccalaureate degree for employment as a school nurse.
- Planner & Coordinator of Student Care: School health Programme is multi-disciplinary
- Researcher
- Collaborator with the school personnel, family, community and health care providers

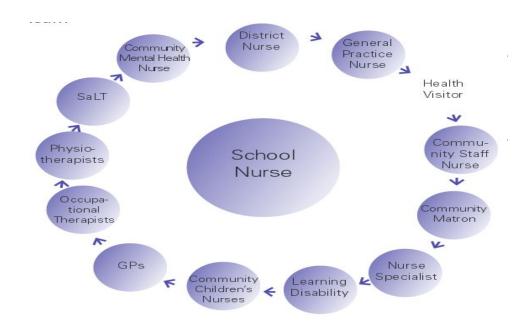


Fig. 12.1: The Multidisciplinary Team in School Health Nursing. Adapted from: The Queens Nursing Service 2011

12.2 Functions of the School Nurse

1. Direct Student Care

- Performs comprehensive & systematic health assessment
- Analyzes data to identify health problems
- Develops individualized healthcare plan and refers for further follow up (children with chronic conditions or special needs)
- Manages and updates plan and communicates it to concerned personnel
- Provides ongoing health information to students, parents and school authorities
- Plans, implements and supervises school health screening programs
- Directs immunization program

- Administers medications in consonance with guidelines
- Documents care & maintains records
- Reports school health data (identifies health issues

2. Leadership

- Development of plans and training staff in emergencies and disasters
- Appropriate delegation of care (initial assessment. training, competency, validation, supervision, and evaluation)

3. Screening and referral

 Screening: vision, hearing, posture, body mass index, etc and refers in timely manner.

4. Planning and implementation of health programmes

- Evaluates school health policies and procedures
- Coordinates school health program
- Crisis / disaster management
- Emergency medical condition management
- Mental health protection and intervention
- Documents and prepares report (legal, regulatory and policy requirements)
- Engages in research and evaluation of school health services

5. Liaison

- Serves as liaison between school, home and community
- Establishes working relationship with pediatricians
- Ensures individualized health plans are executed
- Communicates with family through phone
- Develops community partnerships to promote health of the community

6. Legal

- Maintains current license to practice
- Practices in accordance with national, jurisdictional legislations.
- Demonstrates knowledge and follows the policies and procedures

7. Personal and Professional Development

- Ensures continuing competency (e.g. BLS)
- Maintains record of learning and professional development activities
- Uses nursing research and best practice guideline
- Represents nursing profession in relevant committees, taskforce, board or forums.

12.3 Levels of Prevention in School Health Nursing

Primary Prevention in the School

- Prevention of childhood injuries
- Substance abuse prevention education
- Disease prevention education
- Required vaccinations for schoolchildren

Secondary Prevention in the School

- Emergency plan and emergency equipment
- Giving medication in school
- Assessing and screening
- Identification of child abuse or neglect
- Communicating with health care providers
- Efforts to prevent suicide and violence at school

Tertiary Prevention in the Schools

Managing children with conditions like: asthma, diabetes mellitus, autism, pregnant teenagers and teen mothers, etc referring such to relevant facilities and professionals

ITQ

Question

what are the levels of prevention in School Health Nursing?

Feedback

Primary, Secondary and Tertiary Prevention

12.4 Challenges of School Health Nursing in Nigeria

- Inadequate facilities for school health activities
- Poor Political and Governmental support for School Health Service
- Poor definition for school health nurses
- Poor orientation about who a school health nurse is
- Inadequate research on school health
- Poor involvement of non-governmental organizations in school health

Study Session Summary



Summary

In this Study Session, we stated the roles/functions of school health nurses. We also discussed the challenges of school nursing system in Nigeria and proffered solutions accordingly

Assessment



Assessment

SAQ 12.1 (tests learning outcome 12.1)

- Who is a school Nurse?
- State the roles of a school nurse

SAQ 12.2 (tests learning outcome 12.2)

Concerning planning and implementation of health programs, list 5 roles of a school nurse.

Notes on Self-Assessment Questions

SAQ 1.1 what is the focus of community health nursing?

The focus of community health is on the population as a whole which involves the individual, families and groups in the community.

SAQ 1.2 what are the characteristics of community health nursing?

The characteristics of community health nursing are:

- It is a field of nursing
- It combines public health and nursing
- It focus in population and environment factors that may impact to people's health
- It emphasize in health promotion, illness prevention, and wellness
- It promotes client responsibility and self-care
- It uses aggregate measurement and analysis
- It use principle of organizational theory
- It involves inter-professional collaboration.

SAQ 2.1 what is community nursing process?

It is a systematic way of determining a community's health status, isolating health concern and problems, developing the plans to remediate them, initiating actions to implement the plan, and finally evaluating the adequacy of the plan in promoting wellness and problem resolution in the community.

SAQ 2.2 what are the steps involved in community health nursing process

The steps involved in community health nursing process are;

- Community assessment;
- Community diagnosis;
- Planning;
- Implementation
- Evaluation

SAQ 3.1 Define community

Community is defined as group of people living within a specified geographical boundary.

It may consist of different subgroups. There is usually a leader but there may be many formal or informal leaders.

Communities are not always homogenous in that within a Community, many different views, languages, ideas and approach to life are often represented.

SAQ 4.1

Community analysis can be defined as the process of critically examining the characteristics, resources, assets, and needs of a community, in collaboration with that community, in order to develop strategies to improve the health and quality of life of the community

SAQ 4.2

The following are the steps to community assessment;

- Identification of available resources
- Establishment of project team and steering committee
- Development of research plan and time frame
- Collection and analysis of information already available
- Completion of community research

- Analysis of result
- Reporting back to the community
- Setting priorities for action
- Determination of responses to the needs identified
- Planning and implementation
- Monitoring and Evaluation

SAQ 5.1

This refers to involvement of community members at all stages of assessment, planning, implementation and evaluation of programmes and projects

SAQ 5.2

Community participation is important because there are efficiency benefits from participation, stating that involving stakeholders and empowering community in all programs at all levels provides a more effective path for solving sustainable resource management issues. Participation enhances project effectiveness through community ownership of development efforts and aids decision-making. Local ownership of a project or program as a key to generating motivation for ecologically sustainable activities. Community participation also aids information dissemination amongst a community, particularly local knowledge that leads to better facilitation of action. Participation also results in learning and learning is often a prerequisite for changing behavior and practices.

SAQ 5.3

At the initial level, the very beginning of the project when it is still an idea

The flowing are the levels of community participation

Needs assessment – expressing opinions about desirable

- improvements, prioritizing goals and negotiating with agencies
- Planning formulating objectives, setting goals, criticizing plans.
- Mobilizing raising awareness in a community about needs, establishing or supporting organizational structures within the community
- Training participation in formal or informal training activities to enhance communication, construction, maintenance and financial management skills
- Implementing engaging in management activities; contributing directly to construction, operation and maintenance with labour and materials; contributing cash towards costs, paying of services and so on.
- Monitoring and evaluation participating in the appraisal of work done, recognizing improvements that can be made and redefining needs

SAQ 5.4

- An unfair distribution of work or benefits amongst members of the community
- A highly individualistic society where there is little or no sense of community
- The feeling that the government or agency should provide the facilities
- Agency treatment of community members if people are treated as being they are more likely to act as if they are helpless.

SAQ 6.1

Child health is a state of physical, mental, intellectual, social and emotional well-being and not merely the absence of disease or infirmity in child and healthy children live in families,

environments, and communities that provide them with the opportunity to reach their fullest developmental potential.

Infant welfare clinic is a medical facility that specializes in the health and well-being of young babies. It is a department in the hospital or health centre where both sick and healthy newborns between 0 to 5 years are cared

SAQ 6.2

The following activities make up the under – 5 clinics

- Registration of new born babies
- Weighing and charting of weights
- Interviewing of mothers about their children's feeding, sleeping and playing pattern.
- Physical examination of children
- Giving of health education
- Immunization of babies
- Nutritional demonstration
- Treatment of minor ailment

SAQ 7.1

- a) They are: Acute respiratory tract infection, diarrhoea,
 Malaria, measles, HIV/AIDS and neonatal conditions like birth asphyxia, preterm birth and infections
- b) Acute diarrhoea is the abrupt onset of 3 or more loose stools per day and lasts no longer than 14 days while persistent or chronic diarrhea is defined as an episode that lasts 14 days or longer
- c) Zinc supplements reduce the duration of a diarrhoea episode and are associated with reduction in stool volume.
- d) Rotavirus

SAQ 7.2

The health of today's infants and children is threatened by many factors, some problems are related to parental behaviour while some are related to socio-economic condition.

These problems include:

- HIV/AIDS
- Gun violence
- Child abuse
- Drug trafficking in schools and neighbourhood
- Child trafficking and kidnapping
- Crime and rape

Problems related to parental behaviour are:

- Smoking
- Abuse of alcohol, and other drugs,
- Family violence.

Problem related to socio-economic factors are:

- Poverty
- Homelessness

SAQ 8.1

Immunization theory is the theory behind immunization.

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease. The act of administering vaccines is referred to as vaccination or immunization

SAQ 8.2

At Birth; BCG, OPV 0, HBV

Six weeks; OPV 1, Pentavalent 1, PCV, Rotavirus 1

Ten weeks; OPV 2, Pentavalent 2, PCV, Rotavirus 2

Nine Months; Measles

Twelve Months; Yellow fever

Sites of Administration

OPV Oral

BCG Intradermal

Pentavalent Intramuscular

Rotavirus Oral

Measles Subcutaneous

Yellow fever Subcutaneous

HBV Intradermal

Pneumococcal Conjugate Vaccine (PCV) Intradermal

SAQ 9.1

School is an institution for educating learners. It includes Early Child-Care Centres (ECCC), Primary and Secondary Schools, and Non-Formal Education Centres (NFE).

School Community refers to all the people living/working within the school premises including pupils / students, the teaching and non-teaching staff as well as members of their families.

Health, according to the World Health Organization (WHO) "is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

School Health Day refers to a day set aside annually to create awareness on health related issues in the schools.

School Health Programme (SHP) refers to all aspects of the school programme which contribute to the understanding, maintenance and improvement of the health of the school population

Health Promoting School: The World Health Organisation (WHO) defined a health promoting school as one that is constantly strengthening its capacity as a healthy setting for living, learning and working.

Rationale behind school health services

- It is one of the ways of improving the health of children
- The school is a centre of risk! The school child faces many risks like accidents, emotional stress, communicable diseases, etc.
- School children at this age undergo several physical, emotional and developmental changes which may have immediate and long term effect on their health in turn their education
- Teaching about health in the school is usually more effective than teaching about it elsewhere

SAQ 10.1

Your list can contain some of these objectives:

- To promote healthful growth both mentally and physically among school children
- To produce a well-adjusted physically vigorous child who is free from disease
- To make sure every child is as fit as possible to gain maximum benefits from his or her education
- To make a child become aware of the importance of health and develop healthy practices, health knowledge, attitude and appreciation towards health
- To develop healthy physical and psychological environment for the child
- To promote a state of health, treat minor ailments, prevent diseases and maintain the health of school population
- To diagnose and treat any disability and illness before complication set in
- To prevent the occurrence of and spread of communicable diseases among school children
- To provide emergency care for school children and if necessary their teachers
- To instill principle of healthy living in the school children and members of staff through examples from health personnel and demonstration

SAQ 10.2

These are some of the 12 WHO criteria of a health promoting school

• Active Promotion of self-esteem of all pupils by demonstrating that everyone can make a contribution to the life of the school

- Development of good relations between staff and pupils and amongst pupils in the daily life of the school
- Clarification for staff and pupils of the social aims of the school
- Provision of stimulating challenges for all pupils through a wide range of activities
- Use of every opportunity to improve the physical environment of the school.

SAQ 10.3

Characteristics of School Feeding Services:

- Provision of, at least, one adequate meal a day to school children
- Adequate sanitation and hygiene practices among food handlers including routine medical examination and vaccination, regular screening for infectious diseases, retraining programs for food handlers/vendors and regular inspections of their homes
- Food fortification and supplementation
- Regular de-worming
- Promotion of health related-school policies

SAQ 11.1

The following are the fundamental requirements for organizing

- Should be sited in the school premise
- Must be easily accessible
- The centre must operate every day during school/boarding hours
- The hours of duty must be convenient to learners and staff and include some hours before and after school for day schools
- Must allow participation of parents and guardians who wish to participate in the care of their child
- To the maximum extent possible permit scheduled appointments that do not unnecessarily interrupt the student's classroom time
- The centre must provide services to students in a manner which ensure the students and his/her family's right to privacy

SAQ 11.2

These are the elements of school health services;

- Pre-entry Medical and Dental Screening
- School Health Record
- Routine Health Screening and Examination

Pre entry Medical and dental screening

This will assist with the evaluation of the health status of a child prior to entering school; that is, before commencing primary, secondary and tertiary education. Pre-entry medical screening should be done by trained health personnel.

Purpose of Pre-entry Medical and Dental Screening

- To make a comprehensive appraisal of the child's health status
- To discover defects
- To give valuable information to parents and school personnel
- To provide professional counsel for any existing deviation
- To indicate the extent to which school health programme should be modified to benefit the child
- To determine the fitness of the child to participate in the school programmes

Components of Pre-entry Medical and Dental Screening

- Physical examination
- Mental health examination
- Dental examination
- Visual and hearing screening, and
- Laboratory investigations genotype and blood group, urinalysis, stool microscopy, heamatocrit, mantoux, typhoid screening.

SAQ 12.1

- a) A school Nurse is public health nursing specialist that advances the well-being, academic success, lifelong achievement, and overall health of students.
- b) The following are the roles of a school nurse:

- Collaborator with the school personnel, family, community and health care providers
- Provider of Student Health Care: Encompasses demonstrating vast amount of clinical knowledge in meeting the needs of all students especially those with special needs
- Communicator: Demonstrates adequate communication skills in relating with the children, teachers, parents and the community at large
- Client Teacher: Health Education is a paramount activity in school health
- Investigator: Carries out research to know how to better serve the school community
- Planner & Coordinator of Student Care: School health Programme is multi-disciplinary
- Researcher
- Collaborator with the school personnel, family, community and health care providers

SAQ 12.2

With regards to Planning and implementation of health programmes, you should have some of the following on your list

- Evaluates school health policies and procedures
- Coordinates school health program
- Crisis / disaster management
- Emergency medical condition management
- Mental health protection and intervention
- Documents and prepares report (legal, regulatory and policy requirements)
- Engages in research and evaluation of school health services

References

- Abia State Government. NPI IMMUNIZATION.
 - www.abiastate.gov.ng/rojects/welfare/ni-i
- Akani NA Nkanginieme KEO, Oruamabo RS. The School Health Programme: A situational Revisit. Accessed 04 April 2016. Available at:
 - http://www.ajol.info/index.php/njp/article/download/12046/15132
- Akinsola A. A. A TO Z of Community Health and Social Medicine in Medical and Nursing Practice. 3 AM Communications, Ibadan Nigeria.
- Arnstein, S. 2006. A ladder of citizen participation. Retrieved from http://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.html, assessed on 2/9/2016.
- Badri (2014).A Review of the Progress of School Meals in the Globe. Sky Journal of Food Science 3(6);52-60. Retrieved 15th June, 2016 at:

 http://www.skyjournals.org/sjfs/pdf/2014/Dec/Badri%20pdf
 http://www.skyjournals.org/sjfs/pdf/2014/Dec/Badri%20pdf
 http://www.skyjournals.org/sjfs/pdf/2014/Dec/Badri%20pdf
- Community Involvement. 2010.
 - $\frac{http://www.smarte.org/smarte/dynamic/resource/sn-community.xml.pdf}{}$
- Federal Ministry of Education 2006. Implementation Guidelines of National School Health programme. Retrieved April 5, 2016 from:
 - http://www.unicef.org/nigeria/NG_resources_implementationschoolhealthprog.pdf
- Ghulam, K. 2014. Levels of participation. Retrieved from http://www.participatorymethods.org/method/levels-participation, assessed on 31/8/2016.

- Health Authority of Abu Dabi (2011) Roles and Responsibilities of School Health Nurse. Retrieved 7th April 2016 from:

 http://schoolsforhealth.haad.ae/template/haad/pdf/school_nu
 rse refresher course5.pdf
- Health team 2012. National immunization schedule Nigeria.

 Accessed 25th August 2012.

 Wobwalker.com/.../health/2012/08/national
- Healthy cities/Healthy communities. 2015.

 http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/healthy-cities-healthy-communities/main

 communities/main
- HGSF Nigeria (2014). O'Meals Why It's More Than Just Lunch".

 HGSF Nigeria. Home Grown School Feeding (HGSF). July
 2014. Retrieved 14th June, 2016 from: http://hgsf-global.org/en/bank/downloads/doc_download/433-omeals-snap-shot-july-2014
- Historical events and community health, 2016 eLearnPortal.com by

 The Learning House, Inc retrieved from

 http://www.elearnportal.com/courses/nursing/community-health nursing/community-health-nursing-historical-events-and-CH
- Hitchcock J.E., Schubert P.E., Thomas S.A 2003, Community Health Nursing: Caring in Action, 2nd edition, Delmar learning, New York.
- Hitchcock, J.E., Schubert, P.E, Thomas, S.A. (Eds.). (2003).

 Community Health Nursing: Caring in Action (2nd ed.).

 New York: Delmar Learning.
- Hitchcock, J.E., Schubert, P.E., Thomas, S.A., 2003. Community health nursing: Caring in action. Second edition. 342 368.
- Hsu L.L., Introduction to Community Health nursing, School of Nursing, Shanghai Jiao Tong University. Retrieved from basic.shsmu.edu.cn/jpkc/sqhl/ppt/1.ppt

- http://www.unicef.org/media/media 69712.html
- Lynch, A. 1977. Evaluating school health programs. In *Health*Services: The Local Perspective, A. Levin, ed. New York:

 Academy of Political Science; Proceedings of the Academy of Political Science 32(3):89–105.
- Means, R.K. 1975. *Historical Perspectives on School Health*. Thorofare, N.J.: Charles B. Slack.
- Mengistu D., Misganaw E. 2006 Community health Nursing,
 Lecture note for Nursing Students, University of
 Gondar, Ethiopia retrieved from http/www.cartercenter.org.
- Mengistu, D., Misganaw, E. 2006. Community Health Nursing: Lecture notes for Nursing students
- The National Academies Press (1997). Evolution of School Health Programs." Institute of Medicine. *Schools and Health: Our Nation's Investment*. Washington, DC: oi:10.17226/5153.
- The Queens Nursing Service 2011. Transition to School Nursing

 Service

 http://qni.org.uk/docs/Transition%20to%20School%20Nursing%20-%20CHAPTER%201.pdf
- Tope-Ajayi, F. (2005). A guide to primary health care practice in Developing countries (1st ed.) Nigeria.
- UNICEF, 24 June 2013 UNICEF: Children are both the makers and the markers of healthy, sustainable societies.
- Vaccine Administration Practices Part 1 General Guidelines.

 Accessed 25th Feb., 2015 Retrieved from www.hac-asc.gc.ca/.../1-7-eng.h.
- Vaccine immunization theory. Retrieved from vaccination.co.uk/immunization-with/vaccines
- Watsan. 2005. Community participation. Retrieved from http://ec.europa.eu/echo/files/evaluation/watsan2005/annex_files/WEDC/es/ES12CD.pdf, assessed on 2/9/2016.

- World Health Organization (2000). Local Action Creating Health Promoting Schools. Retrieved 5th April, 2016 from: http://www.who.int/school_youth_health/media/en/88.pdf
- World Health Organization (2011). School Health Services.

 Retrieved 7th April, 2016 from:

 http://www.euro.who.int/en/health-topics/Life-stages/child-and-adolescent-health/adolescent-health/school-health-services
- World Health Organization (WHO), 2013, Global health observatory: infant mortality situation and trends http://www.who.int/gho/childhealth/mortality/neonatal_infant text/en/ (Accessed 4th April2014).