

PHS 821

SCHOOL HEALTH

Course Team

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INTRODUCTION

This course, *PHS821 School Health Programme* is a two-credit unit course. School Health deals with the health and wellbeing of school community members: School children, teachers, administrators, security men, gardeners and every other person that works or lives in the school compound. Community health occupies a central position in every school which is located in one community or another. Again, every school is a sub-set a community or society both having linkages with each other. When there is any disease condition (especially infectious diseases) in the school, a school member like the student or school staff can serve as an agent to transport the disease from the school into the community. On the other hand, when the problem is in the community, school children or workers can also serve as carriers to transport the health problem into the school.

It is equally important to mention that school tasks cannot be effectively discharged when learners and workers are not healthy. Little or nothing could be achieved in a diseased state, as such; conscious efforts must be made to ensure that the health and safety of school members are ensured. Educational objectives are only achieved when health objectives are achieved as one can only operate based on the extent to which his/her health status can support. Teaching and learning require sound health and

full concentration to be successful and this cannot be attained if efforts are not made to ensure health and safety of school members.

As a vital component of the overall school programme, school health is aimed at making the school safe and healthy for teaching and learning. The Nigerian government recognizes the importance of school health programme and in 2006, The Federal Ministry of Education in collaboration with the United Nations Children's fund developed a National School Health Policy and its Implementation Guidelines. These documents have greatly impacted on school health programme in Nigeria as it stipulates the minimum efforts required to maintain a safe and healthy school in Nigeria.

This course is designed to introduce you to the rudiments of school health programme. Its contents are designed to provide functional knowledge that will enable you to develop core understanding and skill in planning and implementing school health and safety efforts.

What You Will Learn in this Course

It is expected that the contents of this course will help you acquire knowledge base needed to stimulate positive attitude as well as empower you to adopt conscious practices to promote school health and protect the

health of staff and students as community members. School health is not the task of government or school teachers or administrators alone but that of every community member. It does not matter what or who you are or will become, there is a functional duty you owe the school and your entire community. This course is designed to enable you understand, appreciate and play your required role in promoting school health as an administrator, teacher, parent, professional, technocrat, religious leader, political leader, or whatever role you are currently playing or will play in the community.

Aside from this, the course will also equip you with the resources required to plan, execute and evaluate school health programmes and policies as a professional. It is therefore advised that you take the course seriously and give it all it takes to maximize the potentials it holds for you. The course is designed to make you an authority in this area of discipline but you must diligently devote your time to studying and assimilating its contents and applying it to everyday life as much as possible. It is important to equally seek more knowledge by using the course as a springboard and guide to accessing other resources with a view to getting diversified but authentic information relating to school health and safety.

Course Aim

The overall aim of this course is to instill functional knowledge, develop positive attitude and empower students with practical skills that will enable them to effectively plan, implement and evaluate school health related programmes and efforts.

Course Objectives

It is expected that at the end of this course, you should be able to:

- Define and explain the concept of health and school health
- Define school health programme, its objectives and its components
- State at least five initiatives for school health in Nigeria
- Present a pictorial of the institutional framework for school health programme in Nigeria
- Define skill-based Health Education, its goal and its objectives
- State at least seven learning principles in skills-based Health Education
- Present a model for skill-based Health Education
- Discuss at least four functional methods for teaching and learning skill-based Health Education
- Discuss assessment procedures in skill-based Health Education

- Give an overview of school health services
- State the aim and objectives of school health services
- Mention at least ten areas in school health services
- Discuss school health problems of school-aged children in Nigeria, how to screen or identify them and how to prevent them
- Describe the school feeding service, its goals and objectives
- State key elements in the school feeding services
- Discuss at least five nutritional problems of school aged children in Nigeria
- State at least 10 essential vitamins and minerals each needed to meet the nutritional requirements of school aged children in Nigeria
- Describe healthful school environment, its goals and objectives
- Mention five indices for characterizing a healthful school environment
- List and explain the components of healthful school environment
- Explain the concept of school, home and community relationships, its goal and objectives
- State at least five characteristics of school, home and community relationships

- Mention at least ten collaborating community agencies for school, home and community relationships
- State and explain at least five avenues for school, home and community relationships
- Explain evaluation of school health programme
- State principles and tools for the evaluation of school health programme
- Mention indicators for evaluating the various components of the school health programme

Working through this Course

This course is carefully organized and planned taking cognizance of the fact that it might be strange to you. Adequate and simple explanations and illustrations are made to help you navigate through and understand every concept covered in the course. The course developers took out time to ensure that you are not burdened with unnecessary details. Distinct and requisite contents that would empower you with knowledge and skills to function effectively in every task requiring sound and accurate knowledge of school health are covered in simple and concise style.

Although the course has been designed to support independent study, attending tutorial sessions will greatly enhance understanding of concepts

discussed in the course as it will avail you opportunity to ask relevant questions to further your understanding. Studying the course resources and attending tutorial sessions are vital to enhancing not only your grade but your understanding and usability of the knowledge garnered from the course.

Course Materials

This course comprises eight modules broken down into 41 different units. They are as listed below:

- i. A course guide
- ii. Study units
- iii. Charts
- iv. Posters
- v. Worksheets
- vi. Projector

Study Units

Module 1 INTRODUCTION TO SCHOOL HEALTH PROGRAMME

Unit 1 Concept of Health, and School Health

Unit 2 Concept of School Health Programme

Unit 3 Goals and Objectives of School Health Programme

Unit 4 Scope of School Health Programme

Unit 5 Components of School Health Programme

Module 2 SCHOOL HEALTH PROGRAMME IN NIGERIA

Unit 1 National Policy on School Health Programme

Unit 2 School Health Initiatives in Nigeria

Unit 3 Implementation of School Health Programme in Nigeria

Unit 4 Administration of School Health Programme in Nigeria

Module 3 SKILL-BASED HEALTH EDUCATION

Unit 1 Concept of Health Education and Skill-Based Health Education

Unit 2 Goals and Objectives of Skill-Based Health Education

Unit 3 Limitations to Effective Teaching of Skill-Based Health Education in Nigerian Schools

Unit 4 Elements/Components of Skill-Based Health Education

Unit 5 Learning Principles in Skill-Based Health Education

Unit 6 Factors Necessary for Effective Skill-Based Health Education

Unit 7 Methods and Resources for Skill-Based Health Education

Unit 8 Assessment of Skill-Based Health Education

Unit 9 Nigerian Government's Implementation Strategies for Skill-Based Health Education

Module 4 SCHOOL HEALTH SERVICES

Unit 1 Concept of School Health Services

Unit 2 Objectives of School Health Services

Unit 3 School Health Centre

Unit 4 Scope of School Health Services

Unit 5 Health Problems of School Aged Children

Module 5 SCHOOL FEEDING SERVICES

Unit 1 Concept of School Feeding Services

Unit 2 Objectives of School Feeding Services

Unit 3 Components of School Feeding Service

Unit 4 Nutritional Problems of School Aged Children

Unit 5 Essential Dietary Vitamins and Minerals for Meeting
Nutritional Needs of School Aged Children

Module 6 HEALTHFUL SCHOOL ENVIRONMENT

Unit 1	Concept of Healthful School Environment
Unit 2	Aims and Objectives of Healthful School Environment
Unit 3	Characteristics of Healthful School Environment
Unit 4	Components of Healthful School Environment
Unit 5	Safe Physical Environment
Unit 6	Safe Biological Environment
Unit 7	Safe Socio-Emotional Environment
Module 7	SCHOOL, HOME AND COMMUNITY RELATIONSHIP
Unit 1	Concept of School, Home and Community Relationships
Unit 2	Objectives and Characteristics of School, Home and Community Relationships
Unit 3	Collaborating Community Agencies for School Health
Unit 4	Avenues for School, Home and Community Relationships
Unit 5	Strategies for Implementing School, Home and Community Relationships

Unit 6 Institutional Roles in Implementing School, Home and
Community Relationships

Module 8 EVALUATION OF SCHOOL HEALTH PROGRAMME

Unit 1 Concept of Evaluation

Unit 2 Evaluation of School Health Programme and its Rationale

Unit 3 Procedures and Tools for School Health Programme
Evaluation

Unit 4 Indicators for Evaluating Components of School Health
Programme

Textbooks and References

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Assignment File

There are two components of assessment for this course. They are the tutor-marked assignment and the final examination.

Tutor-Marked Assignment

This is the continuous assessment component of this course. It accounts for 30 percent of the total score for the course. The tutor marked assignment will be given to you by the course facilitator and you will return it after completing the tasks.

Final Examination and Grading

The final examination is the concluding assessment for the course. It constitutes 70 percent of the total score for the whole course. You will be duly informed of the time for the examination.

Summary

This course is designed to impart functional knowledge of school health to you. This knowledge, being functional, is expected to empower you to take up any role involving school health and discharging it with excellence. We wish you success in this course and hope that you will translate the knowledge gained to becoming a solution to school health problems.

Course Overview

This course is designed to provide basic functional knowledge on school health as presented in the eight modules:

Module One: Introduction to School Health Programme

This module covers an introductory aspect of the course beginning with an overview of the concept of health, school health and school health programme. It also covers aims and objectives of school health programme, its scope and components.

Module Two: School Health Programme in Nigeria

For the goals of school health programme to be achieved, its efforts and activities must be coordinated and organized. The Nigerian government, understanding the importance of school health programme carefully drafted and adopted a written policy document in collaboration with relevant stakeholders and developmental partners on what the focus of school health programme should be as well as how this focus is to be realized. This module is centered on the school health policy in Nigeria, the initiatives to realize the objectives of school health programme and the status of school health programme in Nigeria. The module also covers implementation and administration guidelines of school health programme.

Module Three: Skill-Based Health Education

Behavioural change strategies are important in preventing and controlling health problems. Unless requisite skills for healthful behaviours are developed in learners, they may not be able to resist pressures involving health fatality behaviours. Skill-based Health Education is an effective strategy towards empowering young people to developing positive health behaviour. This module is focused on skill-based Health Education, its meaning, aims, objectives and implementation strategies.

Module Four: School Health Services

Every school child as well as staff has health needs which are either preventive or curative or both. The school health services constitute the component of the school health programme that focuses on meeting these health needs. Ensuring the existence of these services in school makes the school safe and habitable for both learners and school staff. This module is centered on school health services as an integral component of the school health programme.

Module Five: School Feeding Service

Nutrition is important in learning as learning task requires concentration and high mental capacity. Both concentration and high mental capacity are dependent on nutritional status. Healthy eating patterns are essential for learners to achieve their full academic potential, full physical and mental growth, and lifelong health and well-being. Healthy eating is demonstrably linked to reduced risk for mortality and development of many chronic diseases as adults. Schools have a responsibility to help learners and staff establish and maintain lifelong, healthy eating patterns. Well-being and well-implemented school nutrition programmes have been shown to positively influence learners' eating habits. This module is concerned with the nutritional health of learners and school personnel.

Module Six: Healthful School Environment

The environment is an important determinant of the health status of an individual. The school community members including learners and school staff, live and operate within physical, biological, social and psychological environment that significantly influences the extent to which they perform their obligatory and non-obligatory roles as well as their overall health. This module focuses on need and strategies for improving the health of the school environment.

Module Seven: School, Home and Community Relationships

School children and personnel are first members of a community other than the school community. In the same vein, every school exists and functions in a community. No school can be said to be existing in isolation from the wider community in which it is located. For effective realization of school health programme objectives, there must be a meaningful collaboration between the school and the community. Realizing the need for this collaboration, the school, home and community relationship is that aspect of the school health programme that is designed to coordinate and harmonize the collaboration needed between the school and the community for the realization of the goals and objectives of the school health programme. This module focuses on this component of the school health programme.

Module Eight: Evaluation of School Health Programme

Evaluation is a process and a tool that plays important role in every educational and health endeavour. As a process, evaluation entails efforts aimed at establishing the extent to which pre-set goals have been realized. As a tool, the outcome of this process is employed to make informed decision concerning the realization of the goals of the programme. Evaluation is a critical process and tool in the realization of the goals of the

school health programme. It is important to consciously examine the extent to which the set goals of school health programme are being realized. This information will be useful in identifying strengths and weaknesses of the programme. This module is focused on evaluation of the school health programme.

How to Get the Most out of this Course Material

This study material represents the course lecturer, so you are expected to give detailed attention to every information contained in the course. The course material has been simplified to aid easy understanding of the instructional contents. A major advantage of the open distance learning approach is that you can learn at your own pace. As such, you are advised to devote time to effectively interact with the course units at your own pace. You must pay full attention to the learning objectives which are to guide you to maximizing each module. Ensure that you are able to meet these objectives at the end of every module. To facilitate this, each module has exercises that you are expected to attempt at the end. These exercises go along with their solutions with which you are expected to evaluate your answers.

Facilitators/Tutors and Tutorials

There are 15 hours of tutorial provided in support of this course. You will be notified of the dates, time and location together with the name and phone number of your tutor as soon as you are allocated a tutorial group. Your tutor will mark and comment on your assignments, keep a close watch on your progress and on any difficulties you might encounter and provide assistance to you during the course. You must mail your tutor marked assignment to your tutor well before the due date. At least two working days are required for this purpose. They will be marked by your tutor and returned to you as soon as possible.

Do not hesitate to contact your tutor by telephone, e-mail or discussion if you need help. The following might be circumstances in which you would find help necessary to contact your tutor if:

- You do not understand any part of the study units or the assigned readings.
- You have difficulty with the self-test or exercise
- You have questions or problems with an assignment, with your tutor's comments on an assignment or with the grading of an assignment.
- You must endeavour to attend the tutorials. This is the only chance to have face to face contact with your tutor and ask questions which are

answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefit from the course tutorials, prepare a question list before attending them. This way, you will benefit a lot by meaningfully contributing to class discussions.

MODULE ONE

INTRODUCTION TO SCHOOL HEALTH PROGRAMME

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1.1. Introduction

The school environment provides unique setting for empowering school children and community members with requisite knowledge and skill for healthy living. Beyond disease prevention, the school also provides unique setting for the control and eradication of communicable and non-communicable diseases, early detection of diseases and defects, meeting nutritional needs of school children as well as ensuring that school members, including learners and workers, are able to carry out their obligatory and non-obligatory duties regarding learning and other vital activities of daily living. The school health programme is the generic name for all the activities and efforts aimed at ensuring that these objectives and others related to healthful functioning of learners and workers in the school are realized. This module discusses the school health programme as it relates to its meaning, objectives, scope and components.

1.2. Objectives of the Module

At the end of this module, you should be able to:

1. Define School Health
2. Define School Health Programme

3. State at least five objectives of School Health Programme
4. Mention at least 5 scope of School Health Programme
5. State the five components of School Health Programme

1.3. Main Contents

1.3.1. Concept of Health, and School Health

Health has remained a controversial and slippery term to define due to various factors and determinants that affect health. Ogundele (2018) observed that health has been given divergent definitions and interpretations by many scholars. Defining health literally, the scholar noted that it connotes ‘a condition of being safe or whole.’ However, the most widely quoted definition of health was propounded by the World Health Organization in 1948. The world agency defined health as a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity. Although this definition has attracted criticisms, it remains a fundamental conceptualization of health for various reasons. The weaknesses of this definition notwithstanding, it dispelled the bio-medical view of health that sees health purely as disease absence. Another notable contribution of the definition in health studies is the fact that it views health in three distinct dimensions including physical, mental and social.

However, Ogundele (2018) noted five dimensions of health and wellness to include physical, emotional (mental), social, intellectual and spiritual.

Adopting this conceptualization of health as a working definition in this course, school health can be viewed in terms of striving to attain a state of physical, mental and social well-being for school community members beyond disease absence. The school setting provides unique platform to foster good health for school members as well as for community members. This is predicated on the fact that every school exists and functions within a community in which it is a vital institution. Realizing school health is precursory to attaining community health since school members can transmit health knowledge, attitude and practices into the community. Aside the family, the school is the most important place of learning for children: they occupy a central place in the community. School children need to be healthy to learn, and at the same time, they need to be educated to be healthy. Focusing on school age children and turning schools into centres of health and cleanliness will ensure that future generations are better prepared to care for their families, health of communities and clean environment. It is in a bid to realizing healthy schools that the school health programme was conceived.

1.3.2. Concept of School Health Programme

School health programme refers to the coordinated, preplanned and formal efforts and activities aimed at protecting, promoting and maintaining the health status of learners and workers in the school. Moronkola (2012) defined the school health programme as an educational and health programme targeted at meeting the health needs of learners and staff at present and at the same time, laying good foundation for their future health status with the support of the home, community and government. The conceptualization of school health programme according to the scholar transcends present health needs but also aims at ensuring good health status on a progressive note.

Moreover, beyond mere meeting of health needs, school health programme targets ensuring optimum health for every member of the school community. In Health Education generally, health efforts are not to be targeted at health needs only individuals and groups might be ignorant of certain health needs. This is also applicable in the school setting where the utmost aim is academic excellence among learners and career advancement for the workers. While the need for good health status to realize school objectives might be expressed, the functional knowledge, attitude and skill required to attain it might be defective. This makes conscious and concerted

effort to protect, promote and maintain the physical, mental and social health of school children and workers a necessity.

School health programme transcends meeting health needs of learners and school staff to attaining optimum health for this population. Since the school and its members might not even be aware of their own health needs, Udoh (1996) advocated the need for mandatory and conscious efforts by the school to provide opportunities which will favourably influence health knowledge, attitude and behaviour of learners and school workers alike with a view to ensuring optimal health and functioning. Akani, Nkanginieme and Oruamabor (2001) noted that the school health programme is an aspect of the school programme which aims at improving understanding, maintenance and improvement of the health status of learners, teachers and other workers in the school.

In its conceptualization of school health programme, the Federal Republic of Nigeria (FRN, 2006), views the aim of school health programme beyond individual to national development. It is also seen as a strategic tool to realizing national and international health, education and developmental objectives. According to the Nigerian Federal Ministry of Education (2006), the school health programme comprises activities in the school targeted at promoting health and developing the school community. The

school programme according to the ministry is a strategic tool to achieving health, education and developmental goals like Health for All (HFA), Education for All (EFA), education and health related Millennium Development Goals (MDGs), National Economic Empowerment and Development Strategy (NEEDS), Universal Basic Education Act and goals of the National Policy on Education (NPE).

The link between health and education which serves as rationale for school health programme as proposed by the Education for All Framework (2000) are stated below:

- School-based nutrition and health interventions can improve academic performance.
- Students' health and nutrition status improves their enrolment, retention, and reduce absenteeism.
- Education benefits health.
- Education can reduce social and gender inequities.
- Health promotion for teachers' benefits their health, morale, and quality of instruction.
- Health promotion and disease prevention programs are cost-effective.
- Treating youngsters in school can reduce disease in the community.

- Multiple co-ordinated strategies produce a greater effect than individual strategies, but multiple strategies for any one audience must be targeted carefully.
- Health education is most effective when it uses interactive methods in a skill-based approach.
- Trained teachers delivering health education produce more significant outcomes in student health knowledge and skills than untrained teachers.

1.3.3. Goals and Objectives of School Health Programme

The overall goal of the school health programme is attainment of optimum health level for learners and other members of the school community including teaching and non-teaching staff. The Nigerian National School Health Policy (2006) documents that the goal of school health programme is the improvement of the health status of learners and staff in order to make them responsible and productive citizens. In furtherance of this goal, six specific objectives of school health programme are highlighted in the policy:

1. To promote growth and development of individual learner in relation to his/her peculiar health needs
2. To create awareness of the collaborative efforts of the school, home and community in promoting the health of school members
3. To develop health consciousness in learners
4. To create awareness regarding availability and utilization of various health services and resources
5. To promote collaboration, social integration and technological exposure in addressing emerging health issues
6. To build health promotion skills of learners and staff members

1.3.4. Components of School Health Programme

The Nigerian National School Health Policy (2006) identifies five components of school health programme including:

- Healthful School Environment
- School Feeding Services
- Skill-based Health Education
- School Health Services (Preventive and Curative)
- School, Home and Community Relationships

Moreover, the United Nation's Children Emergency Fund (UNICEF) in collaboration with the Namibian Government proposed a comprehensive school health programme in which various components were captured. This comprehensive school health programme is represented in the figure below.



Components of Comprehensive School Health Programme

Source: Modified from UNICEF/Federal Republic of Namibia 2015

1.4. Conclusion

Learners and school staff need to maintain optimal health level required to support their school activities. The school health programme is designed to ensure that this goal is attained. The school health programme combines preventive, curative and educative approaches to ensure that the health of learners and school staff are promoted, protected and maintained. This is required to ensure that educational objectives are realized as one can do little or nothing when his/her health status cannot support him/her.

1.5. Summary

- Health is a critical factor in realizing educational and school objectives
- The school provides important setting for addressing health needs of learners and school staff
- School health programme connotes a carefully planned and organized activities or efforts aimed at promoting, protecting and maintaining the health and well-being of learners and school staff
- The school health programme is seen as a strategic tool to realizing educational, health and developmental goals and objectives in Nigeria

- According to the Nigerian National School Health Policy, the school health programme comprises 5 components including skill-based health education, healthful school environment, school health services, school feeding services and school, home and community relationship.

1.6. Tutored Marked Assignment

1. What is School Health?
2. Define School Health Programme
3. State five objectives of School Health Programme
4. State the five components of School Health Programme

Solution to Assignment

School Health

School health refers to a state of physical, mental and social well-being for school community members beyond the absence of disease and infirmities.

It refers to a state of optimal functioning of learners and school staff.

School Health Programme

School health programme could be defined as well coordinated, preplanned and formal efforts and activities at school aimed at protecting, promoting and maintaining the health status of learners and workers.

Objectives of School Health Programme

According to the National School Health Policy, the objectives of school health programme include:

1. To promote growth and development of individual learner in relation to his/her peculiar health needs
2. To create awareness of the collaborative efforts of the school, home and community in promoting the health of school members
3. To develop health consciousness in learners
4. To create awareness regarding availability and utilization of various health services and resources
5. To promote collaboration, social integration and technological exposure in addressing emerging health issues
6. To build health promotion skills of learners and staff members

Components of School Health Programme

1. Skill-based Health Education
2. Healthful School Environment
3. School Health Services
4. School Feeding Services
5. School, Home and Community Relationship

1.7. References and Resources for Further Reading

Akani, N.A., Nkanginieme, K.E.O and Orumabor, R.S. (2001). The School Health Programme: A Situational Report. *Nigerian Journal of Paediatrics*, 28(1):1-6

Anyanwu, F.C &Okeke, S.R. (2016). Retooling Assessment Procedures for Skill-based Health Education for Young People in Nigeria: Implications for 21st Century Educational Assessment. *Universal Journal of Educational Research* 4(1):58-64

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MODULE TWO

SCHOOL HEALTH PROGRAMME IN NIGERIA

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2.1. Introduction

For the goals of school health programme to be achieved, its efforts and activities must be coordinated and organized. Policies are written intentions of government with the envisaged means of realizing those intentions. The Nigerian government, understanding the importance of school health programme carefully drafted and adopted a written policy document in collaboration with relevant stakeholders and developmental partners on what the focus of school health programme should be as well as how this focus is to be realized. This module is centered on the school health policy in Nigeria, the initiatives to realize the objectives of school health programme and the status of school health programme in Nigeria. The module also covers implementation and administration guidelines of school health programme.

2.2. Objectives of the Module

At the end of this module, you should be able to:

- Explain the concept of school health policy
- Briefly describe the Nigerian National School Health Policy
- List and briefly discuss at least four initiatives for realizing objectives of school health programme in Nigeria

- Give an overview of the status of school health programme in Nigeria
- List at least five stakeholders for the implementation of school health programme
- State at least five personnel responsible for the administration of school health programme and their responsibilities

2.3. Main Contents

2.3.1. National Policy on School Health Programme

Health is important to realizing educational objectives. It was against this backdrop that the Nigerian government through the Federal Ministries of Health and Education collaborated with the WHO in 2001 to conduct a Rapid Assessment of School Health System in Nigeria. The essence of this exercise was to ascertain the status of school health in the country. The assessment identified several health problems among learners, including lack of health and sanitation facilities in-schools, and the need for urgent action in school health. This action necessitated the formulation of the implementation guidelines for school health programme and the National School Health Policy. The policy centres on the health promoting schools concept. A health promoting school is one that constantly strengthens its capacity as a healthy setting for living, learning and working (WHO, 2004).

A health promoting school engages health and education officials, teachers, teachers' unions, students, parents, health providers and community leaders in efforts to make the school a healthy place. (UNICEF, 2013). The Nigerian National School Health Policy is thus aimed at realizing the objectives of Education for All (EFA) and Health for All (HFA) using the school health programme as a tool through organized and coordinated roles of various cognate agencies of government including Education, Health, Environment, Agriculture, Water Resources, Information and Orientation, among others.

Vision of National School Health Policy

The vision statement of the policy is: Promoting health of learners in order to achieve Education for All and Health for All in Nigeria.

Mission of National School Health Policy

The mission statement of the policy is: To ensure adequate facilities, resources and programmes that will guarantee physical, mental and social well-being as well as safety and security of the school thereby enhancing learning outcomes.

Goals of the National School Health Policy

The goals of the National School Health Policy are to:

1. Enhance the quality of health in the school
2. Create an enabling environment for inter-sectorial partnership in the promotion of child friendly schools

Objectives of the National School Health Policy

The objectives of the National School Health Policy are to:

1. Provide the necessary framework for the mobilization of support for the implementation of the school health programme
2. Set up the machinery for the coordination of community efforts with those of government and non-governmental organizations towards the promotion of child friendly school environments
3. Guide the provision of professional services in the implementation of the school health programme
4. Promote the teaching of skill-based health education
5. Facilitate effective monitoring and evaluation of the school health programme
6. Set up modalities for the sustainability of the school health programme

Development Process of the Policy

The process for the development of the National School Health Policy alongside the National School Health Programme was participatory involving stakeholders at national and state levels under the leadership of the Inter-departmental Committee on School Health, Safety and Environment constituted by the Federal Ministry of Education (FME). The Committee was charged by the Permanent Secretary of FME in 2004 to formulate this document. The need for the national school health policy became imperative when Nigerian School Health Association (NSHA) and development partners such as the WHO, JICA, UNICEF, as well as stakeholder Ministries of Health and Environment, noted the lack of standards to guide school health programmes in Nigeria.

The process included the following steps:

- ✓ Inter-sectorial Workshop for Teachers on Focusing Resources on Effective School Health (FRESH) Approach to School Health:
September – October 2005
- ✓ Development of initial working document on School Health Policy and Guidelines on the National School Health Programme by School Health Desk officers of the FME: November 2005 – February 2006

- ✓ In-house critiquing of the draft document by the inter-departmental committee on School Health, Safety and Environment: February 2006
- ✓ Development of draft of the implementation guideline by technical team- March 2006
- ✓ Circulation of first draft for input from stakeholders at national and state levels: March– November 2006
- ✓ Finalization meeting for the Implementation Guidelines on the National School Health Programme: November 2006

The list of the stakeholders include: Representatives of Federal Ministries of (Education, Health, Environment, Water Resources, Agriculture & Rural Development, Information & National Orientation, etc.); Professional Associations of Health Education (National Paediatric Association, National Association for Physical, Health Education and Recreation, Sports and Dance, Nigeria School Health Association); Civil Society Organizations (National Union of Teachers, National Association of Parents/Teachers Association of Nigeria, Association of National Conference of Principals Secondary Schools and Conference of Primary School Head Teachers of Nigeria); State Ministries of Education and State

Universal Basic Education Boards officials; and Representatives of Development Partners especially UNICEF, WHO, JICA and ENHANSE/USAID.

2.3.2. School Health Initiatives in Nigeria

An initiative refers to any purposeful and conscious plan or strategy employed to realizing a specified objective. When related to school health, it connotes planned, organized and envisaged means to realizing the goals and objectives of the school health programmes. A distinctive feature of an initiative is the fact that it is not based on speculation but on empirical evidence that is valid, reliable and reproducible. An initiative is universal in that it is widely acclaimed and accepted at the local, state, national, regional or international levels, depending on its scope and reach. Six common school health initiatives for school health programme in Nigeria include:

- Global School Health Initiative
- Health Promoting Schools
- Life Skills Initiative
- Home-Grown School Feeding and Health Programme (HGSF &HP).
- Skill-Based Health Education Initiative
- Focusing Resources on Effective School Health (FRESH) Initiative

Global School Health Initiative

WHO in collaboration with other international agencies (UNESCO, UNICEF) introduced the Global School Health Initiative (GSHI) IN 1995. The essence of the initiative was to mobilize and strengthen school health promotion activities at all levels with a view to improving the health of learners and other members of the school community. Strategies for the implementation of this initiative include:

1. Evaluation research to ascertain the effectiveness of school health programme in Nigeria schools and elsewhere as need arises
2. Capacity building through training and re-training of school health programme personnel
3. Providing inter-sectorial collaboration especially between the ministries of education and health with a view to coordinating efforts aimed at realizing national school health objectives
4. Facilitating harmonious relationships and networking among stakeholders concerned with school health promotion.

Health Promoting Schools

The Health Promoting School Initiative (HPSI) originates from the GSHI and focuses on mobilising, strengthening and complimenting the School

Health Programme. UNICEF (2013) identified two parameters for judging a health promoting school – healthy school environment and education on health and hygiene issues.

Healthy School Environment

Indices for healthy school environment are:

1. Safe and clean drinking water
2. Gender sensitive toilet facilities
3. Comfortable seating arrangements
4. Safe playgrounds
5. Learner friendly environment
6. Access for physically challenged learners

Education on Health and Hygiene Issues

Indices for this parameter are:

1. A focus on cleanliness, personal hygiene and sanitation
2. Preventative information against various non-communicable diseases
3. Prevention against communicable diseases
4. Comprehensive sexuality education, including HIV and AIDS prevention, care and psycho-social support services

5. Environmental education
6. Life skills based education
7. Orientation of teachers and parent-teachers' forums to abolish corporal punishment in schools and come up with alternatives to violence
8. Establishment of health clubs
9. Providing school-based health and nutrition services

Criteria for Health Promoting School Levels

Three levels for evaluating health promoting schools (bronze, silver and gold) and their criteria have been suggested by UNICEF (2013) as reproduced below:

Bronze Level

The Bronze level entrance is based on the following criteria:

1. Availability of safe drinking water
2. Sanitation Facilities:
 - Toilet facilities should be maintained in good working order and hygienic conditions
 - Separate toilets available for use by teachers, boys and girls

- Toilets with a wash hand basin, running water, soap and a hygienic facility
 - Availability of hand drying facilities (such as paper towels, etc)
3. Access to health services and school feeding/food and nutrition services (when possible)
 4. Skill-based health education for pupils
 5. Health-related school policies
 6. Development of the school health charter
 7. Display of health messages in classrooms, toilets and notice boards
 8. A safe and clean school environment
 9. Establish of school health clubs, and create a Health Corner in each classroom, library or any place that is accessible to all the learners, teachers and school personnel
 10. School canteens to provide safe nutritious food
 11. School nutrition programme
 12. Oral Health programme

Silver Level

In addition to the criteria for the bronze award the silver level, entrance is based on the following criteria:

1. An appropriate learner/toilet facility ratio of 1 properly working and hygienically maintained toilet per 50 pupils; availability of hand washing facilities with soap and drying facilities. (Girls: 1 toilet cubicle for 25 girls and boys 1 cubicle toilet for 100 boys and 1 urinal for 40 - 60 boys according to Policy Framework by WHO (2005).
2. Building/improving water fountains/water bags or increasing number of tap water on the school grounds according to the school size
3. Creativity in the approach of a specific health promotion project or intervention; this can be in form of a drama group, involvement in a community project, etc.
4. Participation in the National/Regional Science Fair with at least one health related project
5. Continuation of the School-based Health Clubs/ projects
6. Continuation of the School-based Health Clubs, HIV/AIDS projects
7. Provision of sick bay for learners to use when not feeling well
8. Start process of implementing the school-based oral health programme
9. School canteens to provide safe nutritious food
10. Mobilize for school nutrition programme

Gold Level

In addition to the criteria for bronze and silver awards, the gold level entrance is based on the following criteria:

1. Help at least one school in the country to move toward the Silver level of HPSI implementation (sisters school)
2. Participate in National/Regional Science Fair with at least one health related project
3. Creativity in the approach to local health problems and interventions or health promotion e.g. Participate in community projects, do survey/research in local community on any health issue
4. Continue with the school-based Health Clubs/ Projects
5. Continue with the school-based Health Clubs/ HIV/AIDS Projects
6. Full implementation of the school-based oral health programme
7. School canteens to provide safe nutritious food
8. Mobilize for School Nutrition programme

Life Skills Initiative

Life skills according to the WHO are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. They are a group of psychosocial competencies

and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathise with others, and cope with and manage their lives in a healthy and productive manner. Life skills may be directed toward personal actions or actions toward others, as well as toward actions to change the surrounding environment in order to make it conducive to healthy living. Life skills are conceptualized as adaptive competencies for dealing with daily demands of life. School children and other members of the school community are faced daily with materials and processes as well as interactions that can have adverse effect on their overall health and well-being. Inability to effectively deal with challenges brings about a compelling health problem. Learners and school staff must therefore possess functional knowledge and attitudes required to build resilience against environmental pressures that could affect their health. Lifestyle diseases presently constitute the bulk of health challenges in the present and coming centuries. Sexually transmitted infections, substance abuse, sedentary living and other lifestyle diseases constitute significant threat to health and well-being as they account for substantial proportion of morbidity and mortality rate and ratio in our present world. Combating these health threats requires life skills that play protective role against these

harmful habits. Important life skills that school health programme through skills-based Health Education could instill include refusal and negotiation skills, assertiveness, critical thinking, problem solving, conflict resolution, empathy, group loyalty, self-efficacy, self-esteem etc. Skill-based Health Education is thus the most effective strategy towards realizing the goals of this initiative.

Home-Grown School Feeding and Health Programme (HGSF & HP)

This initiative was designed by the Nigerian government with active partnership from national, regional and international development partners like the National Economic Empowerment and Development Strategy (NEEDS), New Partnership for African Development (NEPAD), United Nation Children's Fund (UNICEF) among others. The initiative is targeted at attracting and keeping out-of-school children in school by meeting the nutritional and health needs of school children basically through the provision of nutritional meals at school. The initiative is also aimed at ensuring that nutritional problems in school children are tackled so as to facilitate appropriate growth and development as well as improved academic performance. Indicators of the success of this initiative include improved physical, mental and social well-being of school children, improved school enrolment and completion, gender balance in school

enrolment and completion and improved academic performance. The initiative strongly recognizes the place and importance of local food production as well as the involvement of the local community in realizing its aims and objectives.

Skill-Based Health Education Initiative

Health Education is widely acclaimed as an effective tool to improving and promoting health and well-being. The importance of Health Education cannot be overemphasized as it plays significant role in preventing disease, prolonging life and protecting health. In a century characterized by explosion of knowledge as well as emerging challenges, skill-based Health Education has evolved as a responsive tool to surmounting the myriads of health challenges in this century. Skill-based Health Education, according to Anyanwu and Okeke (2016), is an approach to Health Education that is effective, interactive, engaging and meaningful as it focuses on skills (social and manipulative) and functional knowledge of health issues within a society. In the school setting, Skill-based Health Education is aimed at involving learners by making Health Education contents as practicable as possible with a view to empowering learners with requisite skills to leading health protective and promoting behaviours.

Focusing Resources on Effective School Health (FRESH) Initiative

The FRESH Programme (Focusing Resources on Effective School Health) was launched at the Dakar Forum to effect a fundamental change in the way the global community and national governments think and act about health and its effects on education. It is based on two bold contentions: first, that the goal of universal education cannot be achieved while the health needs of children and adolescents go unmet; and second, that a core group of cost effective activities can and must be implemented, together and in all schools, in order to meet those needs and thus deliver on the promise of Education for All. The FRESH Initiative encompasses four core components as briefly discussed below:

FRESH Core Component 1: School Health Policies

School health policies are needful in ensuring a healthy, safe and secure school environment, guaranteeing equal rights and opportunities and regulating the provision of health education and health services. These policies also serve as the blueprints for action necessary to harness the potential of health to improve educational outcomes. When a representative cross-section of stakeholders is involved in developing such school health

policies, the process itself serves as an awareness-raising and partnership-building activity. Thus, education policy-makers and administrators will benefit by working closely not only with health officials and care providers, but also with teachers, students, parents and civil society representatives at the school level.

Although partnership is essential, experience has shown that the education sector must lead, and retain overall responsibility for the development, implementation and enforcement of school health policies. This requires the allocation of human and financial resources. FRESH recommends that responsibility and authority for school health programmes be designated at every level of education planning and administration possible. This is the essential first step toward a successful school health program. Once policies are in place, they must be effectively monitored. School administrators and teachers should be trained to implement the policies. Students, parents and community members at large must know and understand the policies. Mechanisms for enforcing policies, and for evaluating their effectiveness, are necessary to ensure the compliance and support of those the policies are intended to benefit.

FRESH Core Component 2: Provision of Safe Water and Sanitation

This is the first step towards a healthy learning environment. According to UNICEF, if schools cannot improve the health status of children, they must at least not make it worse. Yet this may well occur if the school's water supply is contaminated with disease-causing organisms or other toxic elements. Accidents and injuries are known to occur more frequently in schools that are poorly constructed or inadequately maintained, and schools that lack appropriate toilet facilities are almost certainly contributing to the spread of parasites, thus harming not only school children's health, but the health of the community members as a whole. Where the school environment is perceived as unwelcoming or threatening, school attendance is adversely affected. The fact of girls abandoning or being withdrawn from schools that fail to provide separate toilets, particularly around the age of onset of menses, is just one example of how environmental factors influence student participation in education. The provision of safe water and appropriate sanitation facilities are thus basic first steps in the creation of a healthy physical learning environment. Policies governing the construction of such facilities should address the important issues of gender access and privacy, and maintenance policies should be established to ensure that the facilities are cared for and used properly over time. By

providing safe and appropriate sanitation facilities, schools can reinforce the health and hygiene messages delivered in Health Education classes, and serve as an example to both students and the wider community. This, in turn, may lead to a demand for similar facilities in other parts of the community.

FRESH Core Component 3: Skill Based Health Education

The place of human behaviour in health and well-being cannot be overemphasized. Though vaccinations, medical treatment, attempts to reduce environmental causes of illness and education about disease processes continue to be important means of maintaining and restoring health, they are not enough. Such measures will not protect people from the harmful effects of their own behaviour if, for example, they choose or are pressured to smoke, use drugs, act in violent ways, engage in unprotected sexual activity or take other health risks. To safeguard their physical and emotional health, individuals must play an active role, and for this, they need more than just knowledge. They need life-promoting attitudes, values and beliefs, and specific cognitive and behavioural skills. Quality skill-based health education helps young people to acquire communication,

negotiation and refusal skills, and to think critically, solve problems and make independent decisions. Skill-based health education contributes to the development of attitudes and values that promote respect for one-self and for others, tolerance of individual differences and peaceful co-existence. It results in the adoption of health-promoting habits, such as healthy eating, and reduces risk taking behaviours associated with HIV/STI infection, unplanned pregnancy, drug and alcohol abuse, violence, injury, etc. Young people who receive quality skill-based health education are more likely to adopt and sustain a healthy lifestyle not only during their school years, but throughout their lives.

FRESH Core Component 4: Health and Nutrition Services

Improved maternal and child health care has drastically reduced childhood mortality thereby leading to increased number of children available to be enrolled in schools. Unfortunately, this potential is threatened by health and nutrition problems among school-age children that exclude them from school, prevent them from remaining in school for a sufficient number of years or interfere with their learning while in school. Girls and members of other disadvantaged groups and populations recognised in the Dakar Framework as priority targets for renewed efforts to achieve Education for

All, are likely to be the least healthy and most malnourished among new school enrollees. To protect their investment in efforts to increase access and improve the quality of educational services, the delivery of basic health and nutrition services in schools must be made a topmost priority. Effective school health programmes link the resources of the health, education, nutrition and sanitation sectors in schools. They address problems that are prevalent and recognised as important in the community, and take advantage of a skilled workforce (teachers and administrators) that is already engaged with individual and organisational partners in the local community. As students become healthier, they participate more fully in education opportunities, and the whole community starts to see the school and school personnel in a more positive light. In particular, malaria treatments, micronutrient supplementation, deworming and school feeding programs have been perceived as a substantial added benefit of schooling and have thus improved enrolment and attendance.

Aside these stated core components, the FRESH Framework also recognizes some support activities including:

- Effective partnerships between teachers and health workers and between the education and health sectors
- Effective school and community partnerships

- Pupil awareness and participation

2.3.3. Implementation of School Health Programme in Nigeria

In order to ensure the successful implementation of the school health programme, the Nigerian government in collaboration with international development partners developed an implementation guideline in 2006. Stakeholders collaboration is important in the successful implementation of school health programme. The school health programme requires a multi-sectorial approach including government and non-governmental agencies as well as international development partners.

Stakeholders in School Health Programme Implementation

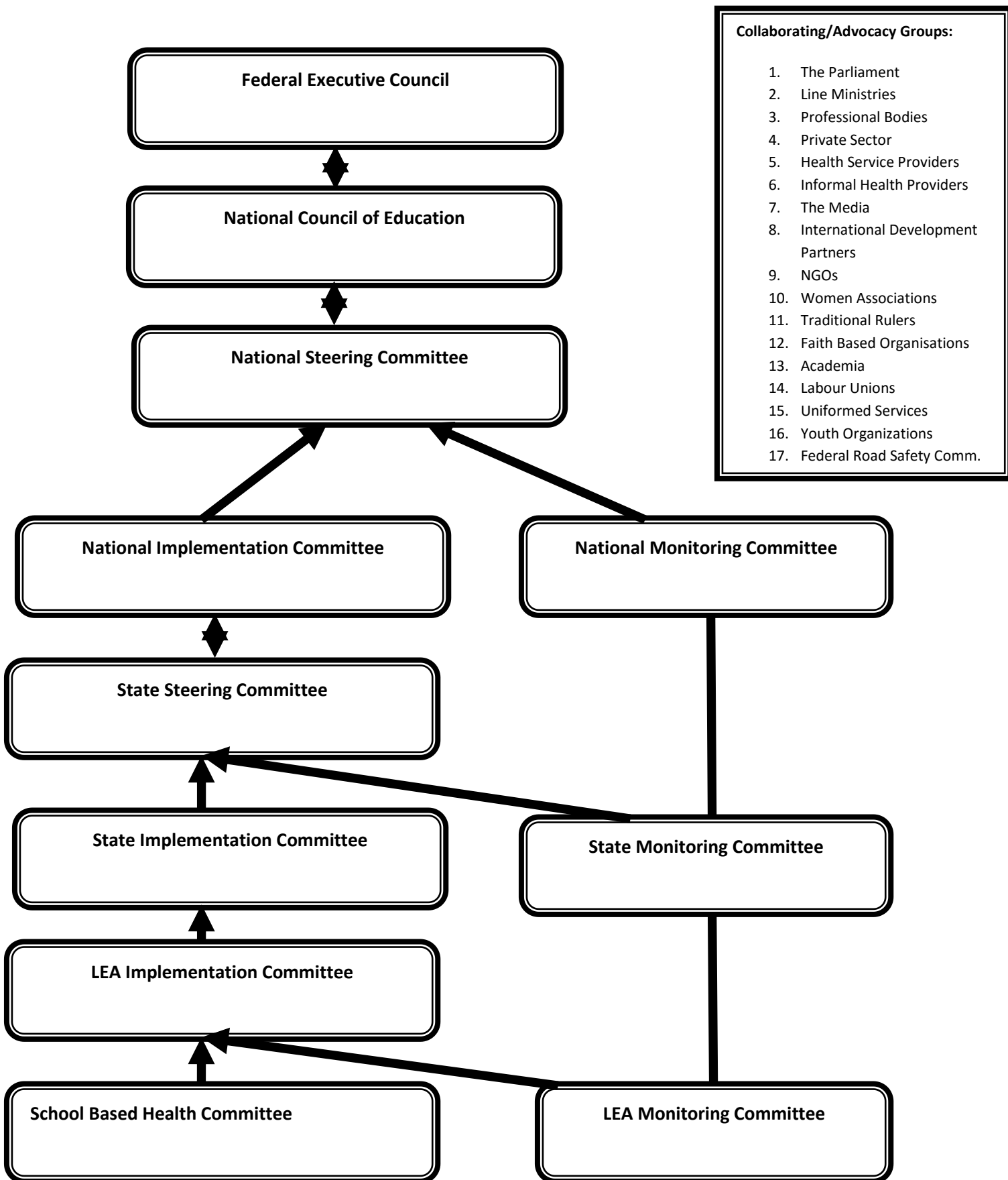
Stakeholders identified in the successful implementation of the school health programme highlighted include:

- The government
- Local communities
- Civil society organisations
- Organized private sector
- International development partners

Institutional Framework for the Implementation of School Health Programme

The National School Health Policy identifies eight committees (see fig. 2.1) at the national, state, local government and school levels for the successful implementation of the school health programme. These committees are saddled with five critical administrative roles based on their level and jurisdiction. These administrative roles include:

1. Forecasting and planning
2. Organizing
3. Directing
4. Coordinating and
5. Controlling



Source: Federal Ministry of Education in Moronkola, O.A. (2012). *School Health Programme*. Ibadan: Royal People

2.3.4. Personnel for School Health Programme Administration

School health programme in school can be administered by the following personnel identified by Moronkola (2012):

- **School Administrator**

The school administrator is key to the successful implementation of the school health programme. The political will in the school required to implement the school health programme rests with the school administrator. Unless the administrator gives the necessary support, it will be nearly impossible to implement school health programme. The school administrator should play the administrative roles of supervising and monitoring successful implementation of the school health programme. The school administrator is also expected to provide a favourable and conducive environment for the school health programme to be implemented.

- **School Health Programme Director**

The school health programme director is responsible for the day-to-day running of the school health programme. This director could be a medical doctor or nurse with educational background or a professional health educator. The major task of the director is to supervise and or coordinate

the activities of the school health programme. He/she is expected to domesticate national school health policy to the peculiarities of the school and direct as well as supervise its implementation relying on the authority and approval of the school administrator.

- **The School Health Teacher**

The school health teacher's major role is in the area of skill-based health education. He/she is saddled with the responsibility of teaching health and playing major roles in health curriculum issues. The school health teacher also plays collaborative roles in other components of the school health programme aside taking the lead in skill-based health education.

- **School Medical Director**

The school medical doctor is at the centre of the school's curative aspect of the school health services. The school medical director also ensures and supervises medical examination for school community members is carried out to detect asymptomatic illnesses and to ensure proper diagnosis for better treatment of diseases. Unfortunately, only few schools engage school medical doctors in Nigeria.

- **School Nurse**

The school nurse assists the school medical doctor in carrying out his/her duties. Aside this, the school nurse plays significant roles in keeping health records, appraising health status of school community members, preventing and controlling communicable diseases, serving as resource person in health teaching as well as making input in formulating or domesticating school health policy.

- **Physical Educator**

The major role of the physical educator is to plan and direct fitness programmes for school community members. Obesity and overweight are becoming major public health problems and physical fitness has been reported to play protective role against weight problems.

2.4. Conclusion

This module gives an overview of school health policy in Nigeria and the implementation strategies for school health programme. The module also covers initiatives for the implementation of the school health programme in Nigeria and school administrative personnel for the school health programme.

2.5. Summary

- The National School Health Policy resulted from the 2001 Rapid School Health Assessment conducted by the Federal Ministry of Education and the WHO
- The policy was developed and launched in 2006
- Initiatives for school health policy in Nigeria include: Global School Health Initiative, Health Promoting Schools, Life Skills Initiative, Home-Grown School Feeding and Health Programme (HGSF &HP), Skill-Based Health Education Initiative, Focusing Resources on Effective School Health (FRESH) Initiative
- Stakeholders involved in the implementation of the school health programme include the government, local communities, organized private sector, international development partners, etc.
- Institutional framework for the implementation of the school health programme comprises eight committees at the national, state, local government and school levels.
- Personnel responsible for the implementation of the school health programme include the school administrator, the school health

programme director, the health teacher, school medical director, school nurse and physical educator.

2.6. Tutored Marked Assignment

1. List four initiatives for realizing objectives of school health programme in Nigeria
2. List five stakeholders for the implementation of school health programme in Nigeria
3. State four personnel responsible for the administration of school health programme

Solutions to Tutored Assignment

Initiatives of School Health Programme

1. Global School Health Initiative
2. Health Promoting Schools
3. Life Skills Initiative
4. Home-Grown School Feeding and Health Programme (HGSF &HP).
5. Skill-Based Health Education Initiative
6. Focusing Resources on Effective School Health (FRESH) Initiative

**Stakeholders for the Implementation of School Health Programme in
Nigeria**

- The government and all cognate ministries
- Local communities
- Civil society organisations
- Organized private sector
- International development partners

**State four personnel responsible for the administration of school health
programme**

- School administrator
- School medical director
- School health teacher
- Physical educator
- School nurse

2.7. References and Resources for Further Reading

Moronkola, O.A. (2012). *School Health Programme*. Ibadan: Royal People

Ogundele, B.O. (2002) School Health Education, In Z.A. Ademuwagun, J.A. AJala, E.A. Oke, O.A. Moronkola and A.S. Jegede (eds). *Health Education and Health Promotion*, Ibadan: Royal People.

Anyanwu, F.C & Okeke, S.R. (2016). Retooling Assessment Procedures for Skill-based Health Education for Young People in Nigeria: Implications for 21st Century Educational Assessment. *Universal Journal of Educational Research* 4(1):58-64

MODULE THREE

SKILL-BASED HEALTH EDUCATION

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3.1. Introduction

The present and coming centuries' predominant health problems will be lifestyle based diseases. This thus makes behavioural change strategies important in preventing and controlling health problems. Unless requisite skills for healthful behaviours are developed in learners, they may not be able to resist pressures of involving health fatalistic behaviours. Skill-based Health Education is an effective strategy towards empowering young people to developing positive health behaviour.

3.2. Objectives of the Module

At the end of the module you should be able to:

1. Define skill-based Health Education
2. State the goal and at least five objectives of skill-based Health Education in Nigeria
3. Mention at least five learning principles in skill-based Health Education
4. State and discuss at least five factors necessary for effective teaching of skill-based Health Education
5. Discuss assessment procedures for skill-based Health Education

3.3. Main Contents

3.3.1. Concept of Health Education and Skill-Based Health Education

Health Education has been described as a slippery term to define which has attracted many conceptualizations as well as misconceptions (Ogundele, 2002). Anyanwu and Okeke (2016) identified the definition proposed by Green and Kreuter (1991) as encompassing and relevant to the overall aim and processes of health education. Accordingly, they defined Health Education as any combination of learning experiences designed to facilitate voluntary action conducive to health. Health education therefore provides the consciousness-raising, concern-arousing, action-stimulating impetus for public involvement and commitment to social reform. It emphasizes the imparting of accurate information to set the stage for the adoption of sound health practices or the abandonment of poor ones. It focuses on acquainting people with the causes of disease, on health practices to reduce and avoid risk and on ways to detect a developing problem (Anyanwu and Okeke, 2016). However, the peculiarities of contemporary health problems necessitated a more responsive approach which resulted in the evolution of skill-based Health Education.

Skill-based Health Education was conceptualized to move Health Education from its traditional conceptualization of health knowledge and attitude to demonstration of vital skills; cognitive, social and manipulative, that could help in the attainment of the goals of Health Education. Skill-based health education uses a combination of participatory learning experiences that aims to develop knowledge, attitudes and especially skills needed to take positive actions needed to create healthy lifestyles (Fountain and Gilepsie, 2003). It addresses real life applications of essential knowledge, attitudes and skills, and uses interactive teaching and learning methods. Model of skill-based Health Education as conceptualized in Anyanwu and Okeke (2016) is represented in the figure below.

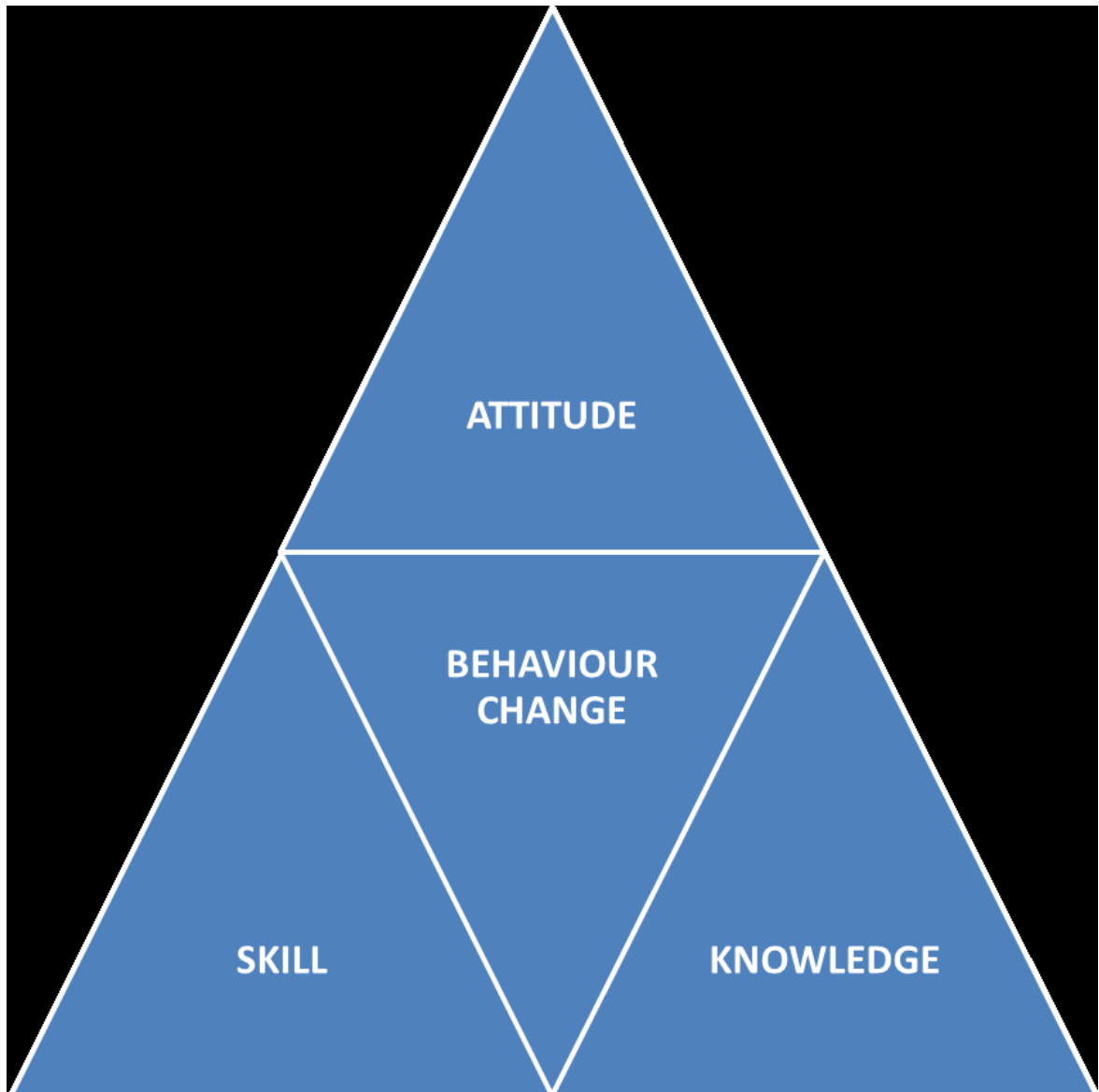


Fig. 3.1: Skill-based Health Education Model

Source: Anyanwu, F.C &Okeke, S.R. (2016). Retooling Assessment Procedures for Skill-based Health Education for Young People in Nigeria: Implications for 21st Century Educational Assessment. *Universal Journal of Educational Research* 4(1):58-64

According to the authors, the model shows the vital components of skill-based Health Education that assessment effort must cover. At the centre of the model is behaviour change which is the very essence of Health Education. When adequate knowledge and requisite skills have been acquired and positive attitude towards that particular health practice, behavior change is very likely to occur. Understanding this model and its workings has significant and relevant implication for the teaching of skill-based Health Education as the health teacher can only assess what has been taught. From the model, the Knowledge component refers to what students understand and have learned, both prior to being exposed to a curriculum and after it. It must be stated that this knowledge is functional and must be something that can be put into use in preventing disease and protecting health.

Skills refer to students' abilities to carry out specific behaviors. These are often called "life skills", because they are the interpersonal and thinking skills that enable students to handle issues that they face in real life. Skill objectives for skill-based health education with an HIV prevention focus might include being able to problem-solve when faced with decisions on

health-related matters, being able to communicate assertively when faced with pressure to have intercourse, and being able to use condoms correctly. Attitudes refer to feelings, values and beliefs that are held about the self, others, and issues. Attitudes are influenced by cultural and religious teachings, as well as school, the peer group, parents, and life experience. Attitude objectives for skill-based health education with an HIV prevention focus might include a positive self-image regarding bodily changes during puberty, motivation to engage in healthy behaviour, a sense of concern for those affected by HIV/AIDS, and willingness to consider alternatives to intercourse.

Behaviors refer to what young people actually do when confronted with decisions about health-related issues. Behavioral objectives for skill-based health education with an HIV prevention focus might include refusal to share needles if injecting drugs, consistent use of condoms when having intercourse, and delaying the age of first intercourse.

3.3.2. Goals and Objectives of Skill-Based Health Education

Goals of Skill-Based Health Education

The overall goal of skill-based Health Education according to National School Health Policy is to provide a sequence of planned and incidental

learning experiences capable of equipping learners with adequate skills to take appropriate decisions and actions that will promote their health.

Objectives of Skill-Based Health Education

The objectives of skill - based health education are to:

1. Provide functional knowledge on health issues to learners
2. Develop life skill-based learning experience to influence the development of desirable health habits and discourage unhealthy practices.
3. Stimulate health consciousness in learners to assume responsibilities for their own health
4. Instill positive health attitudes required to stimulate positive health behaviours in learners
5. Stimulate imaginative, creative and innovative thinking abilities in learners using participatory approach as a tool

3.3.3. Limitations to Effective Teaching of Skill-Based Health Education in Nigerian Schools

Although Health Education has prominently featured in the Nigerian school curriculum, its effectiveness has been greatly questioned (FRN, 2006).

According to the Federal Government of Nigeria, Health Education has been a curricular subject in Nigerian schools for decades, taught at various times as hygiene education; health science; health education; or combined as physical and health education. Despite its long years as a curricular subject, its effectiveness in influencing knowledge, attitude and behaviour on health has remained a source of concern. Some of the identified limitations to effective delivery of health education in Nigerian schools were:

- i. Dearth of health education teachers
- ii. Lack of appropriate and adequate teaching aids
- iii. Less attention paid to application of skills development as opposed to instructional method of impacting knowledge
- iv. Absence of adequate facilities for teaching and learning of health education.

3.3.4. Elements/Components of Skill-Based Health Education

The National Implementation Guideline and National Health Policy identify four critical elements for the successful implementation of skill-based Health Education:

- i. The Curriculum (teachers and pupils activities)
- ii. Teaching-Learning Materials (supplies and development)
- iii. Infrastructure – classroom, lockers and chairs, laboratory/designated rooms for practical, toilets and water points
- iv. Personnel - Health education teachers, other trained support staff.

3.3.4.1. The Curriculum

The curriculum comprises activities undertaken by teachers and learners in skill-based Health Education. The Implementation Guideline for School Health Programme in Nigeria provides that:

1. The teaching and learning of health education shall be skill-based to enhance positive health attitude and practice
2. The curriculum shall be adapted to the different age groups, background, culture and beliefs of the learners
3. Uniform curriculum shall be implemented nationwide for each level of the education system.

3.3.4.2. Teaching-Learning Materials Development

The National School Health Policy gives substantial attention to the development and utilization of appropriate resources for skill-based Health Education. It provides that:

1. Appropriate teaching-learning materials such as textbooks, teachers guide, learners workbook are to be developed for all levels
2. Teaching-Learning materials are to be distributed to teachers and learners who are the end users
3. Information, Education and Communication (IEC) materials such as fliers, posters, charts and story books shall be developed and distributed to schools
4. Health Education teachers are encouraged to improvise teaching-learning materials.

3.3.4.2. Infrastructure

Skill-based Health Education cannot be taught and learnt in vacuum. As such, there is need for infrastructures that will aid the effective teaching and learning of this vital component of the school health programme. Facilities and equipment which encourage appropriate skills development like classroom, lockers and chairs, laboratory/designated room for practical,

toilet and water point among others are to be provided to ensure effective delivery of skill-based Health Education. There is also the need to ensure the effective utilization of available facilities and equipment in line with approved minimum standard for schools. Similarly, proper maintenance mechanisms of the facilities and equipment must be put in place.

3.3.4.3 Personnel for Skill-Based Health Education

The Federal Government of Nigeria (2006) noted that in line with the National Policy on Education, NCE shall be the minimum qualification for a Health Education teacher. As a result of meeting demand for well-equipped personnel, it is important that training institutions for Health Education teachers incorporate life skills in their curricula in order to enhance the skills of these teachers. Aside the health teacher, other professionals can play supporting roles as resource persons in teaching skill-based Health Education.

Professional Competence for Teaching Skill-Based Health Education

It is important to state that teachers and other facilitators of learning involved with skill-based health education need to be competent in using interactive teaching methods.

Learning Principles in Skill-Based Health Education

Learning is an integral aspect of teaching as teaching cannot have occurred without measurable evidence to prove that learning has taken place. For teaching and learning to take place in skill-based Health Education, the following principles advanced by Tiberius and Tipping (1990) are apposite:

1. Teachers' knowledge of the subject matter is essential to the implementation of important teaching tasks
2. Active involvement of the learner enhances learning
3. Interaction between teachers and students is the most important factor in student motivation and involvement
4. Students benefit from taking responsibility for their learning
5. There are many routes to learning, teachers must make use of all possible routes to enhance learning
6. Realization of learning objectives is intricately tied to learners' and teachers' expectations
7. Learning is enhanced in an atmosphere of cooperation
8. Use of appropriate aids and materials enhance learning
9. Teaching and learning are enhanced when there is appropriate feedback

10. Feedbacks are useful when they are put into consideration for improvement of teaching and learning

11. Learning is maximized when needed time and efforts are deployed by teachers and learners

12. Teaching and learning are enhanced by previous teaching and learning experiences

3.3.5. Factors Necessary for Effective Skill-Based Health Education Delivery

Skill-based Health Education, beyond the conventional Health Education requires the following factors for its effective delivery:

1. Competent and highly motivated teachers
2. Highly motivated learners
3. Serene learning environment
4. Use of appropriate teaching and learning resources
5. Use of participatory learning approaches
6. Citing examples that are real and meaningful to learners
7. Making learning as practicable as possible beyond abstract conceptualizations

3.3.6 Methods for Skill-Based Health Education Teaching

To contribute to skill-based health education goals and achieve the objectives of skill-based health education, teaching and learning methods must be relevant and effective. Effective skill-based health education replicates the natural processes by which children learn behaviour. These include modelling, observation, and social interactions. Interactive or participatory teaching and learning methods are an essential part of skill-based health education. Skills are learned best when students have the opportunity to observe and actively practice them. Listening to a teacher while he describes a skill or reads or lectures about them does not necessarily enable young people to master them. Learning by doing is necessary. Teachers need to employ methods in the classroom that let young people observe the skills being practiced and then use the skills themselves. Researchers argue that if young people can practice the skills in the safety of a classroom environment, it is much more likely that they will be prepared to use them in and outside of school.

The role of the teacher in delivering skill-based health education is to facilitate participatory learning (that is, the natural process of learning) in addition to conducting lectures or employing other appropriate and efficient

methods for achieving the learning objectives. Participatory learning utilises the experience, opinions, and knowledge of group members; provides a creative context for the exploration and development of possibilities and options; and affords a source of mutual comfort and security that aids the learning and decision-making process (CARICOM & UNICEF, 1999).

Although many methods of teaching can be used in teaching health, specific methods for skill-based Health Education include:

1. Discussion method
2. Problem solving method
3. Numbered heads together
4. Field trip method
5. Use of social drama (edutainment)
6. Experimental method
7. Demonstration method
8. Peer education
9. Brain storming and debate

3.3.6. Assessment of Skill-Based Health Education

Assessment is concerned with examining the extent to which learners have acquired what they are expected to acquire as a result of their exposure to learning experiences. Anyanwu and Okeke (2016) argued that the present paper and pencil test predominant in educational assessment in Nigeria is not the best for skill-based Health Education. The authors argued that as a school based programme, the extent to which appropriate assessment techniques can improve the utility of skill-based Health Education programme cannot be overemphasized. They noted that present assessment tests are knowledge based thus adversely affecting the utility of skill based health education. Providing a variety of assessment strategies that go beyond knowledge tests can assist health teachers and other facilitators of learning to monitor progress of the learners, as part of routine good educational practice. Effective assessment procedures for knowledge, attitude and skills of the components of skill-based Health Education must therefore be ensured. The Federal Ministry of Education suggested that in the Skill-based Health Education programme, a plan must be developed to assess achievement of the desired outcomes. The procedure would involve quantitative assessments such as written tests and inventories; and

qualitative assessment such as direct observation and practical tests. The practical test will focus on the ability of learners to utilize health education equipment and demonstrate taught skills

3.3.7. Nigerian Government Strategies for Implementation of Skill-Based Health Education

According to the Federal Government of Nigeria, the key strategies for achieving meaningful skill-based Health Education in schools are:

- i. Advocacy
- ii. Capacity Building
- iii. Social/community mobilization
- iv. Information, Education and Communication
- v. Assessment and Supervision

3.3.9.1 Advocacy

Advocacy is required for policy makers in training institutions for Health Educators to incorporate skill-based Health Education in the curriculum. This way, Health Educators in training will be well equipped to play their desired roles effectively in the classroom. In the same vein, advocacy to states and LGAs on recruitment of qualified Health Education teachers, provision of facilities, equipment and materials are also important to ensure

that the goals of skill-based Health Education are realized. There is also need for advocacy to community Based Organizations (CBOs) and Faith Based Organizations (FBOs) to support skill-based Health Education programmes in schools.

3.3.9.2. Capacity Building

This refers to human capacity building for health teachers and include both pre-service and in-service training and human development drives. Beyond the teacher, there is also need to build capacity relating to development of Health Education resources and materials and improving on existing ones.

3.3.9.3. Social and Community Mobilization

This entails motivating the school community for active participation in skill-based Health Education programmes. This can be achieved using innovative methods like social drama on topical health issues like dangers of drug abuse, family life education as well as incentives that can enhance healthy living. It equally entails motivating the neighbourhood community for active participation in skill-based Health Education programmes, creating awareness on benefits of healthy living such as health talk, ensuring environmental sanitation, provision of toilet facilities etc.

3.3.9.4. Information, Education and Communication

This implementation strategy is concerned with development of IEC and support materials like fliers, posters, story books etc. Beyond development, these IECs must also be properly disseminated to schools and when received, they must be properly utilized to attain set goals and objectives.

3.3.9.5 Institutional Roles for Implementation of Skill-Based Health Education

3.5.1 Federal Ministry of Education (FME)

The FME is saddled with the role of strengthening the Health Education Division in order to enable it perform the following functions relevant to skill-based Health Education:

1. Co-ordinate the design, development and distribution of skill-based health education teaching-learning materials in the country;
2. Give technical support and distribute skill based health education guidelines to all levels;
3. Develop human resources for skill-based Health Education at all levels
4. Promote intra and inter-sectorial collaboration by establishing relevant fora for effective skill-based Health Education

5. Ensure that delivery of skill-based Health Education is in conformity with the National School Health policy and the National Health Policy
6. Co-ordinate all activities of line ministries and other stakeholders to ensure effective implementation of this policy
7. Monitor and evaluate infrastructure, materials, personnel and maintain database
8. Establish health instruction networking systems e.g. newsletters, health instruction forum, attending local and international meetings for sharing of experiences and exchange of information at both national and international levels
9. Mobilize resources from various sectors such as government, NGO's, donor agencies, community and other sources for supporting skill-based health education activities in the country

Universal Basic Education Commission

This agency of government has the responsibilities of setting the standards on learners performance and collaborating with FME to monitor and evaluate the skill-based Health Education programme.

State Governments

The following are the roles of state governments in implementation strategies for skill-based Health Education:

1. Advice and support LGAs on the implementation of skill-based Health Education activities such as environmental sanitation, house to house inspection and immunization programmes
2. Implement decisions made by the FME Health Education Division relating to skill-based health education issues
3. Ensure that skill-based Health Education delivery in the State is in accordance with the National Policy on School Health.
4. Conduct seminars and workshops on skill-based Health Education for teachers at various levels.
5. Support schools in the designing, pre-testing and production of culturally acceptable IEC materials.

State Universal Basic Education Boards

Collaborate with SME for monitoring and evaluation of skill-based Health Education activities.

Nigeria Educational Research and Development Council

The NERDC has the following roles:

1. Review and update periodically the skill-based Health Education curriculum
2. Assist in designing and development of skill-based Health Education materials.
3. Cooperate with the FME School Health Division in establishing skill-based Health Education networking system including production of needed texts and other print materials.

3.4. Conclusion

Skill-based Health Education is one of the components of school health programme. Its most important function is to instill functional health knowledge and develop requisite social and practical skills for healthy behaviour in learners. The main essence of skill based Health Education is to develop health consciousness, knowledge and preventive skills in learners. Realizing the goals of skill-based Health Education however goes beyond the classroom teacher but requires the collaboration of other stakeholders including governmental and non-governmental agencies.

3.5. Summary

- Health problem solving in the present and coming centuries will be largely dependent on people's behavioural choices. This makes

empowering them with requisite knowledge, attitude and skills to live healthy lifestyle imperative

- Skill-based health education uses a combination of participatory learning experiences that aims to develop knowledge, attitudes and especially skills needed to take positive actions needed to create healthy lifestyles. It entails sequential and planned learning experiences with adequate skills wherein various health concepts based on the age, interest, needs of students and community are presented to learners in order to enable them to make informed decisions and take personal responsibility to promote personal and community health.
- The major goal of skill-based Health Education is to provide a sequence of planned and incidental learning experiences capable of equipping learners with adequate skills to take appropriate decisions and actions that will promote their health.
- Limitations against effective delivery of skill-based Health Education in Nigeria include: lack of qualified Health Education teachers, lack of appropriate and adequate teaching aids, less attention paid to application of skills development as opposed to

instructional method of impacting knowledge, absence of adequate facilities for teaching and learning of Health Education.

- Principles for effective teaching and learning of skill-based Health Education include: environment influence, teaching and learning is influenced by teachers' and learners' motivation respectively, learning is maximized when it progresses from simple to complex, learning is enhanced when there is proper structuring and sequencing of instructional contents.
- For effective delivery of skill-based Health Education: competent and highly motivated teachers must be engaged, learners must be equally motivated to learn, the learning environment must support learning, appropriate teaching and learning resources must be used, learners must be fully involved in instructional process, etc.
- Effective method for delivering skill-based Health Education include: discussion method, problem solving method, numbered heads together, field trip method, social drama, experimental method, demonstration method, peer education, brain storming and debate.

- Effective assessment is key to realizing the goals and objectives of skill-based Health Education. As such, all the components of skill-based Health Education, including knowledge, attitude and skills (mechanical and social) must be assessed using relevant assessment tools and procedures.
- Strategies for implementation of skill-based Health Education include: advocacy, capacity building, Social/community mobilization, information, education and communication and assessment and supervision.

3.6. Tutored Marked Assignment

1. What is skill-based Health Education
2. State the goal and five objectives of skill-based Health Education in Nigeria
3. State five learning principles of skill-based Health Education
4. State five factors necessary for effective teaching of skill-based Health Education
5. Discuss assessment procedures for skill-based Health Education

Solution to Assignment

Skill-based Health Education

This is a properly planned and sequenced health educational programme which involves participatory teaching and learning approach designed to instill functional health knowledge, stimulate attitude formation and develop functional mechanical and social skills required for protecting, promoting and maintaining personal and community health.

Goal of Skill-based Health Education

This is to provide a sequence of planned and incidental learning experiences capable of equipping learners with adequate skills to take appropriate decisions and actions that will promote their health

Objectives of Skill-based Health Education

The objectives of skill - based health education are to:

1. Provide functional knowledge on health issues to learners
2. Develop life skill-based learning experience to influence the development of desirable health habits and discourage unhealthy practices.

3. Stimulate health consciousness in learners to assume responsibilities for their own health
4. Instill positive health attitudes required to stimulate positive health behaviours in learners
5. Stimulate imaginative, creative and innovative thinking abilities in learners using participatory approach as a tool

Learning Principles in Skill-Based Health Education

1. Teachers' knowledge of the subject matter is essential to the implementation of important teaching tasks
2. Active involvement of the learner enhances learning
3. Interaction between teachers and students is the most important factor in student motivation and involvement
4. Students benefit from taking responsibility for their learning
5. There are many routes to learning, teachers must make use of all possible routes to enhance learning
6. Realization of learning objectives is intricately tied to learners' and teachers' expectations
7. Learning is enhanced in an atmosphere of cooperation
8. Use of appropriate aids and materials enhance learning

9. Teaching and learning are enhanced when there is appropriate feedback
10. Feedbacks are useful when they are put into consideration for improvement of teaching and learning
11. Learning is maximized when needed time and efforts are deployed by teachers and learners
12. Teaching and learning are enhanced by previous teaching and learning experiences

Factors Necessary for Effective Teaching of Skill-Based Health Education

1. Highly competent teacher
2. Highly motivated learners
3. Use of participatory approaches
4. Use of relevant teaching aids
5. Citing examples that are real and meaningful to learners
6. Making learning as practicable as possible beyond abstract conceptualizations
7. Supportive learning environment
6. Discuss assessment procedures for skill-based Health Education

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MODULE FOUR

SCHOOL HEALTH SERVICES

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4.1. Introduction

Every school child as well as staff has health needs and these needs can be preventive or curative or both. The school health services constitute the component of the school health programme that focuses on meeting these health needs. Ensuring the existence of these services in school makes the school safe and habitable for both learners and school staff. This module is centered on the school health services as an integral component of the school health programme.

4.2. Objectives of the Module

At the end of this module, you should be able to:

1. State school health services as incorporating preventive and curative efforts
2. State the goal and at least five objectives of school health services
3. Mention and explain at least five scope of school health services
4. State at least five communicable diseases common in the school setting, their characteristics and how to prevent them.

4.3. Main Contents

4.3.1. Concept of School Health Services

School health services comprise preventive and curative health services provided at the school for learners and school staff with a view of protecting, promoting and maintaining their health. Members of the school community have preventive and curative health needs that only this component of the school health programme can meet. Ogundele (2002)

noted that these services combine public health and educational principles coordinated to promote the health of school members as well as that of the entire community since every school exists in a larger community. When the health status of school members are protected; the health of the community members are also positively influenced. As a result, the school health services constitute effective tool to realizing community health objectives. School health services refer to the health-care delivery system that is operational within a school or college. The services aim at promoting and maintaining the health of schoolchildren so as to give them a good start in life (Ojugo, 2005).

Although the school health services should comprise preventive and curative approaches, emphasis must be placed on preventive rather than curative efforts. As such, school health services must be designed to first prevent health problems and provide for treating health problems, should they occur. The WHO's Expert Committee on Comprehensive School Health Education and Promotion notes that "to learn effectively, children need good health." Good health supports successful learning and successful learning supports good health. 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. The purpose of the School Health Services is to help children at school to achieve the maximum health possible for them to obtain full benefit from their education. School health services are provided by the physicians, dentists, school health nurses, teachers and other appropriate personnel to appraise, protect and promote the health of members of the school community (FME, 2006).

According to Ogundele (2002), the focus and emphasis of school health services should be:

1. Identification of school members' health needs and resources to meet these needs
2. Appropriate selection and utilization of responsive health services in meeting these needs
3. Provision of health facilities, equipment and supplies
4. Control of communicable diseases with prevention at the centre of control effort
5. Health appraisal and follow-up activities
6. Management of emergency illnesses and injuries
7. Management of the health and social needs of learners with special needs

8. Overall health and well-being of school members including learners and personnel

4.3.2. Objectives of School Health Services

Objectives of school health services according to the Federal Ministry of Health (2006) are to:

1. Promote optimal health within the school setting of all persons in the school
2. Prevent diseases among all persons in the school
3. Promote healthy growth and development in all school learners.
4. Promote early detection of defects and diagnosis of diseases amongst all school community members
5. Provide prompt treatment for diseases and injuries occurring among all persons in the school
6. Provide referral and follow-up services in for school community members
7. Ensure effective counselling services for all learners, staff and parents/guardian when necessary.
8. Promote effectiveness of the school feeding service

4.3.3. School Health Centre

A school health centre is fundamental to the realization of the objectives of school health services. This is because this centre provides a setting with the physical and psycho-social arrangement needed for the discharge of school health services activities. A school health setting must have appropriate equipment and supplies for diagnosis, treatment and meeting of emergency and referral services. According to the Implementation Guidelines for School Health Programme, the school health service centre should be sited in the school premises to serve the school or not more than 10 primary and secondary schools clustered within 15 minutes' walk. The school health service centre must be easily accessible and designed to eliminate or diminish barriers to care for students and to participation by parents or guardians. Where an elaborate health centre is lacking, a sick bay or in the least, a dedicated room must be set aside for the care of children who suddenly take ill in school.

The guideline also provides that the health centres must operate every day during school/boarding hours. Hours of duty must :

- Be convenient to learners and staff and include some hours before and after school for day schools
- Allow 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.
- Provide services to students in a manner which ensure the students and his/her family's right to privacy.

Minimum Requirements for a School Health Centre

The minimum requirement for setting up a school health centre according to the Implementation Guideline for School Health Programme are:

- i. A space as wide as a 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
- ii. Provision of safe water – e.g. solar powered borehole or well
- iii. Provision of a functional refrigerator – powered by kerosene, solar or electricity as appropriate

- iv. 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.
- v. Provision of regular power supply – either electricity or solar
- vi. Provision of means of sterilisation of equipment and instruments
- vii. Provision of safe disposal of medical waste.
- viii. Constant and regular supply of stationeries for proper record keeping
- ix. Provision of adequate health record keeping system like record cards, computer system etc.
- x. Provision of transportation to referral to hospitals or centres/ visits to school clinic if located elsewhere

4.3.4. Scope of School Health Services

Scope of school health services include but not limited to:

1. Health Appraisal
2. Health Observation
3. Medical Health Examination and Health Screening
4. First Aid and Emergency Care
5. Health History and Records

6. Health Counselling
7. Health Education
8. Referral
9. Prevention of Communicable and Non-Communicable Diseases
10. Immunization Services

4.3.4.1. Health Appraisal

Health appraisal deals with efforts targeted at finding out individual health status of learners and school personnel with a view to planning and implementing needed treatment, corrective, counseling or other needed intervention programme. The main objective of health appraisal is early detection of identifiable physical, medical and mental defects that can inhibit learners' ability to benefit maximally from the educational opportunities provided in the school. Health appraisal is a major component of health services. Health appraisal according to Ogbuji (2003), is that aspect of health services which concerns itself with evaluating the health of an individual objectively. Health appraisal is of immense importance in realizing the objectives of the school health programme. It provides avenues for detecting health problems requiring attention.

4.3.4.2. Health Observation

This involves consciously examining the physical and emotional health and well-being of school children. It connotes physical inspection of the physiology and behaviours of children with a view to establishing whether there is deviation from what the normal status of health should be in relation to the peculiarities of each child. Health observation does not necessarily require the use of specialized equipment as physical assessment serve as effective observation procedure. As a result, anybody can observe the health status of a child but closer attention leading to screening might be the duty of trained professionals like doctors or school nurses. In some instances, health teachers might carry out simple screening exercises as are discussed in later section. Stunted growth, poor nutrition, acute illnesses, socio-emotional problems, orthopaedic problems are some of the health problems that can be easily observed in learners.

According to the Nigerian School Health Policy Implementation Guideline, the main purpose of teacher's health observation is to enable early identification of those children who may require special attention. Also, to measure some simple parameters, this can be used as indices for evaluating the health status of the learner. The guideline provides that a teacher should

be trained to be observant and recognize symptoms of common ailments.

The specific procedure to be carried out by teachers include:

- i. Periodic inspection of the learners to assess their general cleanliness and detect discharge in the ears/eyes, squint in the eyes, unusual colour of eyes, inability to see the blackboard, inability to hear or read properly as appropriate for age and skin rashes. It also includes early detection of tooth decay and bad breath. Learners observed with such ailments as above should be referred to the school health centre.
- ii. Measuring 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's health records file.
- iii. Periodic observation by the teacher should be carried out at the beginning of every term.

4.3.4.3. Medical/Dental Health Examination and Health Screening

Medical/dental health examination and screening are important in school health services. They are central to the realization of the objectives of this component of the school health programme. Medical/dental examination as well as health screening is done in two forms:

1. Pre-enrolment/pre-employment stage
2. Periodic medical examination/health screening

Pre-Enrolment/Employment Screening

Just as the name implies, these are the medical/dental examinations and health screening that school children or personnel are made to undertake to ascertain their health status prior to enrolling or employment. It is important to stress that the essence of this screening is not to discriminate against enrolling any child but to assess the health needs of the child in order to make appropriate arrangement(s) to meet these health needs.

According to the Nigerian School Health Programme Implementation Guideline, pre-enrolment is designed to ensure the evaluation of the health status of a child prior to entering school; that is, before commencing primary, secondary and tertiary education. The guideline also provides that 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 for Pre-Enrolment/Employment Screening:

According to FME (2006), the purposes for this screening include:

- i. To make a comprehensive appraisal of the child's health status.
- ii. To discover defects
- iii. To give valuable information to parents and school personnel
- iv. To provide professional counselling in the detection of any existing deviation from normal
- v. To indicate the extent to which school health programme should be modified to benefit the child
- vi. To determine the fitness of the child to participate in the school programmes and possibly to grant exemptions during school programmes requiring physical stress or otherwise

Pre-Entry Medical and Dental Screening shall include:

- i. Physical examination
- ii. Mental health examination
- iii. Dental examination
- iv. Visual and hearing screening, and
- v. Laboratory investigations – genotype and blood group, urinalysis, stool microscopy, haematocrit, mantoux, typhoid screening

Routine Medical Examination and Health Screening

This is a periodic assessment of the health status of learners and school staff with a way to continually appraise their health status. The essence of this exercise is to detect health needs with a view to meeting them. The teacher observation of learners earlier discussed is a good means of periodic health screening although professional screening conducted by health professionals is equally important. Periodic screening to be conducted by health/medical professionals as stipulated in the Implementation Guidelines are:

- i. 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 found squinting, tilting of the head, and with a visual acuity of less than 6/9 in one or both eyes should be referred to the specialist.
- ii. Screening to detect hearing defect should be done periodically at the school health services centre at the beginning of every session. The pure tone audiometer is often used for assessing hearing acuity. This tests acuity at tones of various frequencies (pitches) over a wide range of

intensities (loudness). Children with diagnosed hearing loss are referred to the specialist.

iii. 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.

iv. Regular de-worming exercise should be done at least once every 3 months

v. Routine immunization and missed opportunities. In addition provision of booster doses of relevant vaccines should be applied

vi. Food supplementation. E.g. Vitamin A supplementation verified and supplied to learners as when due

School Health Screening Equipment

Simple health screening equipment are important for the effective implementation of the school health services and the school health programme in general. The table below presents school health screening equipment and personnel to use them.

Health Service	Screening and Supplies	School Health Personnel
Anaemia screening (Haemoglobin test)	Haemoglobin meter	School Nurse
Anthropometric measurement	<ul style="list-style-type: none"> • Digital weighing scale • Calculator • Stadiometer • MUAC tapes • WHO standard reference charts for girls and boys: BMI for age, height for age, weight for age standard charts 	<ul style="list-style-type: none"> - Nurse - Health Teacher
Hearing and external ear examination	Screening Audiometer Otoscope/ENT set (+ ear)	<ul style="list-style-type: none"> - School Nurse - Audiologist - Medical Rehabilitation

	pieces with different sizes)	Worker
Oral health	Torch, Mouth mirror	- Nurse - Health Teacher
TB screening	Stethoscope	School Nurse
Vision and external eye examination	<ul style="list-style-type: none"> • Snellen Chart: Alphabet/E chart • Penlight with a +10.00D lens or ENT set with torch • Reading card • Occluder (eye cover) 	<ul style="list-style-type: none"> - Nurse - Health Teacher - Optometrist

4.3.4.4. First Aid and Emergency Care

Health problem arising in the school might be injuries due to man-made or natural disaster or injuries resulting from playground or other setting. Occurrence of injuries or sudden illness requires emergency care. This emergency care is given to reduce pain, complications and allowing the injury to grow worse before proper medical attention is given. In schools where there is no health facility, functional first aid or emergency care and kit are needful so as to ensure that those who need these services are taken care of. It is important that staff and learners are trained in basic first aid and emergency care skills. This is to ensure that sudden injuries are taken care of within the limit of the expertise of the aider before proper medical care.

4.3.4.5. Health History and Record

This is a process of documenting significant health information for each school community member for the purpose of monitoring and reference. According to FME (2006), record keeping 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/she enters school for the first time. The health information goes with the learner from class to class. If the learner transfers to another school the original health record is expected to go with him/her and while the duplicate should be retained by the original school.

The health record should contain;

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

It must be ensured that records contain sufficient information to justify the diagnosis and treatment and accurately document all health assessments

and services provided to the student. Each entry into the student's record must be dated and authenticated by the staff member making the entry indicating name, age and sex and (FME, 2006).

4.3.4.6. Health Counselling

Every learner as well as other members of the school community have peculiar issues that could affect their mental and social health. Managing distressing issues of life requires counseling and guidance in order to reduce the likelihood of depression and other mental health problems. Health guidance and counseling is the aspect of school health service that provides opportunity for members of the school community to have professional ground to disclose their problems and obtain help in dealing with these problems.

School children, for instance, are from various home backgrounds with varying psycho-social issues. Health counseling provides opportunities for these learners to acquire coping skills in dealing with matters relating to their personal lives which if not provided might predispose them to health damaging behaviours. When there are no opportunities for young people to obtain coping skills, they might resort to seeking

information from friends and other platforms which might not provide health-supportive solutions to their problems. A learner who seeks financial advice from another learner might take to robbery or prostitution from the negative influence and advice given. This makes provision of health counseling an important aspect of the school health service programme.

4.3.4.7. Health Education

Since school health services comprise preventive and curative services, Health Education provides important tool for the realization of the preventive aspect of school health services. Health Education entails empowering individuals and groups with functional knowledge required to stimulate positive attitude needed to adopt behaviours that promote, protect and maintain personal and community health using well-constructed and planned learning experiences as a tool. Health Education is multi-disciplinary in approach targeted at not only increasing knowledge but also empowering people to make use of the sound knowledge provided to enhance healthful daily living. Although Health Education is a component of the school health programme, it features prominently in school health service as it provides the tool

through which the preventive aim of school health service can be attained.

4.3.4.8. Referral Services

While the school is expected to provide functional preventive and curative health services to its members, there is however likelihood of having cases that are beyond the expertise or services that the school can provide. As a result, it is vitally important to ensure that referral arrangements are put in place to ensure that such cases are taken to a higher service provider or expertise. Every health worker, including those in the school setting must understand the point that their expertise stops and must never attempt to handle cases that are beyond their scope and expertise. Referral services are therefore instrumental to the realization of the objectives of the school health programme. Every school clinic should have a formal arrangement with a community health setting where cases can be referred.

4.3.4.9. Prevention of Communicable and Non-Communicable Diseases

Prevention of diseases (communicable and non-communicable) is a major focus of school health services. Although non-communicable diseases exist

in the school setting, communicable diseases pose more threat as the presence of many people in the school make transmission possible and easy. A worrisome dimension of this spread is that communicable diseases can be distributed in different communities as learners from different communities meet in the school. When there is outbreak in the school, these learners might transport the disease to their different communities. It is therefore important to ensure that effective strategies are put in place to control communicable diseases in the school with primary prevention being the most preferred strategy. Common communicable diseases, their characteristics, method of transmission, prevention and treatment are shown in the table below.

Disease	Characteristics	Transmission Mode	Prevention	Treatment
Acquired Immune Deficiency Syndrome (AIDS)	Viral disease of the immune system characterized by poor resistance to diseases resulting from lowered immunity	Unprotected sexual contact with an infected person, transfusion of infected blood, use of infected sharp objects, infected mother to unborn child	Safe sexual behaviour, screening blood before transfusion, avoid sharing sharp objects, undergoing screening during pregnancy	No cure. Treatment of the opportunistic infections (ARV) only

Athlete's foot	Fungal skin infection of the foot characterized by reddish blister in between the fingers of the foot	Contact with contaminated vehicles like foot wears or even floor	Avoid sharing personal items like shoes and socks	Anti-fungal medication
Botulism	Food poisoning due to bacteria action characterized by muscular weakness, dizziness, nausea and paralysis of the respiratory and central nervous systems	Eaten unhygienically handled or canned fruits and vegetables	Proper canning and preservation of fruits and vegetables and hygienic food handling	Ant-toxins
Bronchitis	Infection of the membranes of the bronchi by virus or bacteria resulting in fever and laboured breathing	Having close contact with an infected person or contaminated vehicle	Avoiding contact with an infected person as well as contaminated vehicles	Anti-toxins, bed rest
Chancroid	Sexually transmitted infection caused by bacteria characterized by painful chancre in the genitalia	Sexual contact with an infected person	Avoiding unprotected sexual contact	Antibiotics
Chicken pox	Viral skin infection characterized by mild fever, itchy skin, rash and blisters	Close contact with infected person or vehicle	Avoiding contact with infected person or vehicle	Use of skin lotions to reduce symptoms
Chlamydia	Sexually transmitted infection due to bacterial action characterized by inflammation of the urethra in males and vagina in females	Sexual contact with an infected person	Avoiding unprotected sexual contact	Antibiotics
Cholera	Infection of the intestine characterized by severe diarrhea, vomiting and dehydration	Ingesting contaminated food or water	Environmental and personal hygiene especially during outbreak	Rehydration, Antibiotics

Common Cold	Viral infection of upper respiratory tract characterized by coughing, sneezing and runny nose	Close contact with infected person, air-borne	Avoiding close contact with infected person and material	Bed rest, medication
Conjunctivitis	Eye infection characterized by tearing, inflammation, itching, burning sensation and pus in the eye	Contact with infected person or material	Avoiding close contact with infected person or material	Antibiotics
Diphtheria	Bacterial infection characterized by sore throat and fever	Direct contact with infected saliva or mucus	Vaccination	Antitoxins, antibiotics
Gonorrhea	Bacterial STI characterized by painful urination in males and discharge of pus from the penis. Symptoms asymptomatic in female although they can transfer the bacteria	Unprotected sexual contact with an infected person	Avoiding unprotected sexual contact	Antibiotics
Hepatitis A (Infectious Hepatitis)	Viral infection characterized by fever, fatigue, loss of appetite, abdominal pain and jaundice	Close contact with infected person or material e.g. food or water	Staying away from infected person and material, environmental and personal hygiene especially during outbreak	Bed rest
Hepatitis B (Serum Hepatitis)	Viral liver infection similar to hepatitis A although more severe than hepatitis A	Unprotected sexual contact, contact with vehicle	Avoiding unprotected sexual contact as well as other prevention strategies for Hepatitis A	Same as hepatitis A
Hepatitis, Non A,	Viral liver infection with symptoms similar to hepatitis A	Contact with infected vehicle,	Avoiding unprotected sexual contact as well as	Bed rest

Non B	and B although milder	unprotected sexual contact	other prevention strategies for Hepatitis A	
Herpes Type I	Viral mouth infection characterized by cold sores and fever blisters that appear most often on the lips	Contacted with infected saliva	Avoiding infected person or vehicle	Heals naturally although topical medications may ease symptoms
Herpes Type II	Viral infection of the genital characterized by sores on the genitalia	Unprotected sexual contact with an infected person	Avoiding unprotected sexual contact	No cure. Treatment focuses on getting rid of sores and limiting outbreaks
Influenza	Viral respiratory infection characterized by fever, headache, muscular ache, runny nose, sore throat and coughing	Close contact with infected person or material	Avoiding infected person or material, vaccination	Bed rest, use of hot liquid
Legionnaire's Disease	Bacterial infection of the lung characterized by high fever, inflammation of lungs, coughing and weakness	Contact with bacteria that grow in water or air-conditioners	Avoiding infected vehicles	Antibiotics
Malaria	Protozoan disease characterized by fever, headache and jaundice	Contact with female anopheles mosquito that carries and transmits plasmodium that causes malaria	Environmental sanitation to keep homes and surroundings free from mosquito breeding places	Drug therapy
Measles	Viral infection of the skin and respiratory system characterized by fever, dry cough, runny nose and can lead to pneumonia and	Highly contagious and as such caused by contact with infected vehicle	Avoid infected vehicles, vaccination	Bed rest

	other complications	and also air-borne		
Meningitis	Viral or bacterial inflammation of spinal and brain nerves and characterized by fever, headache, nausea, vomiting and stiff neck	Contact with infected person, vehicle, airborne	Vaccination	Drug therapy
Mono-nucleosis	Viral infection characterized by high fever, swollen glands, sore throat and weakness,	Kissing	Avoiding kissing	Bed rest
Mumps	Viral infection characterized by headache, fever, vomiting and swelling of the glands in front of the eat	Direct contact with saliva or contaminated vehicles	Vaccination	Bed rest
Pneumonia	Viral or bacterial infection of lungs characterized by inflammation of the lungs, fever, chest pains, and coughing	Contact with infected saliva	Vaccination	Antibiotics
Poliomyelitis	Viral infection of the nerves characterized by headache, vomiting, muscular stiffness, soreness and weakness	Direct contact	Vaccination	No specific treatment
Rabies (hydrophobia)	Viral infection of the brain characterized by convulsions, paralysis, restlessness, fever, excessive salivation and death	Contact with saliva from bite of an infected animal like dog, cat, fox, skunk, raccoon, bat or rat	Vaccination	Antirabies
Rheumatic fever	Characterized by sore throat, fever, inflamed joints, body rash,	Direct contact	Avoiding contact	Antibiotics

	and heart damage			
Ringworm	Fungal skin infection characterized by ring-shaped sores	Direct contact with infected person or vehicle	Avoiding contact and sharing of personal items, personal hygiene	Antifungal drugs
Rocky mountain	Characterized by high fever, severe headache, body rash, severe muscular weakness, damage to liver, kidney and lungs if untreated	Bite of an infected tick	Use of tick repellent	Antibiotics
Rubella (German measles)	Mild viral disease characterized by rash, fever, swollen glands around ears, neck and throat. It can also cause birth defect if a pregnant woman is attacked	Direct contact with saliva or mucus of infected person	Vaccination	Bed rest
Salmonellosis	Bacteria food poisoning characterized by acute diarrhea, abdominal pain, vomiting and fever	Ingesting contaminated food like improperly cooked meat, poultry and egg	Cooking meat thoroughly. Food hygiene	Medication
Scarlet fever	Bacterial infection characterized by severe sore throat, fever, vomiting, headache and body rash	Direct bodily contact	Avoiding contact	Antibiotics
Shingles	Characterized by fever and scabby sores	Direct body contact	Avoiding body contact	Skin lotion
Staphylococcal Food Poisoning	Characterized by vomiting and abdominal cramps	Ingesting contaminated foods	Food hygiene	Medication

Syphilis	An STI characterized by open sore on genitalia and body rash at early stage. Serious symptoms develop if left untreated	Sexual contact	Avoiding unprotected sexual contact	Antibiotics
Tetanus (lockjaw)	Bacterial infection of nerve cells of the spinal cord characterized by painful tightening of the muscle	Bacteria entering the body through open wounds	Vaccination	Antibiotics
Trichonosis	Food poisoning caused by parasitic worms and characterized by diarrhea, fever and profuse sweating	Ingestion of infected pork or bush meat	Proper cooking of meat	Medication, bed rest
Tuberculosis	Bacterial lung infection characterized by dry cough, weight loss, blood in phlegm and heavy perspiration at night	Contact with saliva or mucus of an infected person, ingestion of unpasteurized dairy products and from an infected cow	Vaccination	Antibiotics
Typhoid Fever	Characterized by headache, fever, weakness, loss of appetite, skin rash, constipation and diarrhea	Ingestion of contaminated food or water	Food hygiene	Antibiotics
Vaginitis	Infection of the vagina characterized by soreness, itching and vaginal discharge	Yeast infection due to hormonal changes or after use of antibiotics, sexual contact	Personal hygiene, avoiding unprotected sex	Anti-fungal cream and medication
Whooping Cough	Bacterial infection of the	Contact with saliva	Vaccination	Antibiotics

	respiratory system characterized by loss of appetite, fever, lethargy, cough, and vomiting	or mucus of infected person		
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Source: Modified from Getchel, Pippin and Varnes in Moronkola (2012).

4.3.4.10. Immunization and Vaccination Services

Immunization is a process whereby a person is made immune or resistant to an infectious disease, by the administration of an antigen. It is a major way of disease prevention and control. It involves stimulating body defense mechanisms to build anti-bodies against a particular disease causing organism. The school is an important setting for vaccination and immunization especially during the outbreak of a disease. There is need to vaccinate children against diseases as well as administer booster doses of vaccinations earlier received. While the school might not have total control regarding this service, it can however interface with local health boards and relevant health agencies of government to ensure that these services are made available in the school setting.

Importance of Immunization:

- Immunization builds and strengthens the body's immunity against diseases

- All vaccines used are WHO pre- qualified with no significant side – effects, making them safe and effective
- Fully immunized children and women are protected against diseases and cannot infect others, saving time and money
- Immunization reduces and in some cases completely eliminates some diseases thereby protecting future generations.
- A fully immunized population is a healthy and productive nation.

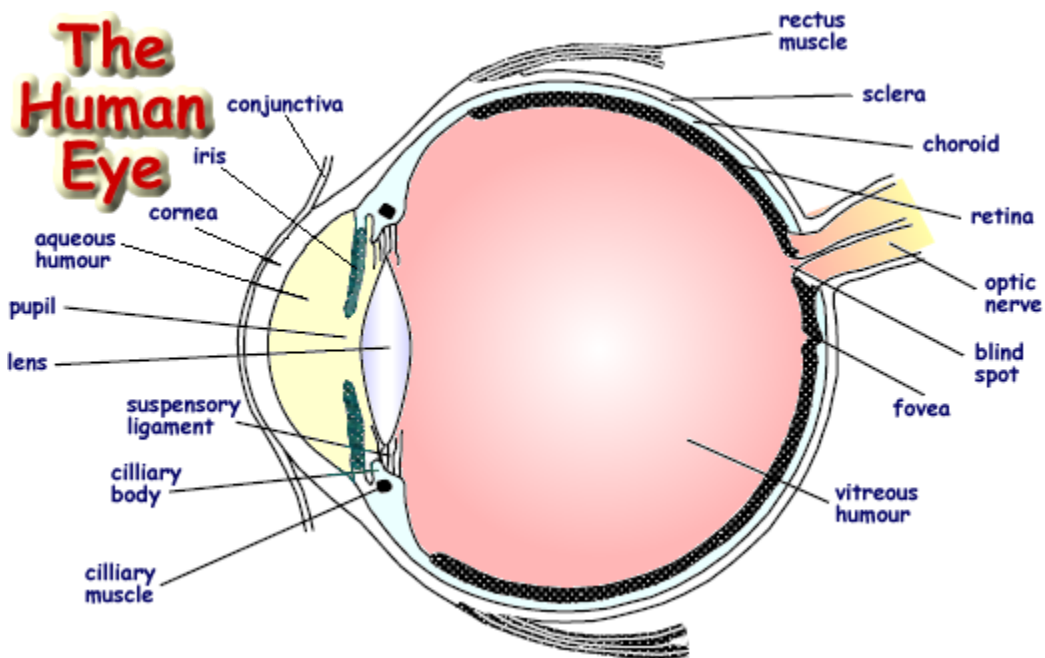
4.3.5. Health Problems of School Age Children

Learners are faced with a number of health problems of which common ones include:

1. Visual impairment
2. Hearing impairment
3. Dental disease and defects
4. Diseases due to poor personal hygiene
5. Rheumatic heart disease
6. Malaria
7. Nutrition related diseases

4.3.5.1. Visual impairment

Good vision is an important index of health and well-being. It is also important to realizing full educational objectives. Good vision is made possible by properly functioning eye. The human eye can be compared to a camera which gathers, focuses, and transmits light through a lens to create an image of the environment. While in a camera, the image is created on film; in the eye, it is created on the retina. The retina is a thin layer of light sensitive cells at the back of the eye. Aside the retina, the eye has other parts that play important roles in good vision (see fig. 4.1.).



Source: Cyberphysics available at

http://www.cyberphysics.co.uk/topics/medical/Eye/eye_ad.html

The lens of the eye refracts (bends) light that enters the eye. The cornea, which is a clear, transparent covering in the front portion of the eye also contributes to focusing light on the retina. Nerve fibers extending back from the retina's nerve cells come together behind the retina to form the optic nerve, which is a "cable" of nerve fibers connecting the eye with the brain. The optic nerve transmits messages about what we see from the eye to the brain.

Inability of the eye to function properly thereby resulting in total absence or impaired vision connotes visual impairment. Visual impairment is a term used to describe any kind of visual loss, whether the person cannot see at all or just has partial visual loss. In the case of young children or any person who cannot read letters, a tumbling "E" chart is used. The person screening asks the child to use their left or right hand to show in which direction the "fingers" of letter E on the chart are pointing: right, left, up or down. The main tool used for vision screening in school is the Snellen chart (Fig. 4.2).

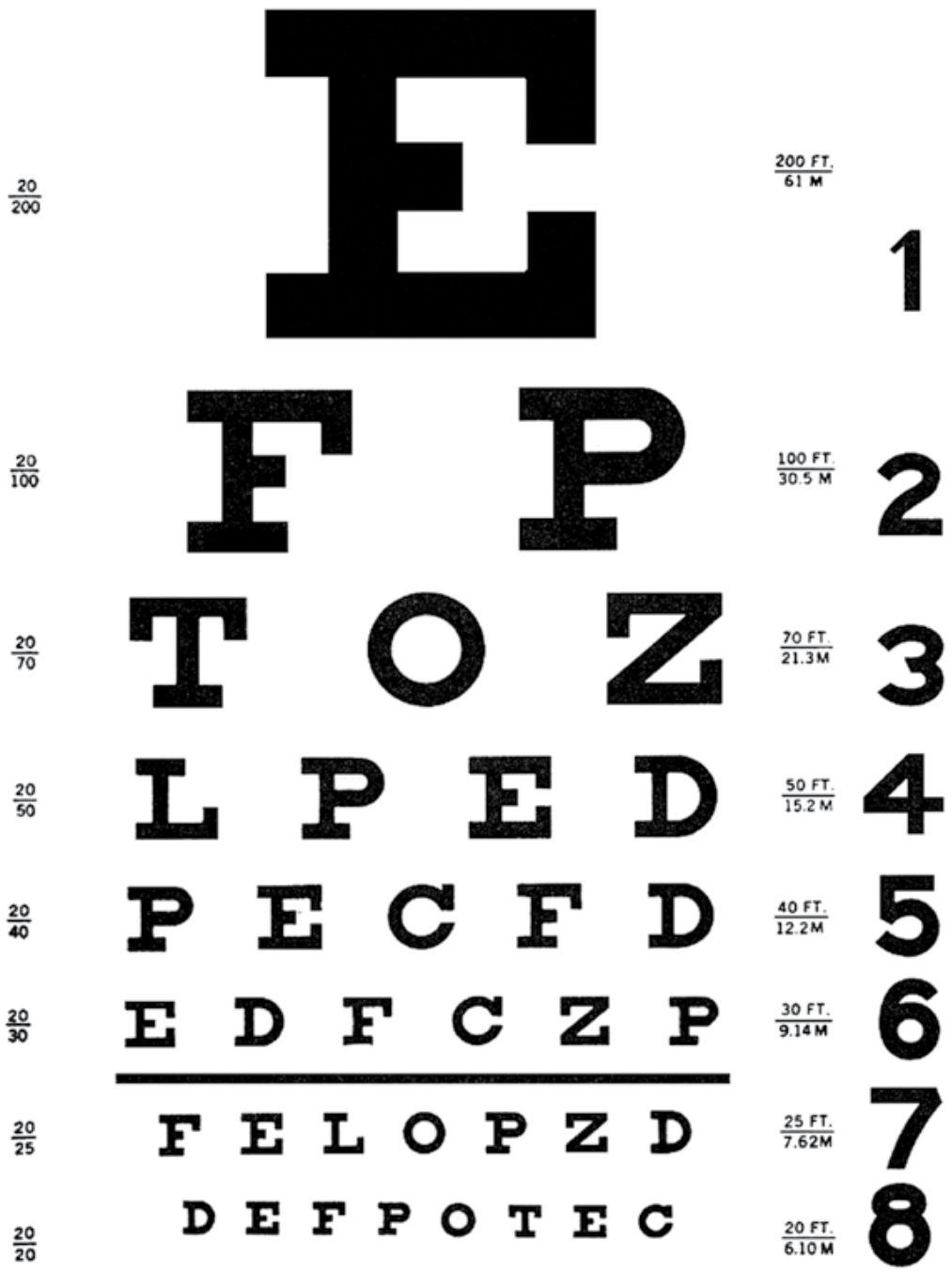


Fig. 4.2: The SnellenChart

It has several row of letters: the ones on top are largest, and the letters on bottom are the smallest. The child stands at 6 a meters distance from the chart covering one eye. The child is supposed to read from the top down to test what is the smallest row of letters the child can see on the chart.

- 6/6 vision (6/6/ visual acuity) is considered “normal” vision. If the child has 6/6 vision, this means that the child can read a letter at 6 meters that most human beings should be able to read at a distance of 6 meters.
- If the child can only read the big E on the top of the chart, her/his vision is considered 6/60. This means that the child can read a letter at 6m what a people with “normal” vision can read at 60m. In other words, the 6/60 visual acuity is very poor.

Visual Acuity based on Snellen Chart	Interpretation
6/6 to less than 6/18	Normal vision
Less than 6/18 but better than 6/60	Moderate visual impairment
Less than 6/60 but better than 3/60	Severe visual impairment
Less than 3/60 but no light perception (NLP)	Blindness

Signs of Visual Impairment in School Children

A child with poor vision may show or express the following:

- Closes or covers one eye
- Squints (narrow the eyes) or frowns when reading or copying from the board
- Has one eye that turns in or out, especially when tired
- Complains of double vision
- Avoids reading, writing or drawing, or has short attention span in reading writing, drawing or copying
- Complaining that things are blurry or hard to see (e.g. can't see what is written on the board)
- Has trouble reading or doing other close-up work or hold objects close to eyes in order to see
- Copies from a peer's book instead of the board
- Writes up or down hill on paper and/ or has excessively sloppy handwriting which becomes smaller, crowded or inconsistent in size
- Blinks more than usual or seems irritable or frustrated when doing close-up work (such as looking at books)

- Complains of eyes burning or itching after reading or writing
- Frequently rubs the eye
- Has excessively teary eyes
- Has unexplained headaches
- Leans on or feels walls to guide him/hers.

School vision screenings are important and can help to detect eye conditions that are defined as “commonly occurring,” meaning that they occur in more than 1% of the school going population. Early detection of vision problems has a demonstrated impact on quality of life for students. Traditional school vision screenings have focused on myopia (near sightedness), children need to receive an eye examination by an eye doctor (ophthalmologist) in a clinical setting that can detect issues with distance vision, close vision, color detection, and binocular vision.

Managing Visual Impairments

This depends on the severity of the impairment. While some can be managed using corrective lenses, surgery might be required to manage eye conditions like cataracts.

Preventing Visual Impairment

The following measures might be found useful:

- Regular check ups
- Detect early visual defects and refer for appropriate services
- Protect eyes from dangerous objects
- Protect eyes from sharp/strong sunlight and any other harmful light by using sunglasses or other protective glasses
- Avoid any irritant or toxic substances in the eyes
- Provide health education on prevention of eye diseases and proper care of the eyes in order to ensure better and lasting eye-sight.

4.3.5.2. Hearing Impairment

Hearing is critical to speech and language development, communication and learning and absence of this ability can affect the child in the following manner:

1. It causes delay in the development of receptive and expressive communication skills (understanding and producing speech and language).
2. The language deficit causes learning problems that result in reduced academic achievement.

3. Communication difficulties often lead to social isolation and poor self-concept.

4. It may have an impact on vocational choices.

Structure of the Ear

The ear comprises three main parts i.e. the outer, middle and inner ear. Sound travels through the air (via vibration) and is caught by the outer ear (pinnae). The sound then travels through the external meatus (ear canal) and hits the tympanic membrane (eardrum). The ear drum passes the vibrations on to the middle ear, which contains the three smallest bones in the body (malleus, incus and stapes). These little bones begin to move when the eardrum is pushing against them and pass on the vibrations further. Through this movement the sound is transferred to the inner ear. The inner ear (cochlea) has the shape of a snail. It is filled with fluid and contains many little nerve cells, called hair cells. When these hair cells are moved by the vibration, i.e. waves of the liquid, they send the sound message through the auditory nerve (cochlear nerve) to the brain, where it is processed so that we understand what was heard. A child with hearing impairment has damage to one or more parts of the ear.

Hearing Loss

There are three main types of hearing loss, namely:

- **Conductive hearing loss:**

This is an interference in the transmission of sound to the inner ear. In other words, the breakdown in sound transmission occurs in the outer ear and/or middle ear. Infants and young children frequently develop conductive hearing loss due to ear infections. This loss is usually temporary and treatable with medicine or surgery.

- **Sensorineural hearing loss:**

This is malformation, dysfunction, or damage of the inner ear (cochlea). The most common type is cochlear hearing loss which can be hereditary or arise as a result of medical problems before, during or after birth. Children with this type of hearing loss can often be helped with hearing aids, except in cases of profound deafness.

- **Mixed hearing loss:**

This occurs when there is a combination of a conductive and sensorineural hearing loss. This means that the breakdown in sound transmission occurs in the outer and/or middle ear as well as the inner ear. These cases are managed by first treating the cause of the conductive hearing loss (e.g. ear

infection) and then addressing the sensorineural hearing loss, if possible, by fitting a hearing aid.

The severity of hearing loss

The measurement of hearing involves two parameters: the frequency or pitch of the sound (low vs. high) and the intensity or loudness of the sound (soft vs. loud). The device used to measure a person's responses to sound is called audiometer. The responses to the different sounds are marked on a graph called audiogram. An audiogram plots how soft a person can hear when the hearing levels are measured.

The numbers across the top indicate the frequencies (pitch). They are measured in Hertz (Hz). Although the range of hearing in the human ear is from 20Hz to 20 000Hz, the audiogram shows the frequencies that are essential for human speech, i.e. from 250Hz to 8000Hz. The numbers from the top to the bottom measure intensity. Intensity is measured in decibels (dB) and often ranges from -10dB to 110dB. As the number increases, the intensity or loudness of the sound increases at each individual frequency. Similarly, as the number decreases, the loudness of the sound decreases at each frequency. The responses charted on the audiogram define the levels

of hearing in each ear at each frequency. They are classified into the following categories:

Range	Category of Hearing
-10dB to 25dB	Normal hearing
25dB to 40dB	Mild hearing loss
40dB to 55dB	Moderate hearing loss
55dB to 70dB	Moderate/severe hearing loss
70dB to 90dB	Severe hearing loss
>90dB	Profound hearing loss

In order to formally determine whether a hearing loss is present, hearing levels in both ears should be screened at 20dB at 500Hz, 1000Hz, 2000Hz and 4000Hz. A person who is able to hear at 20dB or softer in either ear, has normal hearing levels in both ears.

Screening for hearing loss

School-age hearing screening is an important tool in identifying children with hearing loss who were not identified at birth or who developed hearing

loss later in their lifetime. Efforts to provide consistent protocols, screener training and follow-up through school-age will help ensure that children with hearing loss are identified and managed in a timely manner. This in turn can minimize negative personal, social and academic consequences. The school or community health nurse should coordinate a school-based hearing screening programme. The planning for a hearing screening programme should include school management and where possible, other health professionals employed in education.

4.3.5.3 Dental diseases and defects

Poor oral health is a major school health problem of school going children. The rapidly growing burden of oral diseases are closely linked to unhealthy environments and to lifestyles that include diets rich in sugars, widespread use of tobacco and excessive consumption of alcohol. Most oral diseases are also dependent on clean water, adequate sanitation, proper oral hygiene and appropriate exposure to fluorides. Oral disease control and public health need to take integrated approaches to health promotion and disease prevention based on common risk factors.

Tooth decay and gum diseases constitute oral or dental health problems among school age children.

Prevention of Tooth Decay

- Reduce sugary food intake
- Eat more fruits
- Brush teeth twice a day using fluoridated tooth paste
- Visit the dentist at least twice a year for a routine dental checkup.

Tooth Decay

Tooth decay is the formation of holes or cavities on the tooth as a result of acid produced by the bacteria found in plaque.

Causes of Tooth Decay

1. High consumption of foods with high sugar content
2. Poor oral hygiene

Signs and Symptoms of Tooth Decay

- Tooth may change from white to dark or yellow colour pain/sensitivity when chewing or drinking sweet, hot or cold fluids
- Swelling due to dental abscess

Treatment of Tooth Decay

A dentist will restore teeth by using a filling or crown replacement. If the tooth is beyond repair it may be extracted

Gum Disease

On the other hand, gum disease refers to inflammation of the gums presenting with painful, reddish swelling and bleeding easily.

Causes of Gum Disease

It is caused by accumulation of plaque and calculus around the gums caused by poor oral hygiene which attracts bacteria.

Signs and Symptoms

- Swollen reddish gums, bleeding easily
- Gums may separate from teeth
- Teeth become loose
- Unpleasant smell in the mouth.

Treatment of Gum Disease

- Professional oral hygiene by scaling and root planning (cleaning between the gums and the teeth down to the roots)
- Surgery
- Mouth wash and antibiotics

- The dentist may need to use a local anesthetic to numb the gums and the roots of the teeth

Prevention of Gum, Disease

- Brush teeth thoroughly using proper techniques with toothpaste and toothbrush at least twice a day
- Rinse mouth thoroughly after every meal
- Floss teeth every day
- Brush tongue
- Visit the dentist at least twice a year for a dental check-up

Proper tooth brushing technique

Toothbrush

- Use a toothbrush with medium end-rounded bristles
- Choose the correct size in accordance to the size of your oral cavity
- Change toothbrush every 3 months or when the bristles are bent or after an infectious disease such as TB or strep throat have been diagnosed
- Use chewing stick if there is no toothbrush

Toothpaste

- Use fluoridated tooth paste

Technique

- Brush all surfaces of the teeth (buccal, lingual, proximal and occlusal)
- Brush teeth systematically starting from one side of the jaw to the other and cover only a few teeth at a time. Brush top and bottom teeth with slow circular movements.
- Hold toothbrush at an angle of 45 degrees toward the gums
- Remember to brush the tongue
- Use clean water for rinsing
- Store tooth brush in an upright, covered position to keep germs away
- Chewing sticks can be used when toothbrush and/or toothpaste is not available

4.3.5.3. Diseases due to poor personal hygiene

Personal health is the state of physical and mental fitness which enables the person to carry out various daily activities in order to fully realise one's potential as a human being. The most important precondition and at the same time the simplest way to achieve this result is to take care of one's personal hygiene. Hygiene plays an important role in preventing many bodily diseases. Prevention is achieved by maintaining personal hygiene of those parts of the human body that require special care and attention:

- The human skin, as the prime focus of hygienic cleaning;
- The apertures and holes that are exposed more to dirt – the eyes, ears, urinals and anus;
- Areas that are not exposed to sunlight and air such as the arm pits and pubic areas;
- Teeth and mouth.

How to maintain personal hygiene and personal health

The following skills must be practiced regularly in order to maintain personal health and reduce the chance of disease occurrence:

1. *Bathing:*

This entails washing all parts of the body with clean warm water and soap. Bathing cleanses the skin from excess secretion, perspiration, cumulative dirt and germs which produce bad odour. Since the skin is the body's first line of defence in its fight against germs, hygiene supports skin health. Other advantages of bathing include activating blood circulation, relaxation and feeling refreshed.

2. Hair washing:

As one of the skin's outgrowths, hair gets its nutrition from the hair roots. Upon washing and cleaning or combing one's hair, blood circulation in hair roots is activated by rubbing and massaging the scalp with the tips of one's fingers.

3. Oral and dental care:

As previously explained in dental disease section.

4. Eyes, ears and nose care:

Senses have an important role in effective communication, keeping the body and environment safe and avoiding the risks to human life and health. Eyes ought to be washed daily and their inner corners (that are close to the nose) are wiped with a cotton pad or soft handkerchief towards the outer corners in order to remove eye secretion and dust and prevent them from entering to the nasal tear canal. As for the ears, they are to be wiped (after bathing) with a smooth towel or cotton swab, which should not be pushed into the ear canal because that would cause the earwax to clog the canal and weaken hearing. The best way for nose care is to gently wipe it with a handkerchief and cleanse the area around nostrils with lukewarm water and soap.

5. *Manicure:*

Nails are to be clipped and filed in an oval way; one should avoid over-clipping the nails in order not to infect or injure the surrounding skin.

6. *Pedicure:*

Foot care takes place during bathing as the feet are rubbed and massaged with lukewarm water and soap. Longer toe nails are then clipped in a straight shape, and if available, a moisturizing cream is applied to prevent the toe nails from cracking. Another requirement for foot care is selecting/using proper and comfortable shoes.

7. *Genitalia care:*

This area needs special care for healthy and sick males and females alike. Hence, it should be washed and cleaned numerous times a day with soap and water to remove dirt caused by various types of body secretions like sweat, urine, faeces, vaginal discharges and odour. Women have to have special care for these body parts particularly during menstruation; the pads should be constantly changed. They are usually placed starting from front to back; the area is also cleaned in the same direction (from front to back). Unlike what is wrongly and commonly believed, it is preferable to take daily showers during menstruation.

Common diseases caused by poor personal hygiene: lice and scabies

Lice (Phthiriasis) can infect hair, pubic and arm-pit areas and skin. Based on the place where it exists on the human body. Phthiriasis is transmitted from one person to another upon rubbing or touching the infected body parts and using the infected person's tools and clothes. It is therefore very common in pre-primary and primary level schools. Its symptoms include severe itching of the head and body. It is very difficult to remove even when washed. Lice have to be treated, usually with Gamma Benzene Hexchloride, and combing the hair thoroughly until all nits have been removed. The procedure must be repeated after a week. The combs and brushes must also be kept cleaned at all times.

Skin infection due to Scabies

Scabies is caused by small insects which spread through touching, infected skin or clothes. Scabies make tunnels under the skin and cause little itchy bumps in the body. They frequently nest in warm places on the human body such as: areas between fingers, on the wrists, around the waist, on the genitals, and from there they easily spread to other parts of the body. Scabies itch especially during the night and cause the person to scratch

which cause further skin infections and inflammation resulting in pus. The resulting skin infection can lead to fever.

Management of Scabies

- Smear Benzyl Benzoate (BBE) lotion all over the body from the neck down (the HEW or caregiver can buy BBE in the pharmacy or get it at the health facility)
- Leave the lotion on the body overnight; do not wash it off; it will kill the scabies insects
- The next night, put lotion on again, over the child's whole body, and leave for another night
- Then do it again for a third night; the 3 day treatment will kill scabies insects and their eggs
- To keep from getting scabies again, take out all of the clothes and sleeping bedding and wash them with soap and hot water, and then put in the full sun to dry
- You need to treat the whole family and all of their clothes and sleeping bedding; if one person has scabies, everyone else will get infected.

Prevention of Lice and Scabies

It is important to educate the learners on the prevention of scabies, lice and worms:

- a. Bathe daily with soap and clean water and change clothes daily to prevent scabies and lice
- b. Always hang the bedding and clothes in the sun to prevent scabies
- c. Wash your hair regularly with shampoo to prevent lice
- d. Avoid sharing combs to prevent lice

4.3.5.4. Rheumatic fever disease

Rheumatic fever starts with a sore throat that is known as ‘strep throat’ – a throat infection caused by bacteria called Group A Streptococcus. Most sore throat get better on their own, but if sore throat is not treated with antibiotics it can cause rheumatic fever in at-risk children. RF is principally a disease of childhood (5-15 years) though it can develop in adults; both sexes are equally affected and can affect the heart, joints, skin, and brain.

The school occupies a unique position in relation to rheumatic fever control. A first attack usually occurs in children at early age and

recurrences are most common up to the age when children are leaving secondary school.

Teachers and others in daily contact with school children should be aware of early signs and symptoms which may mean acute rheumatic fever.

Risk factors for Rheumatic Fever

The two most important factors in the epidemiology of rheumatic fever are poverty and overcrowding. Furthermore, barriers to primary healthcare access and the subsequent higher burden of untreated strep sore throat infections are important factors leading to higher rates of rheumatic fever among school age children.

Signs and symptoms

- a. Fever;
- b. Painful/tender joints in the ankles, knees, elbows, and wrists;
- c. Pain in one joint that moves to another joint;
- d. Red, hot, swollen joints;
- e. Small nodules (bumps) under the skin that don't hurt;
- f. Chest pain;
- g. Rapid fluttering or pounding chest palpitations;
- h. Fatigue.

Progression to Rheumatic Heart Disease

If unrecognised and untreated, rheumatic fever can cause permanent damage to the heart, including damaged heart valves and heart failure. Recurrences of rheumatic fever are likely in the absence of preventive measures which can further damage the heart, specifically the valves in the left heart. This condition is then referred to as the rheumatic heart disease (RHD). Because of its high prevalence in developing countries, RHD is the most common form of paediatric heart disease in the world. In many countries, it is the most common cause of cardiac mortality in children and adults aged less than 40 years.

Prevention

Almost all cases of RHD and associated deaths are preventable. The prevention of the disease may be undertaken at a number of different levels. First line of prevention (primordial and primary prevention) aims to stop a disease occurring in the first place, while secondary and tertiary prevention aim to limit the progression and reduce the consequences of established disease. The following is an outline of preventative measures at these different levels:

1. Primordial prevention:

Broad social, economic and environmental initiatives undertaken to prevent or limit the impact of the throat (streptococcal A) infection in a population;

2. Primary prevention:

Reducing streptococcal A transmission and acquisition and treating the throat infection effectively;

3. Secondary prevention:

Administering regular antibiotics to children who have already had an episode of RF to prevent the development of RHD;

4. Tertiary prevention:

Intervention in individuals with RHD to reduce symptoms, disability and prevent premature death.

4.3.5.5. Malaria

Malaria is a parasitic infection caused by the Plasmodium species. It is spread through the bite of a female Anopheles mosquito. Of the five species of human malaria parasites, Plasmodium falciparum is the most virulent which account for 97% of all malaria infections in Nigeria and sub-Saharan Africa. The other types of malaria are caused by *Plasmodium vivax*, *Plasmodium ovale* and *Plasmodium malariae*

Mode of transmission and risk factors for malaria

A person gets infected with malaria following a bite from a Plasmodium infected mosquito.

Risk factors that promote malaria infection:

- a. Stagnant water around the house;
- b. Absence of mosquito nets;
- c. Bushes and grass surrounding households;
- d. Opening windows without gauze;
- e. Littering around the household in the vicinity of stagnant waters.

Signs and Symptoms of Malaria

1. Fever
2. Headache
3. Vomiting
4. Muscular ache chills
5. Fatigue

In cases of severe Malaria the following can be observed: confusion, seizures, anemia, respiratory failure, kidney failure, coma and shock. If not treated immediately, malaria can lead to death. Therefore, school

communities are advised to visit the nearest health facility for early treatment as soon as symptoms are recognized.

Control and prevention of malaria

- a. Indoor residual spraying of houses with insecticides;
- b. Long lasting Insecticidal nets in malaria prone areas to control adult mosquitos;
- c. Pouring oil or chemicals into selected water bodies to control mosquito larvae;
- d. Prophylaxis when traveling to areas where malaria is endemic.

Other important interventions include use of mosquito repellants and traditional herbs to repel mosquitoes and also wearing long sleeve clothes at night when outdoors as well as community mobilization and advocacy on malaria prevention.

4.3.5.6. Nutrition related diseases

Nutritional diseases constitute significant health threat to school age children. This has been extensively discussed in school feeding services module. Please refer to it.

4.4. Conclusion

This module focused on the preventive and curative services that make up the school health services. While curative aspect of school health service is important and must be given due attention; emphasis should however be placed on preventive services as there is no need curing what can be prevented. For school health services to be meaningfully delivered there is need to providing a school health centre. This centre provides the physical and psychological support needed to provide health services to members of the school community. Beyond physical health, mental health must equally be given due attention in the overall school health services provided in the school setting.

4.5. Summary

- School health services are the preventive and curative health services provided at the school setting with the aim of protecting, promoting and maintaining the health of the school community members.
- The existence of a school health centre with minimum standard is the single most important school health service provision of strategy
- Services provided in school health services include but not limited to: Health Appraisal, Health Observation, Medical Health

Examination and Health Screening, First Aid and Emergency Care, Health History and Record, Health Counselling, Health Education, Health Referral, Prevention of Communicable and Non-Communicable Diseases.

4.6. Tutored Marked Assignment

1. What are school health services?
2. State the overall goal and five objectives of school health services
3. Mention six services provided in school health services
4. State five communicable diseases common in the school setting, their characteristics and how to prevent them.

Solution to Assignment

School Health Services

These are the preventive and curative health services provided in the school setting for learners and school personnel with the aim of protecting, promoting and maintaining their health. Although these services combine preventive and curative approaches, emphasis should be on preventive strategies as there is no need wasting time, resources and efforts curing what one can prevent.

Goals and Objectives of School Health Services

The overall goal of school health services is ensuring optimum health status for learners and school personnel using preventive and curative approaches.

Notable objectives of school health services include:

1. Promotion of optimal health level for school community members
2. Prevention of diseases among all persons in schools
3. Promotion of healthy growth and development in learners.
4. Early detection of defects and diagnosis of diseases among everyone in the school
5. Provision of prompt treatment for diseases and injuries occurring among all persons in schools
6. Referral and follow-up services in schools
7. Counselling services for all learners, staff and parents/guardian when and where necessary.

Health Services Provided In School Health Services

1. Health Appraisal
2. Health Observation
3. Medical Health Examination and Health Screening

4. First Aid and Emergency Care
5. Health History and Record
6. Health Counselling
7. Health Education
8. Health Referral
9. Prevention of Communicable and Non-Communicable Diseases

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MODULE FIVE

SCHOOL FEEDING SERVICES

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5.1. Introduction

Nutrition is important in learning as learning tasks require concentration and high mental capacity. Both concentration and high mental capacity are dependent on nutritional status. Healthy eating patterns are essential for learners to achieve their full academic potential, full physical and mental growth, lifelong health and well-being. Healthy eating is demonstrably linked to reduced risk for mortality and development of many chronic diseases as adults. According to the Federal Ministry of Education (2006), schools have a responsibility to help learners and staffs establish and maintain lifelong, healthy eating patterns. Well-being and well-implemented school nutrition programmes have been shown to positively influence learners' eating habits. The school feeding service is that component of the school health programme that is concerned with the nutritional health of learners and school personnel.

5.2. Objectives of the Module

At the end of this module, you should be able to:

1. Describe school feeding service
2. State the key elements in school feeding service

3. State the aim and objectives of school feeding service
4. State at least five nutritional problems of a school age child in Nigeria
5. Mention components of school feeding service
6. State at least 10 essential vitamins and minerals each needed to meet the nutritional requirements of school age children in Nigeria
7. State at least five strategies for meeting the nutritional requirements of school age children in Nigeria

5.3. Main Contents

5.3.1. Concept of School Feeding Services

Nutritional health status is an important factor in overall health and well-being of school community members. Neither learners nor teachers will be able to carry out learning or teaching tasks meaningfully when their nutritional health status cannot support them. Specifically, Anyanwu (2015) reported that nutritional behaviour of learners significantly influences their academic performance. This implies that learners with improved nutritional status will have improved academic performance and vice-versa. A child's nutritional status affects cognitive performance and test scores; illness from parasitic infection results in absence from school, leading to school failure

and dropping out (Vince-Whitman et al., 2001). The school feeding service is therefore designed to effectively take care of the nutritional needs of members of the school community. According to FME (2006), the school feeding service shall provide one nutritionally adequate meal each school day for all school children. The meals shall be prepared from food items produced or sourced packaged, processed, stored and utilized locally. Key elements of school feeding services according to the Federal Ministry of Education are:

- i. Food security: in terms of availability, accessibility, affordability and sustainability
- ii. Standardization of meals for different local environments
- iii. Food storage, preparation and service
- iv. Nutrition education and home economics
- v. Food procurement
- vi. Food sanitation, quality and pest control

5.3.2. Objectives of School Feeding Services

The aim of the school feeding service is to provide learners with a daily supplementary adequate meal that will improve their health and nutritional

status for effective and sound learning achievement. The objectives of the school feeding service are to:

- i. Reduce hunger and malnutrition among learners
- ii. Enhance participatory learning
- iii. Contribute to increased school enrolment, attendance, retention and completion.
- iv. Serve as avenue for teaching basic hygiene and nutritional facts to learners.

5.3.3. Components of School Feeding Service

The Implementation Guidelines for School Health Programme in Nigeria identify four important components of services that the school feeding service must ensure. These components include nutritional services, feeding services, food procurement services and food inspection services as stated below.

5.3.3.1 Nutritional Services

The guideline provides that a nutritionist/dietician from the ministry of health in collaboration with the school based management committee are to produce a daily menu that is culturally acceptable and locally sourced for

school feeding service. Menu as indicated in the committees work plan must meet with the minimum criteria of supplying at least one third (1/3) of the daily requirements of all major and micro nutrients for children. Basic food items available in the communities therefore, should be combined with leafy vegetables, fish or meat and vegetable oil. Apart from carbohydrate, the preferred diet should include other sources of protein other than fish and meat such as beans, soya beans, eggs, fresh milk, yoghurt, cocoa drink etc.

5.3.3.2 Feeding Services

The implementation guideline recommends that each school need to have a standard well-equipped kitchen. The kitchen shall be appropriately sited within the school premises with adequate:

- i. Provision of safe water
- ii. Provision of well ventilated store
- iii. Provision of functional freezer, refrigerator for perishable items
- iv. Provision of power supply
- v. Provision for safe waste disposal
- vi. Provision of school farms and gardens

The feeding should take place in the dining room / hall where the meals are served under the supervision of the teachers with appropriate teaching on health habits.

5.3.3.3 Food Procurement Services

The school based monitoring committee is expected to liaise with local farmers to establish a mechanism for coordinating and monitoring procurement activities. As much as possible, food should be obtained by direct procurement and payment made to boost further food production. Purchase of foodstuff and other requirements is to be done by at least three members of the school committee on a rotational basis after a market survey would have been conducted for transparency purpose.

5.3.3.4 Food Inspection Services

There is need for safe and hygienic handling of food. This is to be ensured by this component of the school feeding service. It is important that food handlers or vendors, if engaged, must have up-to-date health certification to reduce occurrence and spread of food-borne diseases.

5.3.4. Nutritional Problem of School Age Children

Malnutrition is the generic term that represents nutritional problems in school age children. It could be defined as an impairment of health resulting from deficiency, excess or imbalance of nutrients. Although Malnutrition affects people of every age, school age children including infants, children, and adolescents may suffer the most because many nutrients are critical for normal growth and development. Older people may develop malnutrition because of ageing, illness, and other factors which can lead to poor appetite, thereby affecting their nutrient intake.

There are two types of malnutrition: over-nutrition and under-nutrition.

Over-Nutrition

Over-nutrition occurs when nutrient intake is higher than what is needed.

Over-nutrition can lead to overweight and obesity, which are conditions that increase a person's risk of diabetes, hypertension and cardiac disease.

A common over-nutrition problem among school age children is obesity.

Obesity

The human body requires different nutrients for its normal functions, survival, growth, development and activity. These nutrients are however required in specific amounts and proportions. The body's nutrient

requirements are expressed on a daily basis and adequate nutrition is achieved when there is a balance between the amount of nutrients taken by the body and the amount the body requires or can make use of. When there is such a balance, a person is likely to have normal weight for height expressed as Body Mass Index (BMI) ranging between 18.5 and 24.9.

When a person takes more calories than what the body needs it creates an imbalance which results in over-nutrition. This means that the body is taking more energy than it is able to spend during physical activity thus leading to excessive weight gain. In such circumstances, a person is likely to become overweight. Obesity is a condition that develops due to prolonged imbalance between energy intake and energy expenditure. A person is said to be obese when the BMI is equal to or greater than thirty (≥ 30). Just like with being overweight, obesity occurs when the dietary intake of energy and other nutrients is higher than what the body uses for physical activity, work and body processes leading to an increased amount of stored energy mainly in form of fat.

A person becomes obese as a result of the excessive accumulation of body fat. This accumulation is promoted by environment that supports high consumption of nutrients but low physical activity as well as inadequate biological and behavioural responses to such environment. This environment has been named obesogenic environment (Lake and Townshend, 2006; Townshend and Lake, 2017). Obesity among school age children is increasingly becoming a major public health concern especially among high socio-economic class families (Anyanwu, Akinpelu and Okeke, 2018). It has assumed an epidemic situation which threatens health benefits that have contributed to increased longevity globally (UNICEF, WHO & World Bank, 2015). According to UNICEF, WHO and World Bank, (2015), the number of children who are overweight or obese in Africa has nearly doubled since 1990, increasing from 5.4 million to 10.3 million. Accordingly, the continent accounted for a whopping 25% of global childhood overweight and obese children in 2014 (Anyanwu et al., 2018). Obesity has been reported to pose serious danger to the health and well-being of children as well as affect their health status at adulthood (Litwin, 2014).

Risk factors for obesity:

1. Heredity/Genetic make-up: Naturally some people are more likely to gain weight than others on comparable energy intake. The genetic make-up may also influence the way the body utilises energy in different processes.
2. Food choices: A person is likely to become overweight when he or she eats too much starchy foods such as porridge, cassava, rice and potatoes; foods with too much fat (especially saturated fats) such as margarine, butter, cheese, fatty milk; and junk foods like chips, sugary drinks, sweets. Too much intake of refined carbohydrates such as sugar, sweets, honey, jam, white bread, instant pasta, cake, tart, pastries, puddings and rich pudding sauces may increase one's chance to become obese.
3. Cooking methods: Methods of cooking that require a lot of fats like deep frying; stewing of fatty meat or stewing by adding excess oil (using a lot of fat) may also increase the risk of becoming obese.
4. Lack of physical activity/sedentary living: Physical activities such as walking, jogging, running, cycling and manual work make the body use more energy. When a person is not physically active and is taking more foods that are rich in energy, he or she is more likely to become obese.

5. Malnutrition in early stage of life: If a person was malnourished in early childhood, he or she is more likely to become overweight. Children who are stunted (too short for their age) have a much greater risk of becoming overweight and developing chronic disease as adults.

Prevention of Obesity

In order to prevent obesity, modifiable factors associated with the health condition like diet and physical exercise must be given due consideration. While factors like genetic make-up cannot be changed, it can however be effectively managed. Individuals who perceive that they have genes for becoming overweight must monitor their diet and increase their physical activeness in order to reduce the likelihood of becoming obese.

Under-Nutrition

On the other hand, under-nutrition occurs when nutrient needs are higher than nutrient intake. It is a state in which physical function of an individual is impaired to the point where he/she can no longer maintain adequate bodily performance processes such as growth, physical work, and resistance to infection. Under-nutrition contributes directly and indirectly to illness and death of children. Three common forms of under-nutrition in school age children are shown in the table below:

Table 5.1: Forms of Under-Nutrition among School Age Children

Form of Under-Nutrition	Measurement Index	Causes
Wasting (thinness) also known as Acute malnutrition	Absence of appropriate Weight for Height	Result of recent weight loss or failure to gain weight
Stunting (shortness) also known as Chronic Malnutrition	Poor Height for Age	Result of inadequate nutrition over a long period of time, usually not apparent until after 2 years of age
Underweight known as Acute and chronic	Poor Weight for Age	Can result from recent weight

malnutrition		loss or long term inadequate nutrition
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Source: UNICEF, (2013).

Stunting is a common under- nutritional problem among school age children just as over-weight for over-nutrition. It is caused by a variety of factors:

1. poor dietary intake either due to poor infant feeding practices or food insecurity
2. lack of or poor sanitation and hygiene practices
3. environmental factors that impact on food supply and food choices such as floods, drought and other natural disasters
4. social and political factors such as policies about food imports and pricing
5. policies about access to health care
6. agricultural factors such as variety and amount of food produced at small scale household level, which if interrupted can result in food insecurity.

Stunting is a consequence of multiple factors that are often linked to poverty. While stunting can lead to developmental problems it can be

prevented. Interventions during the first 1000 days of a child's life, which is from conception to 2 years old, can prevent or reverse the negative effects of stunting. After age 2, the developmental problems caused by stunting are likely to be permanent and therefore result in children not reaching their full potential. Children who are stunted often do less well in school and therefore have fewer professional opportunities later in life and earn less, perpetuating poverty in their families. Low income, lack of healthcare and reduced access to proper nutrition will continue to impact the health of their children, thereby perpetuating the cycle of under-nutrition from generation to generation.

5.3.5. Essential Dietary Vitamins and Minerals for Meeting Nutritional Needs of School Age Children

Vitamins and minerals are essential for proper nutritional health of individuals. As classes of food, they are referred to as welfare foods as they play important roles in body processes, health and well-being. Unfortunately, deficiencies in vitamins and minerals constitute significant proportion of nutritional problems in school age children. Essential vitamins and minerals for meeting the nutritional needs of school age

children aside the nutrients from primary food classes like carbohydrate, protein and fat and oil are reported in the three tables below.

Table 5.2: Essential Vitamins for School Age Children (Fat Soluble)

Vitamin	Sources	Functions in the Body	Deficiency Signs and Symptoms
Vitamin A	<ul style="list-style-type: none"> - Organ meat - Whole milk - Cheese - Egg yoke - Yellow fruits - Green vegetables 	Maintains healthy: <ul style="list-style-type: none"> - Skin - Eyes - Bones - teeth 	<ul style="list-style-type: none"> - Rough skin - Fatigue - Eye infections - Night blindness
Vitamin D	<ul style="list-style-type: none"> - Fortified milk - Eggs - Exposure of skin to sunlight 	<ul style="list-style-type: none"> - Absorbs phosphorus - Maintains bones and teeth 	Ricket which is a condition characterized by poor bone and teeth development
Vitamin E	<ul style="list-style-type: none"> - Wheat germ - Vegetable oils - Legumes - Nuts - Dark green vegetables 	<ul style="list-style-type: none"> - Protects the red blood cells - Acts as co-enzymes 	<ul style="list-style-type: none"> - Rupture of red blood cells - Fats deposit in muscles

Vitamin K	<ul style="list-style-type: none"> - Spinach - Kale - Cabbage - Pork - Liver 	Normal blood clotting	<ul style="list-style-type: none"> - Slow clotting of blood - Hareorrhage especially in new borns
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Table 5.3: Essential Vitamins for School Age Children (Water Soluble)

Vitamin	Sources	Functions in the Body	Deficiency Signs and Symptoms
Vitamin B1 (Thiamine)	<ul style="list-style-type: none"> - Pork - Whole grain - Organ meat - Milk - Egg 	<ul style="list-style-type: none"> - Maintains healthy appetite - Aids digestion - facilitates in nervous coordination 	<ul style="list-style-type: none"> - beri-beri
Vitamin B2 (Riboflavin)	<ul style="list-style-type: none"> - milk - eggs - whole grain - vegetables - organ meat 	<ul style="list-style-type: none"> - produces energy in cells - improves appetite - aids nerve functions 	Cheilosis (cracking lips, and skin)
Niacin (Nicotinic)	<ul style="list-style-type: none"> - red meat 	<ul style="list-style-type: none"> - maintains 	<ul style="list-style-type: none"> - pellagra

acid)	<ul style="list-style-type: none"> - organ meat - fish - enriched bread - green vegetables 	<ul style="list-style-type: none"> metabolism - aids digestion - improves nervous functions - facilitate skin health 	
Vitamin B6 (Pyridoxine)	<ul style="list-style-type: none"> - red meat - liver - whole grains - vegetables 	<ul style="list-style-type: none"> - maintains sodium and phosphorus balance 	<ul style="list-style-type: none"> - aneamia - inflamed skin - nausea - nervousness
Panhotenic Acid	<ul style="list-style-type: none"> - organ meat - liver - whole grain - intestinal bacteria 	<ul style="list-style-type: none"> - maintains normal blood sugar level - facilitates energy release 	<ul style="list-style-type: none"> - weakness - nausea - loss of appetite - susceptibility to infections
Biotin	<ul style="list-style-type: none"> - organ meat - poultry - egg yolk - fish - peas - banana 	<ul style="list-style-type: none"> - metabolizes carbohydrate and other B vitamins 	<ul style="list-style-type: none"> - skin disorders - anaemia - muscle pain - poor appetite
Vutamin B 12	<ul style="list-style-type: none"> - organ and muscle meats - cheese - eggs 	<ul style="list-style-type: none"> - metabolism - healthy red blood cells 	<ul style="list-style-type: none"> - stunted growth - inflamed nerves - pernicious anemia

	- fish		
Folic Acid (Folacin)	- green vegetables - liver - whole grains - legumes	- produces proteins and red blood cells	- inflamed tongue - diarrhea
Vitamin C (Ascorbic acid)	- citrus fruits - melons - green vegetables - potatoes	- healthy teeth and gums - aids wound healing - aids iron absorption	- scurvy

Source: Modified from Getchell et al., in Moronkola (2012).

Table 5.4.: Dietary Minerals

Minerals	Sources	Functions in the Body	Deficiency Signs and Symptoms
Calcium	- milk - cabbage - oysters - salmon	- maintains healthy bones and teeth - aids blood clotting - improves nerve and heart	- slow blood clotting - soft bones - rickets in children - osteoporosis in adults

		activities	
Phosphorus	<ul style="list-style-type: none"> - milk - egg yolk - meat - poultry - whole grain - cereals - legumes - nuts 	<ul style="list-style-type: none"> - develops bones and teeth - aids muscular activity - improves energy metabolism 	<ul style="list-style-type: none"> - Fragile bones and teeth - Loss of weight - Loss of appetite - Rickets
Sodium	<ul style="list-style-type: none"> - Table salt - Meat - Poultry - Fish - Eggs - Meat 	<ul style="list-style-type: none"> - Stimulate nerves - Aids water balance outside the cells - Improves heart rhythm 	<ul style="list-style-type: none"> - Nausea - Exhaustion - Muscular cramps
Potassium	<ul style="list-style-type: none"> - Meat - Poultry - Cereals - Fruits - Vegetables 	<ul style="list-style-type: none"> - Stimulate nerves - Aids water balance in the cells - 	<ul style="list-style-type: none"> - Muscular weakness - Respiratory failure - Abnormal heart beat
Chlorine	<ul style="list-style-type: none"> - Table salt - Meat - Milk 	<ul style="list-style-type: none"> - Maintains water balance in the body 	<ul style="list-style-type: none"> - Loss of hair - Loss of teeth - Poor digestion

	<ul style="list-style-type: none"> - Eggs 		
Magnesium	<ul style="list-style-type: none"> - Legumes - Whole grains - Milk - Meat - Leafy vegetables 	<ul style="list-style-type: none"> - Maintains muscular and nervous functions - Constituent of bones - Improve energys metabolism 	<ul style="list-style-type: none"> - Mental/emotional disorder - Muscular disorder
Iron	<ul style="list-style-type: none"> - Organ meats - Whole grains - Dark green vegetables - Legumes - Prunes 	<ul style="list-style-type: none"> - Formation of red blood cells - Facilitate transport of oxygen 	<ul style="list-style-type: none"> - Mental/emotional disorder - Muscular disorder
Sulphur	<ul style="list-style-type: none"> - Egg - Meat - Milk - Cheese - Nuts - Legumes 	<ul style="list-style-type: none"> - Constituents of amino acids and B vitamins 	<ul style="list-style-type: none"> -
Copper	<ul style="list-style-type: none"> - Liver - Shellfish - Nuts 	<ul style="list-style-type: none"> - Formation of red blood cells - Iron absorption 	<ul style="list-style-type: none"> - Anemia - Bones and nerves disorders

	<ul style="list-style-type: none"> - Legumes - Whole grains 		<ul style="list-style-type: none"> - Sores on the skins
Manganese	<ul style="list-style-type: none"> - Legumes - Nuts - Whole grains - Vegetables - Fruits 	<ul style="list-style-type: none"> - Bone development - Activates enzyme 	<ul style="list-style-type: none"> - Nervousness - Muscular excitability
Iodine	<ul style="list-style-type: none"> - Iodized salt - Sea food 	<ul style="list-style-type: none"> - Aids functions of the thyroid gland 	<ul style="list-style-type: none"> - Goiter - Loss of physical and mental vigour
Zinc	<ul style="list-style-type: none"> - Sea food - Meats - Milk - Poultry - Organ meats - Wheat germ 	<ul style="list-style-type: none"> - Aids healing - Forms enzymes 	<ul style="list-style-type: none"> - Retarded growth rate - Delayed wound healing
Fluorine	<ul style="list-style-type: none"> - Fish - Flouridated water 	<ul style="list-style-type: none"> - Strengthens bones and teeth 	<ul style="list-style-type: none"> - Dental decay
Selenium	<ul style="list-style-type: none"> - Meats - Egg - Milk 	<ul style="list-style-type: none"> - Keeps vitamin E in cells 	<ul style="list-style-type: none"> - Premature aging - Stunted growth

	- Seafood		
	- Cereals		

Source: Modified from Getchell et al., in Moronkola (2012).

5.4. Conclusion

Nutrition plays strategic role in health and educational attainment of learners. Developing countries like Nigeria grapple with socio-economic challenges that leave many children hungry and deficient of vital minerals and vitamins. The school setting can provide important platform to meet the basic nutritional needs of children through nutrition education and school feeding services. There is need for stakeholders to fully explore the opportunity provided by the school in meeting the nutritional needs of school children.

5.5. Summary

- Nutritional health status is an important factor in overall health and well-being of school children and staff. Neither learners nor teachers will be able to carry out learning or teaching tasks meaningfully when their nutritional health status cannot support them.

- Nutritional needs of school children can be met through a combination of nutritional education alongside school feeding services
- Key elements in school feeding services include: Food security (availability, accessibility, affordability and sustainability), Standardization of meals for different local environments, Food storage, preparation and service, Nutrition education and home economics, Food procurement, Food sanitation, quality and pest control.
- The aim of the school feeding service is to provide learners with a daily supplementary adequate meal that will improve their health and nutritional status for effective and sound learning achievement.
- The objectives of the school feeding service are to: reduce hunger and malnutrition among learners, enhance participatory learning, contribute to increased school enrolment, attendance, retention and completion, serve as avenue for teaching basic hygiene and nutritional facts to learners

- Components of school feeding services include: nutritional services, feeding services, food procurement services and food inspection services
- 1. Common nutrition related health problems among learners in Nigeria include: Protein-Energy Malnutrition (Marasmus), Kwashiorkor, Pellagra, Short Term Hunger, Anorexia Nervosa
Micro-Nutrients Deficiencies,

5.6. Tutored Marked Assignment

1. What is school feeding service?
2. State the key elements in school feeding service
3. State the aim and objectives of school feeding service
4. State at least five nutritional problems of a school age child in Nigeria
5. Mention components of school feeding service
6. State at least 10 essential vitamins and minerals each needed to meet the nutritional requirements of school age children in Nigeria

Solution

School Feeding Services

These are specialized services coordinated and implemented in the school to meet the nutritional requirements by providing at least once nutritious meal to children in the school.

Key Elements in School Feeding Service

Key elements of school feeding services according to the Federal Ministry of Education are:

- i. Food security: in terms of availability, accessibility, affordability and sustainability
- ii. Standardization of meals for different local environments
- iii. Food storage, preparation and service
- iv. Nutrition education and home economics
- v. Food procurement
- vi. Food sanitation, quality and pest control

Aim and Objectives of School Feeding Service

The aim of the school feeding service is to provide learners with a daily supplementary adequate meal that will improve their health and nutritional status for effective and sound learning achievement. The objectives of the school feeding service are to:

- i. Reduce hunger and malnutrition among learners
- ii. Enhance participatory learning
- iii. Contribute to increased school enrolment, attendance, retention and completion.
- iv. Serve as avenue for teaching basic hygiene and nutritional facts to learners.

Nutritional Problems of School Age Children in Nigeria

Notable problems of school age children in Nigeria according to Ogundele (2004) include

1. Protein-Energy Malnutrition (Marasmus)
2. Kwashiorkor
3. Pellagra
4. Short Term Hunger
5. Anorexia Nervosa

6. Micro-Nutrients Deficiencies
7. Obesity
8. Stunted growth

Components of School Feeding Service

These include:

- 1 Nutritional services,
- 2 Feeding services,
- 3 Food procurement services and
- 4 Food inspection services

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MODULE SIX

HEALTHFUL SCHOOL ENVIRONMENT

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6.1. Introduction

Every individual is a product of his/her genetical make-up and the living environment. This implies that aside gene; the environmental is an important determinant of the health status of an individual. The school community members including learners and school staff live and operate within physical, biological, social and psychological environment that significantly influences the extent to which they perform their obligatory and non-obligatory roles as well as their overall health. Unfortunately, many people erroneously see the environment as comprising visible things in the surrounding. In actual sense, the environment transcends surroundings and entails the social interactions and relationships that exist in the school as well as the psychological environment in which school members operate. Supportive environment is crucial not only for health but also for discharging one's functions. Healthful school environment is thus conceived as an effective means through which healthful and supportive environment can be ensured in the school setting.

6.2. Objectives of the Module

At the end of this module, you should be able to:

1. Give an overview of healthful school environment
2. State the goal and objectives of healthful school environment
3. Mention at least five indices for characterizing a healthful school environment
4. List and explain the components of healthful school environment

6.3. Main Contents

6.3.1. Concept of Healthful School Environment

The school environment, just like every other environment plays crucial role in the health and well-being of school community members. Every activity or function carried out in the school setting is done in an environment. Ogundele (2002) defined healthful school environment as encompassing all the various physical, emotional and social aspect of the school and the measures provided at the school setting to ensure the health and safety of learners and school personnel. The conditions of the school environment cited in this conceptualization include physical environment (building, illumination, air quality, sanitation and seating arrangement) and socio-emotional environment (teacher-teacher, teacher-pupil, and pupil-pupil relationships as well as the school meal programme). Citing the indices of a healthful school, Akani et al., (2001) identified physical

environment of the school, emotional climate and the availability of sanitary facilities and equipment.

A healthful school environment according to the Federal Ministry of Education (2006) is an environment which embraces the health and safety of learners and other members of the school community. It is an essential factor in achieving the overall goals of the School Health Programme (SHP) because it has implications for all areas of school health. It attends to the physical and aesthetic surroundings, psychosocial climate and culture of the school community. According to the National School Health Implementation Guidelines, the school environment can be physical or psychosocial. Factors that influence the physical environment of the school include the school building and all the areas surrounding it including biological or chemical agents, the weather and other forms of pollution that affect learners and staff of the school community. Such agents include insects, pest and vectors, temperature and humidity, noise and lighting, etc. On the other hand, the psychosocial environment includes the interrelated physical, emotional and social conditions that affect the well-being and productivity of learners and staff of the school community.

It is important to stress that a range of physical aspects of the school environment influence the physical and mental health of children. These can be listed as sanitation (or the lack of it); dirty hands; water quality; the microclimate; indoor air quality; noise; light (both too little and glare as a result of too much light); dangerous structures; inadequate furniture, and a hazardous location. Added to these is the fact that, for many children, going to school is the first opportunity to mix with people other than close relatives and neighbours.

Consequently, such situations may represent their first exposure to a range of infectious diseases. It is widely recognised that schools can play an important role in promoting society's health. Much effort has been invested over recent years in Health Education techniques for schools in low-income communities, including child-to-child methods, curriculum development, and the productions of locally appropriate education materials.

However, the impact of the actual fabric and management of school premises on child health has been relatively neglected. Many schools fail to provide healthy environments for their pupils. Poorly designed and maintained schools can be a source of disease and ill health (Alano, Ambachew, Hailu, Tilaye and Tafere, 2005).

Ogundele (2002) thus noted that for the school setting not to be a source of disease and ill-health, the school health programme must ensure that due attention is given to ensuring:

1. Good socio-emotional climate in the school through harmonious social interactions
2. Healthful administrative policies and practices
3. Effective food services
4. Accident prevention
5. Maintenance of school building and other facilities
6. Environmental health.

All these tasks are saddled on the healthful school component of the school health programme.

6.3.2. Aim and Objectives of Healthful School Environment

According to the National School Health Implementation Guidelines (2006), the aim of a healthful school environment is the provision of safe and conducive learning, working and living conditions that optimize the organization of day-to-day experiences which influence the emotional, physical and social health of learners as well as other members of the

school community so that maximum benefits from education can be achieved. The document also outlines the followings as objectives of healthful school environment:

- i. To provide a safe and conducive living and learning conditions that maximizes the benefits from educational programmes.
- ii. To promote healthy practices among learners and staff in order to prevent water and sanitation related illnesses and diseases.
- iii. To bring about positive changes in hygiene behaviour of learners and the community at large.
- iv. To provide safe recreational facilities in the school.
- v. To organize school health days.
- vi. To establish interpersonal relationships within the school community.
- vii. To encourage compliance with approved environmental health and sanitation standards for schools.

6.3.3. Characteristics of a Healthful School Environment

A healthful school environment, based on the school health implementation guidelines are characterized by:

1. Location
2. Size.

3. Existence of recreational facilities and equipment
4. School building
5. Sanitation facilities
6. Road and furniture safety (FME, 2006)
7. Harmonious interpersonal relationships

School Location

- A healthful school must be located in a safe area, far away from sources of noise and other forms of pollution such as factories, markets, airports, major highways and public motor parks.
- A healthful school has perimeter fencing with a gate for security purpose.
- A healthful school is located in a well-drained terrain.

School Size

A healthful school must have good space to support the population of learners and school staff. A healthful school according to FME (2006) must be sited on approximately 1 hectare of land for a maximum of 500 learners.

Recreational Facilities and Equipment

Play is as important as learning as school age children's psychological developmental stage makes play a fundamental aspect of their lives. For the school environment to be healthful it must provide opportunities for healthful play in an environment closely monitored and supervised by teachers. As such, the FME (2006) noted that:

- A healthful school must have playground and a large room for indoor activities such as Ludo, Draft, Scrabble, Chess e.t.c. for recreational purposes.
- Playground in the school is clean and safe from accidents, injuries, sting and bites of reptiles.
- The recreational facilities are to be adequate and properly located within the school i.e. adequate space of not less than 2.5m away from fences, buildings, walls, walkways, tree branches and other obstructions.
- Recreational facilities have a fall zone of about 2.00m in all directions from the perimeter of the equipment/facility installed within.

- The facility is accessible to learners and other members of the school community.
- The recreational facilities and equipment are properly maintained.
- All equipment are properly stored and not left indiscriminately
- Recreational activities which could be indoor and outdoor games, clubs and societies, gardening, crafts etc. are provided in healthful schools so that learners can be fully engaged during their leisure periods.

School Building

- The school building meets architectural standards and is learner and gender friendly. It must be well lit and ventilated. It also puts into consideration the physically challenged learners.
- Materials used for the construction of the building are to meet approved standard.
- Number of learners in the classroom should be in line with the National Policy on Education (NPE).
- The space between the teacher and the learners on the first row is not less than 2m.

- Buildings maintain 2.5m distances from one another.
- There is a separate room provided for counselling and school health services.
- Appropriate desks and chairs are provided in the classroom in line with NPE.

Sanitation Facilities

Water Supply

- A healthful school has adequate supply of safe water for drinking, washing, cleaning and flushing of toilets. A water point should serve a maximum of 250 people.
- The water source is properly maintained by the school authority.
- The location of the water source is at least 30m from any soak-away / toilet.
- Wash hand basins with soap and clean hand towels are placed at strategic places within the school premises.

Refuse Disposal Facilities

- There is adequate and sufficient number of rust resistant, water and rodent proof covered containers for refuse collection
- Where possible, incinerators, composting and land fill Are available.

Toilet/Bath Facilities

- The toilet facilities is to be gender sensitive for both learners and staff.
- Constructed compartmentalized Ventilated Improved Pit (VIP) Latrines is promoted. Where appropriate, Water Closet (WC) facilities are available
- There is at least a toilet compartment for every 30 learner.
- The school provides fitted urinal for boys.
- Adequate and separate bathrooms for males and females especially in boarding schools are provided.
- The toilet and bath should be kept clean, disinfected and controlled against pests.

Waste Water Management

- There should be adequate and functional drainage system provided to manage wastewater from bath, kitchen and surface run-offs.
- Rainwater and surface run-offs may be collected for reuse.
- Drainages are cleaned regularly, disinfected and covered.

Environmental Sanitation

- Cleanliness of the school environment including the toilets, the kitchen, food stores and the classrooms is mandatory.
- Drinking water must be covered and kept away from contamination.
- Refuse are collected using sanitary dustbin and kept at strategic locations around the classrooms and hostels. Refuse are disposed daily from the point of generation to the point of final disposal.
- Sewage, storm and rainwater are properly managed and drained.
- Domestic animals at residential areas within the school premises are adequately confined.
- All refuse are properly disposed using appropriate sanitary methods.

Road/Furniture Safety

- There are adequate road signs and markings on the roads leading to the schools. These include informative, regulatory/warning signs and Zebra crossings at least 5km radius at 1km interval from school.
- At least 5 speed breakers (at 1km interval) are provided on the major or minor roads leading to the schools so as to help regulate the speed behaviour of motorists and other road users.

- At school locations where the traffic density is appreciably high, overhead crossing facilities (i.e. flyovers) are to be constructed by to help discourage risky road use behaviours.
- School recreational facilities (e.g. playgrounds/pitches) are located as far away from the roads as possible in order to guard against children running into the roads without warning.
- Side rails or cross bars are fixed on school locations with high road traffic densities so as to promote organised crossing of the roads by the students/staff.

6.3.4. Components of Healthful School Environment

The World Health Organization noted that a healthful school environment must provide protection from physical, biological and chemical threats as well as ensure provision of basic necessities as shown in the table below.

Component	Indices/Risk
Provision of basic necessities	Shelter
	Warmth
	Water
	Food
	Light
	Ventilation
	Sanitary facilities
	Emergency medical care
Protection from biological threats	Moulds
	Unsafe/insufficient water
	Vector-borne diseases
	Venomous animals
	Rodents and hazardous insects
	Other animals (e.g. dogs).
Protection from physical threats	Traffic and transportation
	Violence and crime

	Injuries
	Extreme heat and cold
	Radiation
Protection from chemical threats	Air pollution
	Water pollution
	Pesticides
	Hazardous waste
	Hazardous materials and finishes
	Asbestos
	Paint
	Cleansing agent

Source: The World Health Organization (2004).The Physical School Environment; An Essential Component of a Health-Promoting School. www.who.int/ceh/publications/cehphysical/en/

6.3.4.1. Safe Physical Environment

The school physical environment refers to the surrounding of the school in relation to its ability to support safe and healthful living. As a component of

healthful school environment, a safe physical environment ensures appropriate location of the school. A safe school must be located on a spacious area that is far away from sources of threats and noise pollution. Siting schools close to industries, major roads with heavy vehicular movement, motor parks, markets and other such places predisposes its inhabitants to health risks. As highlighted in the table above by the WHO (2004), a safe physical school environment must have the capacity to protect the school community from traffic and transportation accidents, violence and organized crimes, injuries, extreme weather and radiation.

It is equally important to state that a safe physical school environment must also have basic necessities required to facilitate healthful living in the school. Shelter is one of the basic necessities of life. As a result, a safe physical school must have appropriate and adequate shelter. Roofing type and status is an important aspect of school shelter that must be given due consideration. Roofing sheets that are protective against the ultra violet rays of the sun are preferable in order to make the classroom as cool as possible during hot weather. This is especially the case in rural and peri-urban areas in the tropics where cooling system are not available. On the other hand, in cases of cold weather or in the temperate region, there is need to make

provisions for warming facilities to keep members of the school community warm. Beyond roofing, the school building must be supportive of healthful living. Cases of school collapse leading to death and injuries are well documented in Nigeria. It is important to monitor school buildings and pull down buildings that are out of age or faulty. These constructions pose threat to health and safety of school community members.

Water is at the centre of a safe physical school environment as water is necessary for sanitation and hygiene. Unless the school has adequate water for environmental sanitation, the school will become a source of communicable diseases especially those associated with poor sanitation. Water is needed for hand washing and for toilet hygiene. Menstruating girls are equally in need of water to maintain menstrual hygiene. Provision of water resources in the school is fundamental to ensuring safe physical school environment for sanitation and hygiene purpose aside drinking. Hand washing is a basic protective step and strategy against communicable disease occurrence and spread. It is thus important that hand washing facilities and water should be made available to ensuring safe physical school environment.

In developing countries like Nigeria, the school occupies a central and strategic position in meeting nutritional needs of children. A school where children are served nutritious meal daily will likely provide protection to nutritional problem as well as enhanced learning compared to a school that do not. Meeting the basic nutritional requirements of learners is as important as providing those learning experiences and emergency health services that will assist them in an all-round development. Ensuring a safe physical environment therefore incorporates provision of nutritious meal prepared and handled with the highest possible level of hygiene .

It is equally important to mention that the place of proper illumination in safe school is given required attention. The classrooms, walkways, staircase must be properly illuminated. Poor illumination is a major factor in accidental falls and other safety issues in the school. When there is poor illumination, learners will be less likely to benefit from instructional contents they are exposed to. As stated earlier, classrooms, dormitories (if boarding), walk ways and other areas of the school must have proper illumination. Aside illumination, proper ventilation must also be provided. Air quality is important to healthy living in schools and as such, proper ventilation must be ensured in the school. Provision of sanitary facilities in

the school is also an important strategy in ensuring a safe physical school environment. School sanitation is important in communicable disease prevention and control. There is also need to ensure the provision of emergency health services.

The school physical environment must also provide protection from violence and external aggression. In ensuring this, the school must have perimeter fencing with security gate. Providing security post with well trained and uncompromising security men with effective linkage and collaboration with community security outfits/networks and the police must be ensured. As discussed in school location, efforts must be made to locate the school in areas accessible to emergency response in case of violent attacks in the school. In a world facing serious terrorism threat, it is not advisable to site schools far away from settlements in case of attacks.

6.3.4.2. Safe Biological Environment

Biological hazards at the school are majorly disease causing agents like bacteria, virus, pathogens and other microbes and vectors that are associated with diseases. Biological hazards also comprise other living agents directly or indirectly involved in disease occurrence and spread. The

school environment must put adequate measures in place to ensure that the school members are protected from these biological hazards in order to prevent and control disease occurrence and spread.

6.3.4.3. Safe Socio-Emotional Environment

The psycho-social environment that the school community members operate plays important role in their health and well-being. While all the other components of healthful school environment are concerned largely with the physical dimension of health, the psycho-social component deals more with the mental and social well-being of school children and personnel. There is need for good and harmonious inter-personal relationships in all the interactions that exist in the school. Efforts are to be made to reduce distressing conditions for learners and personnel in order to make the school hospitable and conducive for learning. The win-win approach must be employed in resolving all conflict related matters in the school.

6.4. Conclusion

Every activity in the school is done in a physical, social or psychological environment that does not only affect performance but also health. It is therefore important to ensure that conscious and concerted effort is in place to ensure that the school environment is safe and healthful. Healthful school environment is that component of school health programme concerned with ensuring that the school environment is safe and facilitative of healthy living. School environment goes beyond the school surroundings to the socio-emotional relationships and interactions that exist in the school. In ensuring that the school environment is safe, physical component, biological component and psycho-social component of the environment must be consciously controlled and managed.

6.5. Summary

- Healthful school environment is the component of the school health programme concerned with making all aspects of the school's physical, social and psychological environment safe and supportive of optimal health.
- The aim of a healthful school environment is the provision of safe and conducive learning, working and living conditions that optimize

the organization of day-to-day experiences which influence the emotional, physical and social health of learners as well as other members of the school community so that maximum benefits from education can be achieved.

- Indices for characterizing a healthful school environment include but not limited to: school location, size, existence of recreational facilities and equipment, school building, sanitation facilities, road and furniture safety and harmonious interpersonal relationships.
- The WHO listed components of healthful school environment as provision of basic necessities, protection from biological threats, protection from physical threats, protection from chemical threats and safe psycho-social environment.

6.6. Tutored Marked Assignment

1. Give an overview of healthful school environment
2. State the goal and objectives of healthful school environment
3. Mention at least five indices for characterizing a healthful school environment
4. State the components of healthful school environment

Solution

Overview of Healthful School Environment

School environment plays crucial role in facilitating optimal performance and health of school community members. Learners and personnel alike need healthful environment to operate at their zest. A healthful school environment can be characterized by its location, size and existence of recreational facilities, school building, sanitation facilities and harmonious interpersonal relationships. A healthful school environment goes beyond the school surrounding to include the social and psychological climate in the school environment. A school that is considered healthful must be able to protect its inhabitants from physical, biological and chemical threats and hazards. Efforts aimed at ensuring a healthful school will therefore take cognizance of these expected roles.

Aim and Objectives of Healthful School Environment

The aim of a healthful school environment is the provision of safe and conducive learning, working and living conditions that optimizes the organization of day-to-day experiences which influence the emotional, physical and social health of learners as well as other members of the

school community so that maximum benefits from education can be achieved. Objectives of healthful school environment include:

1. Provision of a safe and conducive living and learning conditions that maximizes the benefits from educational programmes.
2. Promotion of healthy practices among learners and staff in order to prevent water and sanitation related illnesses and diseases.
3. Facilitating positive changes in hygiene behaviour of learners and the community at large.
4. Provision of safe recreational facilities in the school.
5. Organization of school health days.
6. Establishing interpersonal relationships within the school community.
7. Encourage compliance with approved environmental health and sanitation standards for schools.

Indices for Characterizing a Healthful School Environment

A healthful school environment can be characterized by the following indices:

1. School location
2. Size of the school

3. Availability of recreational facilities
4. Availability of sanitation facilities
5. Safe school building
6. Harmonious interpersonal relationships
7. Safe road and furniture

Components of Healthful School Environment

Components of a healthful school environment and its indices are shown in the table below

Component	Indices/Risk
Provision of basic necessities	Shelter
	Warmth
	Water
	Food
	Light
	Ventilation

	Sanitary facilities
	Emergency medical care
Protection from biological threats	Moulds
	Unsafe/insufficient water
	Vector-borne diseases
	Venomous animals
	Rodents and hazardous insects
	Other animals (e.g. dogs).
Protection from physical threats	Traffic and transportation
	Violence and crime
	Injuries
	Extreme heat and cold
	Radiation
Protection from chemical threats	Air pollution
	Water pollution

		Pesticides
		Hazardous waste
		Hazardous materials and finishes
		Asbestos
		Paint
		Cleansing agent
Harmonious Relationships	Interpersonal	Harmonious management-teachers/non-management staff relationship
		Harmonious teachers-learners relationships
		Harmonious teachers-teachers relationships
		Harmonious learners-learners relationships

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MODULE SEVEN

SCHOOL, HOME AND COMMUNITY RELATIONSHIPS

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7.1. Introduction

School children and personnel are first members of a community other than the school community. In the same vein, every school exists and functions in a community. No school can be said to be existing in isolation from the wider community in which it is located. For effective realization of school health programme objectives, there must be a meaningful collaboration between the school and the community. Realizing the need for this collaboration, the school, home and community relationship is that aspect of the school health programme that is designed to coordinate and harmonize the collaboration needed between the school and the community for the realization of the goals and objectives of the school health programme. This module focuses on this component of the school health programme.

7.2. Objectives of the Module

At the end of this module, you should be able to:

1. Explain the concept of school, home and community relationships
2. State the goal and objectives of school, home and community relationships

3. State at least five characteristics of school, home and community relationships
4. Mention at least ten collaborating community agencies for school, home and community relationships
5. State and explain at least five avenues for school, home and community relationships

7.3. Main Contents

7.3.1. Concept of School, Home and Community Relationships

Realization of the goals and objectives of the school health programme requires effective collaboration between the school, the home and other agencies of the community with which the child has contact . This is because health behaviour is affected by multi-faceted influences and as such, behaviour change and interventions must also be planned along these influences. Schools operate within communities, which comprise of individuals, groups and institutions. Learners and staff in schools come from homes located in the communities. Therefore, teachers, community leaders, religious and social institutions, voluntary agencies, health workers, social workers, parents and school children should all be involved

in promoting school, home and community relationship, through collaboration efforts (FME, 2006).

While there is relatively stronger tie between the family and the school through the Parents-Teachers Association, the same cannot be said of the school and the community in general. Although the school interfaces with the home through the PTA to meet critical school needs which might involve health needs, there is need for greater involvement of the community in school health related activities. This is vitally important since the community stands to benefit greatly from health innovations and interventions in the school as there is always a carryover effect of these benefits into the community. On the other hand, health problems can also be carried from the school into the community when little or no efforts are put in place to control communicable disease in the school. The school can serve as a source of disease spread from one community to another as health problem in a community can be picked at school and transported to another community. This makes it vitally important for the community, especially the one hosting the school to effectively collaborate with the school to realize the goals of a health promoting school

7.3.2. Aim and Objectives of School, Home and Community Relationships

According to the School Health Programme Implementations Guideline, the aim of school, home and community relationships is to integrate their various efforts to promote the health of the school community. According to the policy document, the objectives include:

- i. To provide detailed ways of solving problems that inhibits cordial school, home and community relationship
- ii. To encourage community members to participate actively in school health programme implementation
- iii. To promote environmental and behavioural change among members of the school and the community
- iv. To promote relationships between school staff, parents and other members of the community.
- v. To reinforce relationships between parents and learners

7.3.3. Characteristics of School, Home and Community Relationships

Characteristics of school, home and community relationship according to the National School Health Policy (2006) are:

1. Home visits by teachers, school nurses and social workers
2. Regular visits by parents to school
3. Regular communication of the health status of the learner to the home by the school health personnel and the teacher
4. Active participation of the school in community health planning, implementation, monitoring and evaluation
5. Active participation of the school in outreach activities and campaigns
6. Advocacy and community mobilization for the school health programme through traditional and modern media
7. Community involvement in the promotion of health related school policies.

7.3.4. Collaborating Community Agencies for School Health

Depending on the peculiarities of every school and community, agencies that can forge meaningful front with the school in promoting school and community health include but not limited to:

1. Faith based organizations
2. Governmental agencies, parastatals and ministries
3. Non-governmental agencies

4. International development partners and agencies
5. Medical and para-medical associations
6. The organized private sector
7. The media
8. The family
9. Trade unions
10. Youth organizations
11. Women associations
12. Town unions
13. Security agencies
14. Community based organizations
15. Professional bodies

7.3.5. Avenues for School, Home and Community Relationships

Based on the health needs and peculiarities of school and communities, effective collaboration can be forged in the following avenues for realizing a health promoting school:

1. Collaboration of school and community in the control of communicable disease

2. Collaboration of school and community in the prevention of non-communicable diseases
3. Provision of health facilities in the school by the community
4. Provision of toilet and sanitation facilities in the school by the community
5. Advocacy for meeting health and community needs by both the school and the community
6. Establishing and sustaining effective and regular communication channels
7. Collaborating with community agencies like faith based organizations in tackling topical health problems like drug use and abuse, risky sexual behaviour, terrorism and organized crimes, gambling etc.

7.3.6. Strategies for School, Home and Community Relationships

The National School Health Programme Implementation Guideline identifies social mobilization, participation and capacity building as the strategies for school, home and community relationship as briefly discussed below.

7.3.6.1. Social Mobilization

This strategy shall:

1. Ensure that schools involve the homes and communities when formulating school health policies. This way, the home and community will play active collaborative roles in the implementation of this policy.
2. Mobilize community resources in the design and execution of school health projects
3. Mobilize human and material resources in the community to achieve the objectives of school health programme e.g. using artisans and professionals from the community in executing school projects as well as available local materials
4. Ensure that home and community members are agents for communicating observed health needs and problems of the learner/school to appropriate authority for necessary action
5. Ensure cordial relationship between the school, home and community through school and home visits

7.3.6.2. Participation

This strategy entails:

1. Involving home and community in decision making on matters relating to the health of the school community through stakeholders meetings
2. Encouraging parents to participate in school-based management activities as members of PTA executive and school-based management committee in charge of various schools projects and activities
3. Encouraging school community to participate in community health projects e.g. environmental sanitation programmes.

7.3.6.3. Capacity Building

Elements of this strategy include:

1. Empowering school and community health personnel on requisite skills for handling school health matters
2. Early introduction of the teaching and practice of appropriate health behaviours at home and school

3. Empowering school staff, parents and community members as role models to the learners
4. Developing Health Education curriculum that involve learners and their families.

7.3.7. Institutional Roles in School, Home and Community Relationships

For effective implementation of school, home and community relationship, there is need for inputs from various institutions of government. The following roles shall apply:

7.3.7.1. Ministry of Education

The roles of the ministry of education shall include:

1. Enforcing policy guidelines that will enhance school, home and community relationship by setting standard rules of practice
2. Supervising and monitoring the effective implementation of the set rules of relationships among school, home and community so as to ensure harmony.

7.3.7.2. Ministry of Health

1. Ensuring regular visits to schools for the purpose of appraising the health status of learners.
2. Carrying out routine immunization of members of the school community.
3. Alerting the school community of any epidemic and take steps to prevent the infection among learners.
4. Preparing and presenting health talks on topical issues.
5. Facilitating the provision of health services to school community members
6. Serving on the school-based management committee.

7.3.7.3. Local Government

1. Provide health facilities for the use of the school community
2. Provide fund for specific school health projects
3. Create awareness about health matters in the community
4. Support the school, home and community relationship.

7.3.7.4. The school

1. Creates learner friendly environment
2. Liaise with parents on health and academic needs of learners

3. Participate in community Health Projects
4. Provide counselling service for learners and community members.

7.3.7.5. School-Based Management Committee (SBMC)

1. Collaborate with the school in the implementation of school health programme
2. Supervise the use of health facilities within the school
3. Support community health projects
4. Act as a link between the school, home and community

7.4. Conclusion

Unless all stakeholders play out their roles, realizing the goals of school health will be a mirage. The home and community at large are important stakeholders on efforts aimed at evolving a health promoting school. Active collaboration between the school on the one hand and the home and the community on the other is instrumental to realizing the goals and objectives of the school health programme. Recognizing the need for this collaboration, the school, home and community relationship was identified as a component of the school health programme. The essence of this is to smoothen relationship and build mutual understanding to facilitate health promoting action in the school as well as in the community.

7.5. Summary

- The school, home and community relationships provide platform for the school, the home and the community to interface and harmonize collaborative efforts in realizing school and community health objectives.
- The aim of school, home and community relationships is to integrate their various efforts to promote the health of the school community
- Social mobilization, effective participation and capacity building are important strategies for the realization of school health programme.

7.6. Tutored Marked Assignment

1. What is school, home and community relationship?
2. State the goal and objectives of school, home and community relationships
3. State five characteristics of school, home and community relationships
4. Mention seven collaborating community agencies for school, home and community relationships
5. State five avenues for school, home and community relationships

School, Home and Community Relationship

This is the integration of school home and community efforts for the realization of school health objectives. It connotes harmonious and conscious efforts by these three important settings for the health and well-being of school members in particular and that of the community in general. Every member of the school comes from a family and a community and relating with the home and the community helps in protecting and maintaining the health of school members. The home and community agencies can play significant roles in improving sanitation in schools by providing facilities and equipment thereby reducing the likelihood of occurrence and spread of communicable diseases. There could also be harmonized and collaborative efforts to build school clinics, stock them with essential drugs and ensure preventive and therapeutic services for school and community members.

Aims and Objectives of School, Home and Community Relationships

The School Health Programme Implementation Guideline, provided that the aim of school, home and community relationships is the integration of various efforts to promote the health of the school community. The document also documented the objectives to include:

1. Provision of detailed ways of solving problems that inhibits cordial school, home and community relationship
2. Encouraging community members to participate actively in school health programme implementation
3. Promotion of environmental and behavioural change among members of the school and the community
4. Promoting relationships between school staff, parents and other members of the community.
5. Reinforcing relationships between parents and learners

Characteristics of School, Home and Community Relationships

The characteristics of school, home and community relationships include:

1. Home visits by teachers, school nurses and social workers
2. Regular visits by parents to school

3. Regular communication of the health status of the learner to the home by the school health personnel and the teacher
4. Active participation of the school in community health planning, implementation, monitoring and evaluation
5. Active participation of the school in outreach activities and campaigns
6. Advocacy and community mobilization for the school health programme through traditional and modern media
7. Community involvement in the promotion of health related school policies.

Collaborating Community Agencies for School, Home and Community Relationships

Based on the peculiarities of every school and community, agencies that can collaborate with the school in promoting school and community health include:

1. Faith based organizations
2. Governmental agencies, parastatals and ministries
3. Non-governmental agencies

4. International development partners and agencies
5. Medical and para-medical associations
6. The organized private sector
7. The media
8. The family
9. Trade unions
10. Youth organizations
11. Women associations
12. Town unions
13. Security agencies
14. Community based organizations
15. Professional bodies

Avenues for School, Home and Community Relationships

Depending on the health needs and peculiarities of school and communities, effective collaboration can be forged in the following avenues for realizing a health promoting school:

1. Collaboration of school and community in the control of communicable disease

2. Collaboration of school and community in the prevention of non-communicable diseases
3. Provision of health facilities in the school by the community
4. Provision of toilet and sanitation facilities in the school by the community
5. Advocacy for meeting health and community needs by both the school and the community
6. Establishing and sustaining effective and regular communication channels
7. Collaborating with community agencies like faith based organizations in tackling topical health problems like drug use and abuse, risky sexual behaviour, terrorism and organized crimes, gambling etc.

7.7. References and Resources for Further Reading

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MODULE EIGHT

EVALUATION OF SCHOOL HEALTH PROGRAMME

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8.1. Introduction

Evaluation is a process and a tool that plays important role in every educational and health endeavour. As a process, evaluation entails efforts aimed at establishing the extent to which pre-set goals have been realized. As a tool, the outcome of this process is employed to make informed decision concerning the realization of the goals of the programme. Evaluation is a critical process and tool in the realization of the goals of the school health programme. It is important to consciously examine the extent to which the set goals of school health programme are being realized. This information will be useful in identifying strengths and weaknesses of the programme. This module is focused on evaluation of the school health programme.

8.2. Objectives of the Module

At the end of this module, you should be able to:

1. Define evaluation
2. Explain evaluation of school health programme
3. State rationale for the evaluation of school health programme

4. State principles and tools for the evaluation of school health programme
5. Mention indicators for evaluating the various components of the school health programme

8.3. Main Contents

8.3.1. Concept of Evaluation

Evaluation deals with making efforts to ascertain that preset goals and objectives are being or have been attained. Gitlin and Smyth (1989) attempted an etymological definition of the term tracing it from its Latin origin meaning 'to strengthen' or to empower. This description best defines the purpose or essence of evaluation as a tool or process aimed at making any endeavour of man better. The Organization for Economic Community and Development (2007) defined evaluation as the “systematic and objective assessment of an on-going or completed project, programme or policy including its design, implementation and results with the aim of identifying fulfillment of objectives, development efficiency, effectiveness, impact and sustainability. In another definition, Twersky and Lonblom (2012) defined evaluation as an independent, systematic investigation into how, why, and to what extent objectives or goals are achieved. The essence

of evaluation therefore is to assess whether planned objectives are being or have been realized with a view to improving what worked and adjusting what did not.

Evaluation of School Health Programme and its Rationale

When related to the school health programme, evaluation simply connotes efforts aimed at establishing the extent to which preset school health objectives are being (formative evaluation) or have been (summative evaluation) realized. This information is critical to the overall success of the school health programme as it enables stakeholders to know areas of strength that will be built upon and areas of weaknesses that need attention and improvement. Evaluation when related to school health programme relates to all the components of the school health programme. Each component has its own indicators for success as discussed in subsequent section of this chapter.

Characteristics of Evaluation

The Austrian Development Agency (2009) identified five characteristics of evaluation which are central to evaluation of the school health programme.

These characteristics are:

1. Relevance
2. Effectiveness
3. Efficiency
4. Impact
5. Sustainability

Rationale for Evaluating the School Health Programme

The major rationale for evaluation of school health programme is to strengthen the programme in order to realize the goals of a health promoting school. Some notable reasons for evaluating school health programme include:

1. To identify what works in order to improve on it as well as what did not work in order to make necessary adjustment
2. To assess whether efforts targeted at improving school health are rewarding
3. To provide reliable and valid data to judge efforts of various stakeholders
4. To monitor the level of success of current health activities

5. To establish the extent to which actions are tailored towards set goals and objectives
6. To monitor impact of programme on learners' health knowledge, attitude and behaviour
7. To provide reliable feedback on the effort of the government and other stakeholders in achieving school health
8. To provide empirical basis for advocacy, funding and interventions
9. To justify needed review or change in curriculum and approaches to school health practice

Principles for School Health Programme Evaluation

For a successful evaluation of school health programme, the following principles must guide the evaluation process:

1. Evaluation must be objective in purpose and process
2. Clear and unambiguous programme and evaluation goals and objectives must be set
3. Evaluators must not be in self-conflicting position
4. Evaluators must be credible and possess high level of expertise

5. The evaluation data collecting procedures and tools must be valid and reliable
6. Data must be gotten from all concerned stakeholders
7. Generated data must be analysed with set evaluation goals in focus
8. Evaluation result must be disseminated or communicated to all stakeholders involved
9. Evaluation results must be acted upon.

School Health Programme Evaluation Tools

The following tools can be used for school health programme evaluation:

1. Standardized test
2. Questionnaire
3. Interview guide
4. In-depth interview guide
5. Observation checklist
6. Key informant interview guide
7. Focus group discussion guide

8.3.2. Indicators for Evaluating Components of School Health Programme

In 2010, the Federal Ministry of Education in collaboration with UNICEF developed a tool for monitoring and evaluating school health programme. The tool provides basic indicators for evaluating components of the school health programme. Background information such as name of school, location, type, learners' population, teachers' population, school ownership, learners' residential status as well as teachers' residential status is also vital components of the tool.

Sub-divisions in the tool are:

1. Healthful School Environment
2. School Feeding Services
3. Skill-based Health Education
4. School Health Services
5. Menstrual Hygiene
6. School, Home and Community Relationships

8.3.2.1. Indicators for Healthful School Environment

Indicators for evaluating whether the school environments are healthful or not are:

1. The school compound
2. Availability of water
3. Availability of sanitation facilities like gender sensitive toilets
4. Existence of school health clubs
5. Recreational facilities and equipment
6. Avoidance of School violence
7. Custodian staff (gardeners, cleaners, etc).

8.3.2.2. Indicators for School Feeding Services

These include:

1. Meal service
2. Food procurement, logistics and storage
3. School farms and gardens
4. Nutrition education

8.3.2.3. Indicators for Skill-based Health Education

These include:

1. The curriculum
2. Teaching and learning materials
3. Infrastructure
4. Personnel
5. Teaching methods/strategies
6. Evaluation strategies
7. Relationships

8.3.2.4. Indicators for School Health Services

These are:

1. Existence of school clinic or sick bay
2. Systemic deworming and supplementation
3. First aid and emergency preparedness
4. School epidemic disease control services
5. Special health services for learners with special needs
6. Community awareness
7. Referral services

8. School health record
9. Physical health examination

8.3.2.5. Indicators for Menstrual Hygiene

These include:

1. Knowledge of menstrual hygiene
2. Attitude towards menstrual hygiene
3. Practice of menstrual hygiene

8.3.2.6. Indicators for School, Home and Community Relationships

8.3.2.7. These include:

1. School based management committee
2. School policies on community relationships
3. Utilization of health facilities
4. School/community sanitation and hygiene activities
5. Community support
6. Home visits

8.4. Conclusion

Evaluation is an important feedback mechanism regarding the extent to which set goals are being or have been achieved. School health programme evaluation is therefore an important strategy towards estimating the extent to which the goals of school health programme are being or have been achieved. The rationale behind evaluation is improvement and as such, every evaluation efforts must be geared towards improving what is working and correcting what is not.

8.5. Summary

- Evaluation is concerned with efforts aimed at empirically estimating the extent to which set goals are being or have been achieved in order to improve on the programme
- Various indicators have been developed for evaluating the school health programme based on its various components
- The essence of evaluating the school health programme is to keep improving on the programme
- For evaluation of the school health programme to be successful, certain principles must be given due consideration.

8.6. Tutored Marked Assignment

1. Define evaluation
2. Explain evaluation of school health programme
3. State rationale for the evaluation of school health programme
4. State five principles and five tools for the evaluation of school health programme

Solution

Define Evaluation

This connotes efforts aimed at determining the extent to which set goals and objectives are being (formative) or have been (summative) achieved in order to strengthen or improve upon a programme.

Explain evaluation of school health programme

School health programme evaluation deals with the processes and tools put in place to empirically verify whether school health programme objectives are being or have been realized with a view to making necessary improvement.

State rationale for the evaluation of school health programme

The essence of school health programme evaluation is improvement or strengthening of the programme.

State five principles and five tools for the evaluation of school health programme

Principles

1. Evaluation must be objective in purpose and process
2. Clear and unambiguous programme and evaluation goals and objectives must be set
3. Evaluators must not be in self-conflicting position
4. Evaluators must be credible and possess high level of expertise
5. The evaluation data collecting procedures and tools must be valid and reliable
6. Data must be gotten from all concerned stakeholders
7. Generated data must be analysed with set evaluation goals in focus
8. Evaluation result must be disseminated or communicated to all stakeholders involved

9. Evaluation results must be acted upon.

Tools

1. Standardized test
2. Questionnaire
3. Interview guide
4. In-depth interview guide
5. Observation checklist
6. Key informant interview guide
7. Focus group discussion guide

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