COURSE GUIDE

PHS 804
MATERNAL AND CHILD HEALTH

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INTRODUCTION

PHS 804: Maternal and Child Health is a two-credit course for students offering Masters of Public Health Science. Reproductive health is a crucial part of general health and a central feature of human development. It is a reflection of health during childhood, and crucial during adolescence and adulthood, sets the stage for health beyond the reproductive years for both women and men, and affects the health of the next generation.

Reproductive health is a universal concern, but it is of special importance for women particularly during the reproductive years. Although most reproductive health problems arise during the reproductive years, in old age general health continues to reflect earlier reproductive life events. Men too have reproductive health concerns and needs through their general health is affected by reproductive health to a lesser extent than is the case for women. However, men have particular roles and responsibilities in terms of women's reproductive health because of their decision-making powers in reproductive health matters. Failure to deal with reproductive health problems at any stage in life sets the scene for later health and developmental problems. Because reproductive health is such an important component of general health it is a prerequisite for social, economic and human development.

WHAT YOU WILL LEARN IN THIS COURSE

In this course, you have the course units and a course guide. The course guide will tell you what the course is all about. It is the general overview of the course materials you will be using and how to use those materials. It also helps you to allocate the appropriate time to each unit so that you can successfully complete the course within the stipulated time limit. The course guide also helps you to know how to go about your Tutor-Marked Assignments (TMAs) which will form part of your overall assessment at the end of the course. Also, there will be regular tutorial classes that are related to this course, where you can interact with your facilitators and other students. Please, I encourage you to attend these tutorial classes.

COURSE AIMS

The course aims to give you a detailed understanding of issues surrounding Maternal and Child Health which is an important branch of Public Health.

COURSE OBJECTIVES

To achieve the aims set above, each course unit has a set of specific objectives which are included at the beginning of the unit. These objectives will give you what to concentrate/focus on while studying the unit. Please read the objectives before studying the unit and during your study to check your progress.

Below are the comprehensive objectives of the course as a whole. By meeting these objectives, you should have achieved the aims of the course as a whole. Thus, after going through the course, you should be able to:

- Understand the definition of reproductive health
- Understand the concept and importance of reproductive health
- Describe the components of the reproductive health package
- Understand the magnitude of reproductive health problems
- Understand reproductive health indicators
- Understand the historical development of the concept
- Understand the concept of the life course approach
- Know the rationale of the life course approach
- Understand the challenges in implementing a life course approach to health
- Know the linkage between the continuum of care and the life-course approach
- Understand the ICPD concept
- Understand the Beijing +10 concept
- Understand the definition of family planning
- Understand the rationale for family planning programs in developing countries
- Understand steps in counselling
- Know different Family planning delivery systems
- Understand the magnitude of abortion
- Identify reasons behind unplanned pregnancy
- Define Unsafe abortion and know contributing factors
- Know the barriers to safe abortion
- Understand the abortion law in Nigeria
- Understand different components of post-abortion care
- Understand the concept of antenatal and obstetric care
- Discuss traditional antenatal care
- Discuss focused antenatal care
- Discuss the new 2016 ANC model
- Understand the component of essential obstetric care
- Understand the component of emergency obstetric care

- Understand the Concept of Safe Motherhood.
- Know the Safe Motherhood Action
- Understand Effective Strategies to Achieve Safe Motherhood
- Know the pillars of safe motherhood
- Understand the concept of maternal mortality.
- Understand the determinant of maternal death
- Understand the commonest causes of maternal death
- Understand possible preventive actions against maternal mortality
- Understand the definition of maternal mortality ratio
- Understand the definition of Maternal mortality rates
- Understand the importance of maternal mortality ratio as a health indicator in a society
- Understand the differences between maternal mortality ratio and rate
- Understand the approaches measuring maternal mortality ratio and rate
- Understand the concept of obstetric care
- Understand the concept of unmet obstetric care
- Understand the delays in Obstetric care
- Understand the concept of the integrated approach to newborn care
- Know the importance of integrating newborn care
- Explain the meaning of adolescent development
- Understand the importance of adolescents reproductive health
- Know the reproductive health risks and consequences in adolescents
- Discuss the challenges of adolescent reproductive health
- Understand concept about adolescent reproductive health services
- Understand the factors affecting reproductive health needs
- Know the socioeconomic and psychological consequences of pregnancy for unmarried adolescents.
- Understand the concept of needs and issues for men
- Understand how to improve men’s and boys’ own sexual and reproductive health
- Know building blocks to work on men’s sexual and reproductive health
- Know the sexual and reproductive health service package for men and adolescent boys
- Understand the concept of safe motherhood
- Understand the roles of males in safe motherhood
- Know the Safe Motherhood Action
- Know the essential services of safe motherhood
- To identify common cancers in this region

- To recognise aetiology and risk factors for cancers
- To know Cancer Screening methods
- To understand the treatment modalities and Prevention
- To understand the aetiology and mode of transmission
- To be able to classify STIs and HIV/AIDs
- To have good knowledge of prevention and treatment of STIs
- Understand Health systems
- Access to care at all levels
- Understand district health system
- Identify key reproductive health services at the district level
- To understand the tertiary health care
- Reproductive health roles and functions
- Be able to define Primary Health Care (PHC)
- Have a good knowledge of RH
- RH roles at the primary care level
- Know the major community-based intervention
- Understand the overview of the principles and processes entailed in monitoring and evaluating sexual and reproductive health programmes
- Understand the monitoring and evaluation concepts,
- Understand the differences between monitoring and evaluation
- Know the limitation of monitoring and evaluation
- Understand the indicators used in monitoring and evaluation
- Understand integration at the point of service delivery
- Understand integration at the health sector level
- Understand integration within national development planning processes
- Understand the definition of quality of care
- Understand the conceptual framework of quality of care
- Understand the determinants of quality improvement
- Know the quality of care indicators
- Know the tools to measure improvements in quality
- Understand the barriers to quality of care
- Understand the effect of education on reproductive health
- Understand the effect of employment on reproductive health
- Understand the effect of income on reproductive health
- Understand the effect of family and social support on reproductive health
- Understand the effect of community safety on reproductive health
- Know the different publications and reports focusing on MCH.
- Know the different websites and surveys on MCH.
- To know the various MCH programmes at the district level by UNFPA
- Understand the functions of UNFPA

- Know the definition of HMIS
- Understand the rationale of HMIS
- Know the benefit of HMIS
- Know the reproductive health indicators
- Understand the importance of reproductive health indicators

WORKING THROUGH THIS COURSE

To complete this course, you are required to read each study unit, read the textbooks and read other materials which may be provided by the National Open University of Nigeria.

Each unit contains a self-assessment exercises and at certain points, in the course, you would be required to submit assignments for assessment purposes. At the end of the course, there is a final examination. The course should take you about a total of 12 weeks to complete. Below you will find listed all the components of the course, what you have to do and how you should allocate your time to each unit in order to complete the course on time and successfully.

This course entails that you spend a lot of time reading. We would advise that you avail yourself of the opportunity of attending the tutorial sessions where you have the opportunity of comparing your knowledge with that of other people.

THE COURSE MATERIALS

The main components of the course are:

1. The Course Guide
2. Study Chapters
3. References/Further Reading
4. Assignments
5. Presentation Schedule

STUDY UNITS

The study units for this course are made up of three (8) modules and Twenty-nine (29) units as given below:

Module 1 Basic concepts and Landmark Events Related to Reproductive Health and its Evolution

Unit 1 Introduction to Reproductive Health
Unit 2 Historical Background of Maternal and Child Health

Unit 3 Life Course Perspectives
Unit 4 International Conference on Population and Development (ICPD), Post-ICPD, Beijing+10

Module 2 Reproductive Health Behaviour In Nigeria

Unit 1 Contraception as a Pre-Conceptional Health Intervention
Unit 2 Abortion as a Public Health Issue
Unit 3 Antenatal and Obstetrical Care Models
Unit 4 Safe Motherhood and Continuum of Care

Module 3 Maternal Mortality

Unit 1 Determinants of Maternal Mortality
Unit 2 Measurement of Maternal Mortality Ratio and Rates
Unit 3 Obstetrical Care (EOC, EMCOR, BOC), Unmet Obstetrical Need, Delays in Obstetrical Care Provision,
Unit 4 Integrated Approach to Newborn Care

Module 4 Maternal and Child Health Needs of Special Populations

Unit 1 Issues of Adolescents and Young Adults
Unit 2 Needs of And Issues for Men
Unit 3 Role of Males in Safe Motherhood

Module 5 Diseases of Public Health Importance in Maternal Health

Unit 1 Cancers of The Reproductive Tract, Cancers Of The Breast
Unit 2 Sexually Transmitted Infections, HIV/AIDS

Module 6 Health Systems Issues

Unit 1 Access to Services at Various Levels
Unit 2 Role of the District Health System in Reproductive Health
Unit 3 Role of the Tertiary Care Hospital in Reproductive Health
Unit 4 Primary Health Care and Reproductive Health Including Community-Based Interventions

Module 7 Cross-Cutting Themes

Unit 1 Research, Monitoring and Evaluation
Unit 2 Quality of Care
Unit 3 Integrated Approach to the Provision of Reproductive Health Services

Unit 4 Socio-Economics of Reproductive Health Care

Module 8 Data Sources in Reproductive Health

Unit 1 Websites, Reports, Surveys and Publications Focusing On Maternal and Child Health
Unit 2 MCH Programmes at the District Level By UNFPA
Unit 3 MIS in Reproductive Health
Unit 4 Reproductive Health Indicators

ASSIGNMENT FILE

There are three types of assessments in this course. First are the Tutor-Marked Assessments (TMAs); second is the Self-Assessment Exercises while the third is the written examination. In solving the questions in the assignments, you are expected to apply the information, knowledge and experience acquired during the course. The assignments must be submitted to your facilitator for formal assessment in accordance with prescribed deadlines stated in the assignment file.

References and other resources are provided. The unit directs you to work on exercises related to the required reading. In general, these exercises test you on the materials you have just covered or require you to apply it in some way and thereby assist you to evaluate your progress and to reinforce your comprehension of the material. Together with TMAs and SAEs these exercises will help you in achieving the stated learning objectives of each unit and of the Course as a whole.

The work you submit to your facilitator for assessment accounts for 30 per cent of your total course mark. At the end of the course, you will be required to sit for a final examination of 1½ hours duration at your study centre. This final examination will account for 70 % of your total course mark.

PRESENTATION SCHEDULE

Your course materials have important dates for the early and timely completion and submission of your TMAs and attending tutorials. You should remember that you are required to submit all your assignments by the stipulated time and date. You should guard against falling behind in your work.

There is a timetable prepared for the early and timely completion and submission of your TMAs as well as attending the tutorial classes. You are required to submit all your assignments at the stipulated time and

date. Avoid falling behind the scheduled time. The presentation schedule included in this course guide provides you with important dates for the completion of each tutor-marked assignment (TMA). You should therefore try to meet the deadlines.

ASSESSMENT

There are three aspects to the assessment of the course. The first is made up of self-assessment exercises, the second consists of the tutor-marked assignments and the third are the written examination/end of course examination. You are advised to do the exercises. In tackling the assignments, you are expected to apply information, knowledge and techniques you gathered during the course.

The assignments must be submitted to your facilitator for formal assessment in accordance with the deadlines stated in the presentation schedule and the assignment file. The work you submit to your tutor for assessment will count for 30% of your total course work. At the end of the course, you will need to sit for a final or end of course examination of about three-hour duration. This examination will count for 70% of your total course mark.

TUTOR-MARKED ASSIGNMENT (TMAs)

The TMA is a continuous assessment component of your course. It accounts for 30% of the total score. You will be given TMAs questions to answer and these must be answered before you are allowed to sit for the end of course examination. The TMAs would be given to you by your facilitator and returned after you have done the assignment. Assignment questions for the units in this course are contained in the assignment file. You will be able to complete your assignment from the information and material contained in your reading, references and study units. However, it is desirable in all degree levels of education to demonstrate that you have read and researched more into your references, which will give you a wider viewpoint and may provide you with a deeper understanding of the subject.

1. Make sure that each assignment reaches your facilitator on or before the deadline given in the presentation schedule and assignment file. If for any reason you cannot complete your work on time, contact your facilitator before the assignment is due to discuss the possibility of an extension. The extension will not be granted after the due date unless there are exceptional circumstances.
2. Make sure you revise the whole course content before sitting or the examination. The self-assessment activities and TMAs will be useful for

this purpose and if you have any comments please do them before the examination. The end of course examination covers information from all parts of the course.

FINAL EXAMINATION AND GRADING

The end of course examination for Principle of Epidemiology and Disease Control will equal to or less than 2 hours and it has a value of 70% of Control total course work. The examination will consist of questions, which will reflect the type of self-testing, practice exercise and tutor-marked assignment problems you have previously encountered. All areas of the course will be assessed.

Use the time between finishing the last unit and sitting for the examination to revise the whole course. You might find it useful to review your self-test, TMAs and comments on them before the examination. The end of course examination covers information from all parts of the course.

COURSE MARKING SCHEME

Table 1: Course Marking Scheme

Assignment	**Marks**
Assignment 1 – 3	Three assignments, at 10% each = 30% of course marks
End of Examination Course	70% of overall course marks
Total	**100% of course materials**

Table 2: Course Organisation

Unit	Title of Work	Weeks Activity	Assessment (End of Unit)
	Course Guide	Week	
1		Week 1	Assignment 1
2		Week 2	Assignment 2
3		Week 3	Assignment 3
4		Week 4	Assignment 4
5		Week 5	Assignment 5

6		Week 6	Assignment 6
7		Week 7	Assignment 7
8		Week 8	Assignment 8
9		Week 9	Assignment 9

HOW TO GET THE MOST OUT OF THIS COURSE

In distance learning, the study units replace the university lecturer. This is one of the huge advantages of distance learning mode; you can read and work through specially designed study materials at your own pace and at a time and place that suit you best. Think of it as reading from the teacher, the study guide tells you what to read, when to read and the relevant texts to consult. You are provided exercises at appropriate points, just as a lecturer might give you an in-class exercise. Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit and how a particular unit is integrated with the other units and the course as a whole. Next to this is a set of learning objectives. These learning objectives are meant to guide your studies. The moment a unit is finished, you must go back and check whether you have achieved the objectives. If this is made a habit, then you will significantly improve your chances of passing the course. The main body of the units also guides you through the required readings from other sources. This will usually be either from a set book or from other sources. Self-assessment exercises are provided throughout the unit, to aid personal studies and answers are provided at the end of the unit. Working through these self-tests will help you to achieve the objectives of the unit and also prepare you for tutor-marked assignments and examinations. You should attempt each self-test as you encounter them in the units.

The Following are Practical Strategies for Working through This Course

1. Read the Course Guide thoroughly.
2. Organise a study schedule. Refer to the course overview for more details. Note the time you are expected to spend on each unit and how the assignment relates to the units. Important details, e.g. details of your tutorials and the date of the first day of the semester are available. You need to gather together all this information in one place such as a diary, a wall chart calendar or

an organiser. Whatever method you choose, you should decide on and write in your own dates for working on each unit.

3. Once you have created your own study schedule, do everything you can to stick to it. The major reason that students fail is that they get behind with their course works. If you get into difficulties with your schedule, please let your tutor know before it is too late for help.
4. Turn to Unit 1 and read the introduction and the objectives for the unit.
5. Assemble the study materials. Information about what you need for a unit is given in the table of contents at the beginning of each unit. You will almost always need both the study unit you are working on and one of the materials recommended for further readings, on your desk at the same time.
6. Work through the unit, the content of the unit itself has been arranged to provide a sequence for you to follow. As you work through the unit, you will be encouraged to read from your set books.
7. Keep in mind that you will learn a lot by doing all your assignments carefully. They have been designed to help you meet the objectives of the course and will help you pass the examination.
8. Review the objectives of each study unit to confirm that you have achieved them. If you are not certain about any of the objectives, review the study material and consult your tutor.
9. When you are confident that you have achieved a unit's objectives, you can start on the next unit. Proceed unit by unit through the course and try to pace your study so that you can keep yourself on schedule.
10. When you have submitted an assignment to your tutor for marking, do not wait for its return before starting on the next unit. Keep to your schedule. When the assignment is returned, pay particular attention to your tutor's comments, both on the tutor marked assignment form and also that written on the assignment. Consult your tutor as soon as possible if you have any questions or problems.
11. After completing the last unit, review the course and prepare yourself for the final examination. Check that you have achieved the unit objectives (listed at the beginning of each unit) and the course objectives (listed in this course guide).

FACILITATORS/TUTORS AND TUTORIALS

There are Sixteen (16) hours of tutorials provided in support of this course. You will be notified of the dates, times and location of these

tutorials as well as the name and phone number of your facilitators, as soon as you are allocated a tutorial group.

Your facilitator will mark and comment on your assignments, keep a close watch on your progress and any difficulties you might face and provide assistance to you during the course. You are expected to mail your Tutor Marked Assignment to your facilitator before the scheduledd date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible. Do not delay to contact your facilitator by telephone or e-mail if you need assistance.
The following might be circumstances in which you would find assistance necessary, hence you would have to contact your facilitator if:

i. You do not understand any part of the study or the assigned readings.
ii. You have difficulty with the self-assessment exercises.
iii. You have a question or problem with an assignment or with the grading of an assignment.

You should endeavour to attend the tutorials. This is the only chance to have face to face contact with your course facilitator and to ask questions which are answered instantly. You can raise any problem encountered in the course of your study.

To gain many benefits from course tutorials prepare a question list before attending them. You will learn a lot from participating actively in discussions.

SUMMARY

Maternal and Child Health is a course that is designed to acquaint the student with the basic concepts and landmark events related to reproductive health and its evolution, describe the reproductive health behaviour of Nigerians, introduce the concept of maternal mortality, its determinants and measurement, enumerate the maternal and child health needs of special populations with regards to reproductive health, discuss the communicable and non-communicable diseases of public health importance, introduce the concept of health systems and the roles of the different levels of care in reproductive health, discuss the concept of monitoring and evaluation as a public health tool and also introduce the concept of quality of care and the socio-economics of reproductive health care.

Upon completing this course, the student will be equipped with the basic knowledge of the meaning of reproductive health and its components as well as the reproductive health indicators. The student will also have the knowledge of Management information systems in reproductive health and the Maternal and Child Health programmes of the UNFPA.

To gain the most from this course you should endeavour to apply the principles you have learnt to your understanding of Public Health. We wish you success in this course and we hope you will find it both interesting and useful!

MAIN COURSE

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MODULE 1 BASIC CONCEPTS AND LANDMARK EVENTS RELATED TO REPRODUCTIVE HEALTH AND ITS EVOLUTION

UNIT 1 INTRODUCTION TO REPRODUCTIVE HEALTH

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1.0 INTRODUCTION

Reproductive health is a universal concern but is of special importance for women particularly during the reproductive years. However, men also demand specific reproductive health needs and have particular responsibilities in terms of women's reproductive health because of their decision-making powers in some reproductive health matters. Reproductive health is a fundamental component of an individual's overall health status and a central determinant of quality of life. Reproductive health is life-long, beginning even before women and men attain sexual maturity and continuing beyond a woman's child-bearing years.

2.0 OBJECTIVES

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

- understand the definition of reproductive health
- understand the concept and importance of reproductive health
- describe the components of the reproductive health package
- understand the magnitude of reproductive health problems
- understand reproductive health indicators.

3.0 MAIN CONTENT

3.1 Definition of Reproductive Health

There are many and varying definitions of reproductive health, some focused predominantly on the physiological and fertility aspects, and others more holistic in their view. Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its processes. This definition is taken and modified from the WHO definition of health.

3.2 Concept and Importance of Reproductive Health

Reproductive health implies that people can have a satisfying and safe sex life and that they can reproduce and the freedom to decide if, when, and how often to do so. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for the regulation of fertility which are not against the law, and the right of access to appropriate health-care services that enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counselling and care related to reproduction and sexually transmitted diseases.

3.2.1 Reproductive Health Care

RH care is the constellation of information and services designed to help individuals attain and maintain the state of reproductive health by preventing and solving reproductive health problems
RH care includes a variety of prevention, wellness and family planning services as well as diagnosis and treatment of reproductive health concerns.

3.2.2 Positive Reproductive Health

Positive RH means that individuals can manage their sexuality and have unrestricted access to the full range of reproductive health care options

3.2.3 Importance of Reproductive Health

The following are the importance of reproductive health:

- Reproductive health is a human right stated in international law.
- Reproductive health plays an important role in morbidity, mortality and life expectancy.
- Reproductive health problems are the leading cause of women's ill health and mortality worldwide.

3.3 Components of Reproductive Health

Below are the components of reproductive health:

- Quality family planning services
- Promoting safe motherhood: prenatal, safe delivery and postnatal care, including breastfeeding
- Prevention and treatment of infertility and sexual dysfunction in both men and women
- Prevention and management of complications of unsafe abortion and safe abortion services, were not against the law
- Treatment of reproductive tract infections, especially sexually transmitted infections including HIV infection and AIDS
- Information and counselling on human sexuality, responsible parenthood and sexual and reproductive health
- Active discouragement of harmful practices, such as female genital mutilation and violence related to sexuality and reproduction
- Management of non-infectious conditions of the reproductive system, such as genital fistula, cervical cancer, complications of FGM and reproductive health problems associated with menopause
- Gender equity
- Functional and accessible referral

3.4 Magnitude of Reproductive Health Problems

Nigeria Demographic Health Survey 2018 (NDHS2018) reveals:

- Total Fertility Rate: 5.3 children per woman (4.5 in urban areas and 5.9 in rural areas).
- Antenatal care coverage: 67% of women age 15-49 who gave birth in the 5 years preceding the survey received antenatal care (ANC) from a skilled provider during the pregnancy for their most recent birth. Fifty-seven per cent had at least four ANC visits.
- Maternal Mortality Ratio: 512 maternal deaths per 100,000 live births.

- Lifetime risk of maternal death: The lifetime risk of maternal death indicates that one in 34 women in Nigeria will have a death related to maternal causes.
- Prevalence of female genital mutilation (FGM): 20% of women age 15-49 are circumcised, a decrease from the figure of 25% reported in 2013.
- Age at circumcision: 86% of circumcised women age 15-49 were circumcised before age 5, while 5% were circumcised at age 15 or older.
- Attitudes towards FGM: Among women who have heard of FGM, 78% believe that female genital mutilation is not required by their religion and 67% believe that it should not be continued.
- Current contraceptive use: Modern contraceptive use is higher among sexually active unmarried women (28%) than among currently married women (12%). The contraceptive prevalence rate for any method is 17% among currently married women.
- Contraceptive discontinuation: Two of every five times (41%) that women began using a contraceptive method in the 5 years preceding the survey, they discontinued the method within 12 months. The most common reason for discontinuation was the desire to become pregnant (35%).
- Demand for family planning: The total demand for family planning among currently married women is 36%; 34% of total demand is satisfied by modern methods.
- Unmet need for family planning: Unmet need for family planning is higher among sexually active unmarried women (48%) than among currently married women (19%).
- Future use of contraception: 35% of currently married women who are not using contraception intend to use family planning in the future.
- The infant mortality rate: 67 deaths per 1,000 live births
- Under-5 mortality: 132 deaths per 1,000 live births. This implies that more than 1 in 8 children in Nigeria dies before their 5th birthday.

3.5 Reproductive Health Indicators

According to WHO, health indicators are defined as variables that help to measure changes. Indicators are not only to measure the health status of a community but also to compare the health status of one country to another for assessment of health care needs, for allocation of scarce resources and monitoring and evaluation of health services, activities and programmes. Examples of reproductive health indicators include:

- Fertility

- Life Expectancy
- Perinatal Mortality
- Low birth weight
- Maternal Mortality

4.0 CONCLUSION

In this unit, you have learnt about the definition of reproductive, concept and components of reproductive. Also, the magnitude of reproductive health problems was discussed with reproductive health indicators.

SELF-ASSESSEMENT EXERCISE

1. What is the importance of reproductive health?
2. Highlight the components of reproductive health.

5.0 SUMMARY

Reproductive health is a holistic approach to the delivery of health care. An index case seen provides access to the family to ensure the welfare and well-being of other family members.
An effective reproductive health program must be

- Continuous
- Comprehensive
- Coordinated
- Collaborative

6.0 TUTOR-MARKED ASSIGNMENT

1. Describe ways by which quality family planning services will improve maternal health?
2. Describe the effective strategies and interventions to achieve safe motherhood.
3. Describe the target population in reproductive health.

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UNIT 2 HISTORICAL BACKGROUND OF MATERNAL AND CHILD HEALTH

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Historical Development of the Concept
    3.2 Development of Reproductive Health
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

The creation of public health programmes to improve the health of women and children has its origins in Europe at the end of the nineteenth century. With hindsight, the reasons for this concern look cynical: healthy mothers and children were seen by governments at that time to be a resource for economic and political ambitions. Many of Europe's politicians shared a perception that the ill-health of the nation's children threatened their cultural and military aspirations.

Caring for the health of mothers and children soon gained a legitimacy of its own, beyond military and economic calculations. The increasing involvement of a variety of authorities – medical and lay, charitable and governmental – resonated with the rising expectations and political activism of civil society.

Maternal and child health programmes became a public health paradigm alongside that of the battle against infectious diseases. One of the core functions assigned to the World Health Organisation (WHO) in its Constitution of 1948 was "to promote maternal and child health and welfare". By the 1950s, national health plans and policy documents from development agencies invariably stressed that mothers and children were vulnerable groups and therefore priority "targets" for public health action. The notion of mothers and children as vulnerable groups were also central to the primary health care movement launched at Alma-Ata (now Almaty, Kazakhstan) in 1978. This first major attempt at massive scaling up of health care coverage in rural areas boosted maternal and child health programmes, by its focus on initiatives to increase immunisation coverage and to tackle malnutrition, diarrhoea and respiratory diseases. In practice, child health programmes

were usually the central – often the only – programmatic content of early attempts to implement primary health care.

2.0 OBJECTIVES

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

- discuss the historical development of the concept.

3.0 MAIN CONTENT

3.1 Historical Development of the Concept

It is helpful to understand the concept and to examine its origins. During the 1960s, UNFPA was established with a mandate to raise awareness about population "problems" and to assist developing countries in addressing them. At that time, the talk was of "standing room only", "population booms, demographic entrapment" and scarcity of food, water and renewable resources. Concern about population growth (particularly in the developing world and among the poor) coincided with the rapid increase in the availability of technologies for reducing fertility - the contraceptive pill became available during the 1960s along with the IUD and long-acting hormonal methods.

In 1972, WHO established the Special Program of Research, Development and Research Training in Human Reproduction (HRP), whose mandate was focused on research into the development of new and improved methods of fertility regulation and issues of safety and efficacy of existing methods. Modern contraceptive methods were seen as reliable, independent of people's ability to practice restraint, and more effective than withdrawal, condoms or periodic abstinence.

The 1994 ICPD has been marked as the key event in the history of reproductive health. It followed some important occurrences that made the world think of other ways of approaches to reproductive health.

3.2 Development of Reproductive Health

Here, take note of the following, in the Pre-1978 Alma-Ata Conference:

- Basic health services in clinics and health centres
  Primary health care declaration 1978
- MCH services started with more emphasis on child survival
- Family planning was the main focus for mothers
  Safe motherhood initiative in 1987
- Emphasis on maternal health

- Emphasis on reduction of maternal mortality Reproductive health, ICPD in 1994
- Emphasis on quality of services
- Emphasis on availability and accessibility
- Emphasis on social injustice
- Emphasis on individuals woman's needs and rights Reproductive Health Millennium development goals and reproductive health in 2000
- MDGs are directly or indirectly related to health
- MDG 4, 5 and 6 are directly related to health, while MDG 1,2,3, and 7 are indirectly related to health
- World Summit 2005, declared universal access to reproductive health
- "Sexual and reproductive health is fundamental to the social and economic development of communities and nations, and a key component of an equitable society."

SELF-ASSESSMENT EXERCISE

Briefly discuss the MGD that is reproductive health-related with their targets.

4.0 CONCLUSION

In this unit, you have learnt the historical background of maternal and child health.

5.0 SUMMARY

Maternal and child health has received a paradigm shift to what is now known as reproductive health. Maternal and child health comprises a major component of reproductive health.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the historical background of maternal and child health.

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UNIT 3 LIFE COURSE PERSPECTIVES

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Definition of Life Course Approach
  3.2 Rationale for Adopting Life Course Approach
  3.3 Challenges in Implementing a Life Course Approach to Health
  3.4 The Continuum of Care and the Life Course Approach
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Investing in a life-course approach to health is essential to ensure that we promote a healthy start to life, meet the health needs of our citizens throughout their stages of life and accomplish the goal of improved health and well-being for all. In this regard, sexual and reproductive health becomes a critical aspect of the life-course approach to health for all as it provides opportunities, from preconception to transitional life phases, for early investment in health promotion and disease prevention.

2.0 OBJECTIVES

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

- discuss the concept of the life course approach
- explain the rationale of the life course approach
- outline the challenges in implementing a life course approach to health
- discuss the linkage between the continuum of care and the life course approach.

3.0 MAIN CONTENT

3.1 Definition of Life Course Approach

Making a life course approach to the study of reproductive health involves the investigation of factors across life and, also across generations, that influence the timing of menarche, fertility, pregnancy outcomes, gynaecological disorders, and age at menopause. It also

recognises the important influence of reproductive health on chronic disease risk in later life.

A life-course approach considers an individual's entire progress throughout life to explain why certain outcomes result. The outcomes depend on the interaction of multiple protective and risk factors throughout people's lives. A life-course approach examines how biological (including genetics), social and behavioural factors throughout life and across generations act independently, cumulatively and interactively to influence health outcomes. In epidemiology, a life-course approach is being used to study social and physical factors during gestation, childhood, adolescence and adulthood that affect chronic disease risk and health in later life. This approach provides a more comprehensive vision of health and its determinants. It provides a framework that examines opportunities to intervene to improve health in later life and highlights the importance of services that focus on the needs of the individuals/ groups in each stage of life.

Sir Michael Marmot set out the life-course approach as a way to conceptualise the way an individual accumulates positive and negative health impacts through their life. Although some of these may be mitigated or fade with time, many have impacts that continue throughout life and may have a cumulative effect as they interact with new impacts.

3.2 Rationale for Adopting Life Course-Approach

By taking this long term approach, we can start to consider the fundamental causes behind health and well-being conditions and ensure actions nationally and locally will have the most impact on outcomes. Furthermore, the population of the world is anticipated to grow. Therefore the interventions we invest in now across the life-course will be beneficial later as well if they are effective at reducing the burden of disease as the total population of older people increases.

3.3 Challenges in Implementing a Life Course Approach to Health

In the life-course approach to health, including SRH, the theoretical framework is increasingly supported by sound evidence and is a rational and commonsense approach. However, in reality, the application of a life-course approach to the development and implementation of proven interventions that improve health and well-being and prevent poor outcomes is not so simple. The following are the factors that contribute to the challenge of operationalising the life course approach and are not

limited to these:

- Genetic and environmental factors, including the socio-economic environment
- Political will
- Weak healthcare system
- Inadequate reflection in the way healthcare providers are trained, healthcare systems are organised and healthcare is delivered.

3.4 The Continuum of Care and the Life-Course Approach

In the critical area of SRH, the emphasis has been predominantly on maternal and newborn health, specifically the physical health of women during pregnancy and delivery and their health and that of their newborn in the first few weeks thereafter. A core principle that has been advocated by the WHO to improve maternal, newborn and child health (MNCH) is the adoption of a "continuum of care" approach by programmes and policymakers.

This approach has two features:

- Essential MNCH care must be provided "vertically" from the individual household, to the community to the health facilities.
- Care also needs to be provided in a life-course approach throughout the various stages of life (i.e. pre-pregnancy, pregnancy, the neonatal period, infancy and childhood, adolescence, and into the post-reproductive stage) continuously and seamlessly.

Such a comprehensive life-course approach, combined with a strengthening of health delivery systems to provide universal health care, would contribute much to improving health outcomes at both the individual and population levels, but to date few if any countries have been able to achieve this ideal.

4.0 CONCLUSION

In this unit, you have learnt the concept and rationale of the life-course approach; we also discussed challenges in implementing a life course approach to health and finally, the linkage between the continuum of care and the life course approach.

SELF-ASSESSMENT EXERCISE

1. Define life course-approach in reproductive health.

5.0 SUMMARY

The life-course approach provides a useful framework to ensure that action to improve health outcomes, including reproductive health, is truly delivered for all of the population and does not become isolated within one age group or portion of the community. It reminds us that creating a healthy sexual and reproductive life requires a whole system approach where interventions can resonate across an individual's life span and highlights the importance of building sound foundations in childhood that can impact both directly and indirectly on outcomes beyond reproductive health indicators.

It gives us an important reminder that sex is not just the preserve of the young and that although reproductive capability may decline with age, the risk of infection, sexual abuse and violence, coercion and harm continue across the life-course. Finally, the life-course approach reiterates that reproductive health is important at every age and in every community, both as an independent aspect of health and identity and as a part of our lives that can bring pleasure and joy at every age throughout all stages of life.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the concept of the life course approach.
2. What are the challenges in implementing a life course approach to health?

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UNIT 4 THE INTERNATIONAL CONFERENCE ON POPULATION AND DEVELOPMENT (ICPD), POST-ICPD, BEIJING+10

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 ICPD, POST-ICPD, BEIJING+10
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In the 1960s, as mortality rates declined around the world, some researchers and policymakers grew panicked that population growth would outstrip natural resources, leading to famine and societal collapse. Governments responded: some studied the impact of population growth on economies and the environment, others expanded family planning programmes, and a few took actions, sometimes coercive ones, to lower fertility rates.

The ICPD Programme of Action brought the global community together and reflected a new consensus about a response to population growth. It firmly established that the rights and dignity of individuals, rather than numerical population targets, were the best way for individuals to realise their own fertility goals. Furthermore, governments acknowledged that these rights are essential for global development. The ICPD represented a resounding endorsement that securing reproductive health, individual rights and women's empowerment is the obligation of every country and community.

Beijing Platform for Action focused on 12 Critical Areas of Concern

- Women and Poverty
- Education and Training of Women
- Women and Health
- Violence against Women
- Women and Armed Conflict
- Women and the Economy
- Women in Power and Decision-making

- Institutional Mechanisms for the Advancement of Women
- Human Rights of Women
- Women and the Media
- Women and the Environment
- The Girl-child

2.0 OBJECTIVES

By the end of this unit, you will be able to:
- discuss the ICPD concept
- explain the Beijing +10 concept.

3.0 MAIN CONTENT

3.1 International Conference on Population and Development (ICPD), POST-ICPD, BEIJING+10

In September 1994, Nigeria participated in the International Conference on Population and Development (ICPD), held in Cairo, Egypt. The ICPD marked the beginning of the paradigm shift from the concept of Maternal and Child Health and Family Planning (MCH/FP) to Reproductive Health. At the ICPD, the nations of the world reached an understanding of the key concepts of reproductive health and reproductive rights and affirmed that reproductive health is a right for all men, women and adolescents.

The global community, at the ICPD, further agreed that reproductive health and rights are indispensable to people's health and development, and set the goal of achieving universal access to reproductive health information and services by the year 2015. Thus, it becomes imperative for every nation to operationalise the reproductive health concept and promote quality reproductive health services in the interest of the well-being of the people, enhanced social life of the community, national development, and the future of the human society.

The ICPD Programme of Action and the Beijing Platform play independent and mutually reinforcing roles in revolutionising the international standards for the rights and health of the world's women. The Cairo Conference took the lead in focusing on reproductive health, including family planning and sexual health, reproductive rights, education and women's empowerment as necessary tools to achieve social and economic progress and sustainable development. The Beijing Conference brought all rights of women to the forefront to promote equality, development and peace in the world. Both conferences focused on gender equality as a concern for all and the benefit of all, prescribing societies to consider all women's roles, including their reproductive and

productive roles.

Both conferences also recognised the importance of women's empowerment, which is the process by which unequal power relations between men and women are transformed and women gain equality with men. On the individual level, it includes processes by which women gain inner power to express and defend their rights and gain greater self-esteem and control over their own lives and relationships. Male participation and acceptance of changing roles are essential elements of these processes.

Some of the objectives that both conferences highlighted as crucial in achieving gender equality, equity and women's empowerment include:

- Securing women's human rights
- Ensuring male involvement and responsibility in women's reproductive health
- Providing quality health care services
- Taking a life-cycle approach to women's health
- Attending to adolescent sexual and reproductive health needs
- Preventing and treating HIV/AIDS
- Eliminating all forms of violence against women, including harmful cultural practices such as female genital mutilation/cutting (FGM/FGC).

Both conferences also emphasised the rights of particularly vulnerable groups, such as women migrants and refugees.

4.0 CONCLUSION

In this unit, you have learnt the key considerations of the ICPD and Beijing +10 concept.

5.0 SUMMARY

The full implementation of the ICPD Programme of Action is essential for the achievement of all the Millennium Development Goals. More than common objectives and subject areas, however, the two documents reflect principles of human rights shared and supported by the international community and affirmed in several international conventions, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW, 1979) and the Convention on the Rights of the Child (CRC, 1989).

6.0 TUTOR-MARKED ASSIGNMENT

1. What are the objectives of ICPD and Beijing+10?

2. What are the challenges in implementing the Beijing platform?

SELF-ASSESSMENT EXERCISE

1. What was the focus of Beijing+10?

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MODULE 2 REPRODUCTIVE HEALTH BEHAVIOUR IN NIGERIA

UNIT 1 CONTRACEPTION AS A PRE-CONCEPTIONAL HEALTH INTERVENTION

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1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Definition of Family Planning
3.2 The Rationale for Family Planning Programs in Developing Countries
3.3 Family Planning Methods
3.4 Steps in Counseling
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Family planning helps save women's and children's lives and preserves their health by preventing untimely and unwanted pregnancies, reducing women's exposure to the health risks of childbirth and abortion and giving women, who are often the sole caregivers, more time to care for their children and themselves. All couples and individuals have the right to decide freely and responsibly the number and spacing of their children and to have access to the information, education and means to do so. This is considered to be part of the basic human rights of all individuals or couples as it was endorsed by the International Conference on Population and Development in Cairo in 1994.

According to Nigeria Demographic and Health Survey 2018, Current contraceptive use: Modern contraceptive use is higher among sexually active unmarried women (28%) than among currently married women (12%). The contraceptive prevalence rate for any method is 17% among currently married women. Contraceptive discontinuation: Two of every five times (41%) that women began using a contraceptive method in the 5 years preceding the survey, they discontinued the method within 12 months. The most common reason for discontinuation was the desire to become pregnant (35%). Demand for family planning: The total demand for family planning among currently married women is 36%; 34% of total demand is satisfied by modern methods. Unmet need for family planning: Unmet need for family planning is higher among sexually

active unmarried women (48%) than among currently married women (19%). Future use of contraception: 35% of currently married women who are not using contraception intend to use family planning in the future.

2.0 OBJECTIVES

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

- define family planning
- explain the rationale for family planning programs in developing countries
- state steps in counselling
- discuss different Family planning delivery systems.

3.0 MAIN CONTENT

3.1 Definition of Family Planning

Family Planning Refers to the use of various methods of fertility control that will help individuals (men and women) or couples to have the number of children they want and when they want them in order to assure the well-being of children and the parents. Family planning simply means preventing unwanted pregnancies by safe methods of prevention. Timing of pregnancy and intervals between pregnancies are strongly related to personal preference and social custom. Age, family desires, family supports, economic and social circumstances, and access to health care may all play a role in birth spacing.

3.2 The Rationale for Family Planning Programs in Developing Countries

Here, you are to note the following.

3.2.1 Demographic Rationale

Reducing high fertility and slowing population growth provided the dominant rationale for FP programs in the 1960s and 1970s. The rationale was based on concerns over the potentially negative effects of rapid population growth and high fertility on living standards and human welfare, economic productivity, natural resources, and the environment in the developing world, but still, surveys showed a substantial unmet need for family planning.

3.2.2 Health Rationale

During the 1980s, the public health consequences of high fertility for mothers and children are a set of concerns for the international community, especially for developing countries. High rates of infant, child, and maternal mortality as well as abortion and its health consequences, were pressing health problems in many developing nations and had also become of greater concern for international development agencies.

3.2.2.1 Benefits To Women's Health

Simply by providing contraceptives to women who desire to use them, we can reduce maternal deaths by as much as one-third.

3.2.2.2 Family Planning Benefits Children's Health

Family planning indirectly contributes to children's health, development and survival by reducing the risk of maternal mortality and morbidity. Spacing births at least 2 years apart has to do with their survival.

3.2.2.3 Family Planning Benefits Women and Their Societies

Family planning reduces the health risks of women and gives them more control over their reproductive lives. With better health and greater control over their lives, women can take advantage of education, employment, and civic opportunities. If couples have fewer children in the future, the rate of population growth would decrease. As a result, future demands on natural resources such as water and fertile soil will be less. Everyone will have a better opportunity for a better quality of life.

3.2.3 Human Rights Rationale

This rationale became preeminent in the 1990s, in part because of the excesses reactions to the demographic rationale. It rests on the belief that individuals and couples have a fundamental right to control reproductive decisions, including family size and the timing of births. This rationale found its strongest articulation at the ICPD, held in Cairo, in 1994.

3.3 Family Planning Methods

The commonly used family planning methods are:

1. Natural Method

- Breastfeeding
- Abstinence
- Withdrawal (Coitus interrupts)
- Calendar methods
- Cervical mucus (Billing's Method)
- Sympathothermal

2. Artificial methods
   - Barrier methods
   - Diaphragm
   - Condom
   - Intra-uterine device (IUD)
   - Hormonal
   - Pills
   - Implants
   - Injectable
   - Surgical methods (Permanent)
   - Tubal ligation (ligating the oviduct)
   - Vasectomy (ligating the sperm duct)
   - Emergency contraception
   - IUD
   - Levonorgestrel-only or combined estrogenprogesterone
   - RU486

3.4 Steps in Counseling

The main goal of family planning is to improve the quality of life and reproductive health by empowering individuals and couples to exercise their right to safe sex, and to decide whether and when to have children and how many to have. Counselling new clients about family planning needs a step-by-step process. The process includes learning, making choices, making decisions and carrying them out. It consists of six steps which can be remembered with the acronyms **GATHER**. Not every new client needs all the steps; some clients need more attention to one step than another. Counselling is a key component of family planning services. Counselling is one person helping another as they talk person-to-person. It has 6 steps:

- G – GREET client respectfully
- A – ASK about their FP needs
- T – TELL them about contraceptive options
- H – HELP them make a decision
- E – EXPLAIN & demonstrate the use of a method
- R – RETURN/REFER

SELF-ASSESSMENT EXERCISE
Discuss what you understand by family planning.

4.0 CONCLUSION

In this unit, you've learnt about the definition of family planning. The benefit and importance were also discussed. Types and different methods of family planning were not left out of the discussion. Counselling which is a vital aspect of improving access was highlighted above.

5.0 SUMMARY

Family planning is an integral component of reproductive health. The length of time between a woman's pregnancies can have a significant impact on health outcomes for both the woman and her baby. The accepted way to measure the interval between pregnancies is to count the period of time from live birth, stillbirth, miscarriage or induced abortion to the conception of the next pregnancy. The World Health Organisation and other international agencies long held the view that birth spacing of 2 to 3 years, particularly following a live birth, was the recommended interval.

6.0 TUTOR-MARKED ASSIGNMENT

1. How will you counsel a new client who is at your family planning clinic?
2. Differentiate between natural and artificial family planning methods.
3. Describe family planning and the various methods.

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UNIT 2 ABORTION AS A PUBLIC HEALTH ISSUE

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1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Definition of Abortion
  3.2 Magnitude of Abortion
  3.3 Reasons behind Unplanned Pregnancy
  3.4 Unsafe Abortion and Contributory Factors
  3.5 Barriers to Safe Abortion
  3.6 Abortion Law in Nigeria
  3.7 Components of Post-Abortion Care
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Every individual has the right to decide freely and responsibly – without discrimination, coercion and violence – the number, spacing and timing of their children, and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health (ICPD 1994). Access to legal, safe and comprehensive abortion care, including post-abortion care, is essential for the attainment of the highest possible level of sexual and reproductive health.

2.0 OBJECTIVES

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

- explain abortion
- identify reasons behind unplanned pregnancy
- define Unsafe abortion and know contributing factors
- state the barriers to safe abortion
- discuss the abortion law in Nigeria
- describe different components of post-abortion care.

3.0 MAIN CONTENT

3.1 Definition of Abortion

Abortion is the termination or initiation of termination of pregnancy before reaching viability (before 20weeks or <500grams according to

WHO or before 28 weeks of gestation or less than 1kg fetal weight in our environment). Clinical stages of spontaneous abortion are:

- threatened,
- inevitable,
- incomplete,
- complete
- missed abortion.

If any of the stages mentioned gets infected it is called septic abortion.

3.2 Magnitude of Abortion

Abortion is more than a medical issue, or an ethical issue, or a legal issue. It is above all a human issue, involving women and men as individuals, as couples and as a member of the society. Three out of ten of all pregnancies end in induced abortion. Nearly half of all abortions are unsafe, and almost all of these unsafe abortions take place in developing countries. About 45% of all abortions are unsafe and almost all of these abortions occur in developing countries.

Between 2015 and 2019, on average, 73.3 million induced (safe and unsafe) abortions occurred worldwide each year. There were 39 induced abortions per 1000 women aged between 15–49 years; 3 out of 10 (29%) of all pregnancies, and 6 out of 10 (61%) of all unintended pregnancies, ended in induced abortion. Among these, 1 out of 3 was carried out in the least safe or dangerous conditions. Over half of all estimated unsafe abortions globally were in Asia, most of them in south and central Asia. About 3 out of 4 abortions that occurred in Africa and Latin America were unsafe. The risk of dying from an unsafe abortion was the highest in Africa. Each year between 4.7% – 13.2% of maternal deaths can be attributed to unsafe abortion.

3.3 Reasons behind Unplanned Pregnancy

3.3.1 Non-Use of Contraception

The majority of unwanted pregnancies occur in Nonusers of contraceptive methods. Despite the fact that family planning services are more effective and available than ever before. According to the latest Nigeria Demographic and Health survey 2018:

- Current contraceptive use: Modern contraceptive use is higher among sexually active unmarried women (28%) than among currently married women (12%). The contraceptive prevalence rate for any method is 17% among currently married women.

- Contraceptive discontinuation: Two of every five times (41%) that women began using a contraceptive method in the 5 years preceding the survey, they discontinued the method within 12 months. The most common reason for discontinuation was the desire to become pregnant (35%).
- Demand for family planning: The total demand for family planning among currently married women is 36%; 34% of total demand is satisfied by modern methods.
- Unmet need for family planning: Unmet need for family planning is higher among sexually active unmarried women (48%) than among currently married women (19%).
- Future use of contraception: 35% of currently married women who are not using contraception intend to use family planning in the future.

Other factors include:

- Lack of control over contraception
- Young age or single marital status
- Abandonment or unstable relationship
- Mental or physical health problems
- Severe malformation of the fetus
- Financial constraints
- Sexual coercion or rape
- Contraceptive failure

3.4 Unsafe Abortion and Contributory Factors

Unsafe abortion defined as a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking minimal medical standards or both – results in the deaths of 47 000 women every year and leaves millions temporarily or permanently disabled. Yet unsafe abortions are almost entirely preventable: they are a result of unmet need for family planning, contraceptive failure, a lack of information about contraception, and restricted access to safe abortion services.

Abortion is unsafe when it is carried out either by a person lacking the necessary skills or in an environment that does not conform to minimal medical standards or both. The people, skills, and medical standards considered safe in the provision of induced abortions are different for medical abortion (which is performed with drugs alone), and surgical abortion (which is performed with a manual or electric aspirator). Each year between 4.7% – 13.2% of maternal deaths can be attributed to unsafe abortion.

3.5 Barriers to Safe Abortion

Barriers to accessing safe abortion include:

- restrictive laws
- poor availability of services
- high cost
- stigma
- the conscientious objection of healthcare providers and
- unnecessary requirements, such as mandatory waiting periods, mandatory counselling, provision of misleading information, third-party authorisation, and medically unnecessary tests that delay care.

3.6 Abortion Law in Nigeria

In Nigeria, abortion is legal only when performed to save a woman's life. Still, abortions are common, and most are unsafe because they are done clandestinely, by unskilled providers or both. Abortion laws make it one of the most restrictive countries regarding abortion. Nigeria's criminal law system is divided between the northern and southern states of Nigeria.

The Criminal Code is currently enforced in southern states. The abortion laws of the Criminal Code are expressed within sections 228, 229, and 230. Section 228 states that any person providing a miscarriage to a woman is guilty of a felony and up to 14 years of imprisonment. Section 229 states that any woman obtaining a miscarriage is guilty of a felony and up to imprisonment for 7 years. Section 230 states that anyone supplying anything intended for a woman's miscarriage is also guilty of a felony and up to 3 years of imprisonment.

The Penal Code operates in northern states, with abortion laws contained in sections 232, 233, and 234. The sections of the Penal Code parallel the Criminal Code, besides the exception for abortion with the purpose of saving the life of the mother. The Penal Code's punishments include imprisonment, fine, or both. The offences of these codes are punishable regardless of whether the miscarriage was successful. No provisions have been made to the Criminal Code making exceptions for the preservations of the mother's life. However, the cases of Rex vs Edgar and Rex vs Bourne have made it generally accepted that abortion performed to preserve the mother's life is not an appropriate transgression of the Criminal Code.

3.7 Components of Post-Abortion Care

Post-abortion care (PAC) reduces maternal mortality and morbidity and addresses the unmet need for family planning, a root cause of induced abortion.

Post-abortion care, one of the only integrated service delivery models in international public health, provides an integrated package of maternal and child health (MCH) and family planning (FP) services for women having complications from a miscarriage, incomplete abortion, or induced abortion.

USAID's PAC model has three components:

- Emergency treatment of complications
- Family planning counselling and services
- Community empowerment through community awareness and mobilisation

SELF-ASSESSMENT EXERCISE
i. Discuss post-abortion care.
ii. What is unsafe abortion?

4.0 CONCLUSION

In this unit, you've learnt the definition of abortion and unsafe abortion as well as post-abortion care. Barriers to safe abortion and abortion laws in Nigeria were also highlighted.

Unsafe abortion can be prevented through:

- comprehensive sexuality education;
- prevention of unintended pregnancy through the use of effective contraception, including emergency contraception; and
- provision of safe, legal abortion.

5.0 SUMMARY

Abortions are safe when they are carried out by a person with the necessary skills, using a WHO-recommended method appropriate to the pregnancy duration. Almost every abortion death and disability could be prevented through sexuality education, use of effective contraception, provision of safe, legal induced abortion, and timely care for complications. In addition, deaths and disabilities from unsafe abortion

can be reduced through the timely provision of emergency treatment of complications.

6.0 TUTOR-MARKED ASSIGNMENT

1. What are the pros and cons of legalising abortion in Nigeria?
2. In detail, explain the barriers to safe abortion.

7.0 REFERENCES/FURTHER READING

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UNIT 3 ANTENATAL AND OBSTETRICAL CARE MODELS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Definition of Antenatal Care
    3.2 Definition of Obstetric Care
    3.3 Traditional Model of ANC
    3.4 Focused Antenatal Care
    3.5 2016 WHO ANC MODEL
    3.6 Basic Emergency Obstetric and Newborn Care (Bemonc)
    3.7 Comprehensive Emergency Obstetric and Newborn Care (CEMONC)
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Antenatal care can help women prepare for delivery and understand warning signs during pregnancy and childbirth. Through preventive health care, women can access micronutrient supplementation, treatment of hypertension to prevent eclampsia, as well as immunization against tetanus. Antenatal care can also provide HIV testing and medications to prevent mother-to-child transmission of HIV. In areas where malaria is endemic, health personnel can provide pregnant women with medications and insecticide-treated mosquito nets to help prevent this debilitating and sometimes deadly disease.

2.0 OBJECTIVES

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

- explain the concept of antenatal and obstetric care
- discuss traditional antenatal care
- discuss focused antenatal care
- discuss the new 2016 ANC model
- state the components of essential obstetric care
- describe the components of emergency obstetric care.

3.0 MAIN CONTENT

3.1 Definition of Antenatal Care

Antenatal care (ANC) can be defined as the care provided by skilled healthcare professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy. The components of ANC include risk identification; prevention and management of pregnancy-related or concurrent diseases; and health education and health promotion.

ANC reduces maternal and perinatal morbidity and mortality both directly, through detection and treatment of pregnancy-related complications, and indirectly, through the identification of women and girls at increased risk of developing complications during labour and delivery, thus ensuring referral to an appropriate level of care. In addition, as indirect causes of maternal morbidity and mortality, such as HIV and malaria infections, contribute to approximately 25% of maternal deaths and near-misses ANC also provides an important opportunity to prevent and manage concurrent diseases through integrated service delivery.

3.2 Definition of Obstetric Care

Essential obstetric and newborn care (EONC) encompasses all care that is provided during pregnancy, labour, childbirth, and the postpartum period to prevent and manage complications. Comprehensive emergency obstetric and newborn care (CEMONC) encompasses all of the basic care for maternal and newborn emergencies as well as cesarean section surgery, blood transfusion, and umbilical vein insertion and intubation of the newborn. Basic and comprehensive emergency obstetric and newborn care (EMONC) addresses the main causes of maternal and newborn mortality.

A positive pregnancy experience is defined as:

- maintaining physical and sociocultural normality
- maintaining a healthy pregnancy for mother and baby (including preventing and treating risks, illness and death)
- having an effective transition to positive labour and birth, and
- achieving positive motherhood (including maternal self-esteem, competence and autonomy)

3.3 Traditional Model of ANC

The traditional model of antenatal care was developed in the early 1900s. Emphasised was the number and frequency of visits of pregnant women. And it includes approximately 12 clinic visits if the woman begins ANC in the first trimester (i.e., once a month for the first six months, once every two to three weeks for the next two months, and then once a week until birth).

3.4 Focused Antenatal Care

In low- and middle-income countries (LMICs), ANC utilisation has increased since the introduction in 2002 of the WHO ANC model, known as focused ANC (FANC) or basic ANC, which is a goal-orientated approach to delivering evidence-based interventions carried out at four critical times during pregnancy. Focused antenatal care is an updated approach that recognises three key realities:

- Antenatal care visits are a unique opportunity for early diagnosis and treatment of problems in the mother and prevention of problems in the newborn
- The majority of pregnancies progress without complication
- All women are considered at risk of complications because most complications cannot be predicted by any type of risk categorisation

Therefore, all women should receive essential care and monitoring for complications that are focused on individual needs. WHO used to recommend four antenatal care visits for women whose pregnancies are progressing normally, with the first visit in the first trimester (ideally before 12wks but not later than 16wks), and at 24-28wks, 32wks and 36wks. Each visit should include care that is appropriate to the woman's overall condition and state of pregnancy and help her prepare for birth and care of the newborn.

The goal of antenatal care (ANC) is to help women maintain normal pregnancies through focused (goal-directed) assessment and individualised care, including:

- Detection and treatment of existing conditions and complications
- Prevention of complications and diseases
- Birth-preparedness and complication-readiness
- Health promotion

3.5 2016 WHO ANC MODEL

2016 WHO ANC model recommends a minimum of eight ANC contacts, with the first contact scheduled to take place in the first

trimester (up to 12 weeks of gestation), two contacts scheduled in the second trimester (at 20 and 26 weeks of gestation) and five contacts scheduled in the third trimester (at 30, 34, 36, 38 and 40 weeks). Within this model, the word “contact” has been used instead of “visit”, as it implies an active connection between a pregnant woman and a healthcare provider that is not implicit with the word “visit”. Recent evidence linked higher frequency of ANC contacts with reduced likelihood of stillbirths, increases maternal and fetal assessments and improves communication.

3.6 BASIC EMERGENCY OBSTETRIC AND NEWBORN CARE (BEMONC)

Basic emergency obstetric and newborn care includes the following signal functions (i.e., key interventions to treat/manage key causes of maternal and newborn mortality):

- Administration of parenteral (intravenous or intramuscular) antibiotics
- Administration of a parenteral uterotonic
- Administration of a parenteral anticonvulsant
- Manual removal of the placenta
- Removal of retained products of conception (e.g., manual vacuum aspiration)
- Assisted vaginal birth (e.g., with vacuum or forceps)
- Newborn resuscitation
- Care of the low-birth-weight (LBW) newborn
- Administration of a parenteral antibiotic to the newborn

3.7 COMPREHENSIVE EMERGENCY OBSTETRIC AND NEWBORN CARE (CEMONC)

Comprehensive emergency obstetric and newborn care includes all of the BEMONC functions PLUS:

- Performing a cesarean section (C-section)
- Administration of blood

4.0 CONCLUSION

In this unit, we have discussed the basic concepts of ANC and Obstetric care. You have also learnt about the various model of ANC by WHO and the Components of both basic and comprehensive emergency obstetric and newborn care.

5.0 SUMMARY

ANC is often the only contact women have with the health care system as a result there is a need to increases the number of skilled birth attendants in Nigeria which will afford an opportunity for micronutrient supplementation such as vitamin A, iron, folate, iodine and opportunity for prevention of disease transmission: tetanus, HIV, malaria to all pregnant women.

6.0 TUTOR-MARKED ASSIGNMENT

1. Outline the components of basic emergency obstetric and newborn care.
2. Discuss the components of basic emergency obstetric and newborn care.
3. Differentiate between FANC and 2016 ANC model.

SELF-ASSESSMENT EXERCISE

Briefly describe the 2016 WHO ANC model.

7.0 REFERENCES/FURTHER READING

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UNIT 4 SAFE MOTHERHOOD AND CONTINUUM OF CARE

CONTENTS

1.0 Introduction
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3.0 Main Content
  3.1 Definition of Safe Motherhood
  3.2 Safe Motherhood Action
  3.3 Requirements for Safe Motherhood
  3.4 Effective Strategies to Achieve Safe Motherhood
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In 1987, the World Bank, in collaboration with the World Health Organization (WHO) and the United Nations Population Fund (UNFPA), sponsored the Safe Motherhood Conference in Nairobi. The Safe Motherhood Initiative resulting from the conference was a major effort aimed at reducing maternal mortality throughout the world, and particularly in developing regions. The Safe Motherhood Initiative set as its aim to reduce maternal mortality and morbidity by one half by the year 2000. The initiative recognised the need for national governments, funding agencies, and non-governmental organisations (NGOs) to make maternal health an urgent health priority and to ensure that necessary political and financial support was dedicated to this effort. Therefore the Safe Motherhood Programme was officially launched in Nigeria, September 1990.

2.0 OBJECTIVES

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

- explain the Concept of Safe Motherhood
- state the Safe Motherhood Action
- discuss Effective Strategies to Achieve Safe Motherhood
- describe the pillars of safe motherhood.

3.0 MAIN CONTENT

3.1 Definition of Safe Motherhood

Safe motherhood encompasses a series of initiatives, practices, protocols and service delivery guidelines designed to ensure that women receive high-quality gynaecological, family planning, prenatal, delivery and postpartum care, in order to achieve optimal health for the mother, fetus and infant during pregnancy, childbirth and postpartum.
Safe motherhood is a key component of reproductive health; it decreases maternal and infant mortality and morbidity. Although most maternal and infant deaths can be prevented through safe motherhood practices, millions of women worldwide are affected by maternal mortality and morbidity from preventable causes.

Safe motherhood programs emphasise addressing all of these issues as well as other reproductive health issues: sexually transmitted infections, unplanned pregnancy, obstetric fistula, and female genital cutting (FGC).

3.2 Safe Motherhood Action

Making motherhood safe requires action on three fronts:

1. Reducing the numbers of high-risk and unwanted pregnancies
2. Reducing the number of obstetric complications
3. Reducing the case fatality rate in women with complications

3.3 Requirements for Safe Motherhood

Achieving safe motherhood and reducing maternal mortality requires a three-pronged strategy:

1. All women have access to contraception to avoid unintended pregnancies
2. All pregnant women have access to skilled care at the time of birth
3. All women with complications have timely access to quality emergency obstetric care

3.4 Effective Strategies to Achieve Safe Motherhood

The Safe Motherhood Initiative outlined strategies and specific interventions, referred to as the Pillars of Safe Motherhood, for the reduction of maternal morbidity and mortality. They include:

- Focused Antenatal Care
- Minimising Delays
- Skilled Attendant at Birth
- Pregnancy Spacing

1. Family Planning -to ensure that individuals and couples have the information and services to plan the timing, number and spacing of pregnancies;
2. Antenatal Care - to prevent complications where possible and ensure that complications of pregnancy are detected early and treated appropriately;
3. Clean/Safe Delivery - to ensure that all birth attendants have the knowledge, skills and equipment to perform a clean and safe delivery and provide postpartum care to mother and baby;
4. Essential Obstetric Care - to ensure that essential care for high-risk pregnancies and complications is made available to all women who need it.

SELF-ASSESSMENT EXERCISE

What are the strategies to achieve safe motherhood?

4.0 CONCLUSION

In this unit, you have learnt about the concept of safe motherhood. We have also discussed the strategies to achieve it.

5.0 SUMMARY

Safe motherhood means ensuring that all women have access to the information and services they need to go safely through pregnancy and childbirth. It includes education on safe motherhood; prenatal care (care during pregnancy) and counselling with a focus on high-risk pregnancies; promotion of maternal nutrition.

6.0 TUTOR-MARKED ASSIGNMENT

1. Describe the concept of safe motherhood.
2. Discuss in detail the strategies to achieve safe motherhood.

7.0 REFERENCES/FURTHER READING

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MODULE 3 MATERNAL MORTALITY

UNIT 1 DETERMINANTS OF MATERNAL MORTALITY

CONTENTS

1.0 Introduction
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    3.1 Definition of Maternal Mortality
    3.2 Determinants of Maternal Mortality
    3.3 Causes of Maternal Mortality
    3.4 Prevention of Maternal Mortality
    3.5 Why Study Maternal Mortality
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

When a woman dies from anything having to do with pregnancy, it is called maternal mortality or maternal death. Maternal death can happen while a woman is pregnant, during labour and delivery, or in the 42 days after childbirth or the termination of pregnancy. If a woman passes away from an accident or a health issue that doesn't have anything to do with the pregnancy, then it is not considered a pregnancy-related death.

In countries with a good economy, modern technology, and access to healthcare, the chances of dying during pregnancy, in childbirth, or the days and weeks after delivery are very low. About 99% of all maternal deaths occur in developing countries. Maternal mortality is higher in women living in rural areas and among poorer communities. Young adolescents face a higher risk of complications and death as a result of pregnancy than other women from 2000 to 2017, the global maternal mortality ratio declined by 38 per cent-from 342 deaths to 211 deaths per 100,000 live births, according to UN inter-agency estimates. This translates into an average annual rate of reduction of 2.9 per cent.

The Millennium Development Goal (MDG) 5 to reduce the global burden of maternal death by 75% by 2015, and the recent Sustainable Development Goal (SDG) 3, which seeks to significantly cut the number of deaths to 70 per 100,000 live-births by 2030, led to the implementation of interventions to reduce the global burden of maternal mortality According to the Nigeria Demographic Health Survey 2018

(NDHS2018), Maternal Mortality Ratio in Nigeria is 512 maternal deaths per 100,000 live births in Nigeria; which is lower than what was recorded in the previous surveys (NDHS revealed a national MMR of 576 deaths per 100,000 live-births and 545 deaths per 100,000 in 2013 and 2008 respectively).

2.0 OBJECTIVES

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

- explain the concept of maternal mortality
- discuss the determinant of maternal death
- state the commonest causes of maternal death
- highlight possible preventive actions against maternal mortality.

3.0 MAIN CONTENT

3.1 Definition of Maternal Mortality

Maternal death or maternal mortality is defined by the World Health Organisation (WHO) as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

3.2 Determinants of Maternal Mortality

Like many countries in Sub-Saharan Africa, the leading causes of maternal death in Nigeria are obstetric haemorrhage, eclampsia, sepsis and complications from unsafe abortions. Similarly, studies show that factors such as age, education, antenatal care, parity, domestic violence and social autonomy (which have been established as determinants of maternal mortality) are associated with this outcome in Nigeria. Some paper reviews show the influence of poverty, lack of education, cultural food taboos and gender relations on maternal mortality in Nigeria.

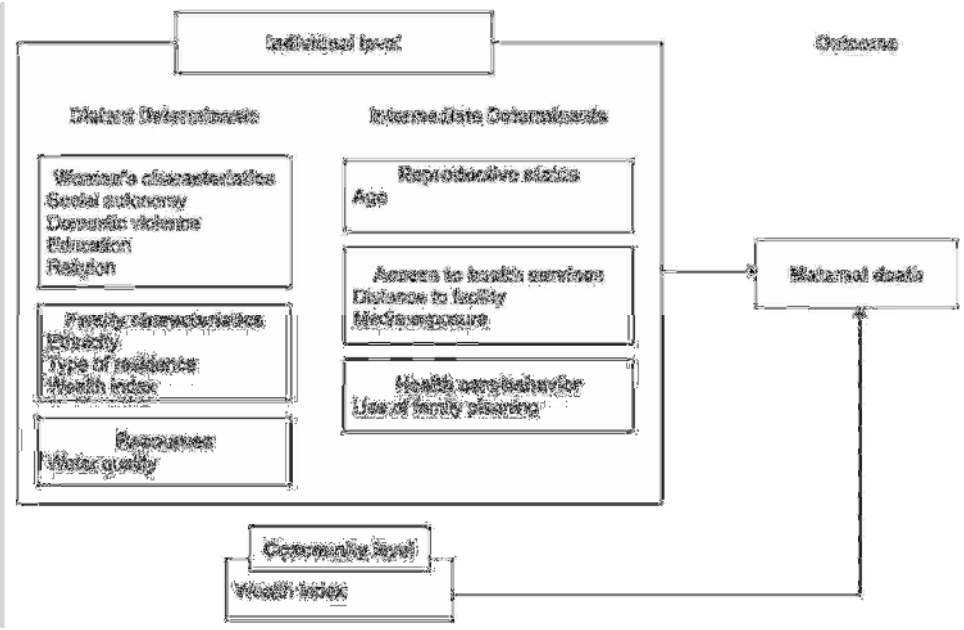

Fig. 1.1: Determinants of Maternal Mortality
Adapted framework (McCarthy & Maine) determinants of maternal mortality

3.3 Causes of Maternal Mortality

The vast majority of maternal deaths occurred in low-resource settings, and most could have been prevented. Women in less developed countries have, on average, many more pregnancies than women in developed countries, and their lifetime risk of death due to pregnancy is higher. The causes of maternal deaths or factors associated with high maternal mortality are divided into 3 categories:

- Obstetric factors (direct or indirect)
- Reproductive factors
- Non-obstetric and non-medical factors.

3.3.1 Obstetric Factors

Direct obstetric factors are factors that result from obstetric complications during pregnancy, labour, and puerperium. In descending order of magnitude, they include:

1. Haemorrhages especially post-partum haemorrhage
2. Sepsis
3. Hypertensive disorders of pregnancy
4. Obstructed labour
5. Unsafe abortion
6. Others like anaemia in pregnancy

Deaths resulting from the above, account for about 80% of all maternal deaths due to obstetric factors.

Indirect obstetrics factors are factors such as previously existing disease conditions of the mother, or disease conditions arising during pregnancy and aggravated by pregnancy. Such conditions include:

1. Malaria
2. Anaemia
3. Hepatitis
4. Tuberculosis
5. Sickle cell disease
6. Diabetes mellitus.

These factors account for the remaining 20% of maternal death due to obstetrics factors.

3.3.2 Reproductive Factors

These are factors such as lack of family planning, factors associated with high-risk pregnancy (unfavourable age, age and parity), height and weight of the mother.

3.3.3 Non-Obstetric and Non-Medical Factors

These are general causes not related to medical or obstetric conditions often leading to the three delays in obstetrical care provision.

3.4 Prevention of Maternal Mortality

Most maternal deaths are avoidable, as the healthcare solutions to prevent or manage complications are well known. Possible preventive actions against maternal mortality include:

1. Antenatal care
2. Community education
3. Family planning
4. Provision of improved facilities
5. Trained traditional birth attendants

3.5 Why Study Maternal Mortality

Maternal mortality is therefore studied for the following reasons

1. To reduce the general health burden of a nation
2. To identify the causes and determinants in a society
3. To proffer solutions to achieve the goal set by WHO for the reduction of maternal mortality by 4/5

Improving the well-being of mothers, infants, and children is an **important** public **health** goal for the world. Their well-being determines the **health** of the next generation and can help predict future public **health** challenges for families, communities, and the **health care** system.

4.0 CONCLUSION

In this unit, you've learnt about maternal mortality, we also discussed the determinants of maternal mortality. Causes of maternal mortality were highlighted as well as the reasons why a reduction in maternal mortality is important.

5.0 SUMMARY

Maternal care is at the lowest level of use, particularly in developing countries. Preventing maternal death is almost equivalent to upgrading the socioeconomic status of the country in particular. Nobody knows the exact number of maternal deaths each year due to poor epidemiological studies and poor recording of the health care institutions. We concluded that many of the contributory factors of maternal mortality could be avoided if preventive measures were taken and adequate care available.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the concept of maternal mortality.
2. Explained in detail the determinants of maternal mortality.

SELF-ASSESSMENT EXERCISE

i. Define the term maternal mortality.
ii. List the causes of maternal mortality.

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UNIT 2 MEASUREMENT OF MATERNAL MORTALITY RATIO AND RATES

CONTENTS

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  3.1 Definition of Maternal Mortality Ratio and Rate
  3.2 Differences between Maternal Mortality Ratio and Rate
  3.3 Approaches to Measuring Maternal Mortality
  3.4 Importance of Maternal Mortality Ratio and Maternal Mortality Rate as a Health Indicator
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

The maternal mortality ratio is a key performance indicator (KPI) for efforts to improve the health and safety of mothers before, during, and after childbirth per country worldwide. Often referred to as MMR. It is not to be confused with the maternal mortality rate. The maternal mortality ratio is therefore a better indicator of maternal death from pregnancy-related deaths.

2.0 OBJECTIVES

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

- explain maternal mortality ratio
- state the importance of maternal mortality ratio as a health indicator in a society
- explain the differences between maternal mortality ratio and rate
- discuss the approaches for measuring maternal mortality ratio and rate.

3.0 MAIN CONTENT

3.1 Definition of Maternal Mortality Ratio and Rate

The maternal mortality ratio is the annual number of female deaths per 100,000 live births from any cause related to or aggravated by the

pregnancy or its management (excluding accidental or incidental causes). Maternal mortality ratio= Maternal death x 100,000
Live births

The maternal mortality rate is the number of maternal deaths (direct and indirect) in a given period per 100,000 women of reproductive age during the same time.

Maternal mortality rate = Maternal deaths x 1000
Women of reproductive age

3.2 Differences between Maternal Mortality Ratio And Rate

As it was discussed or explained above, the maternal mortality ratio takes into cognizance the number of pregnant women in the community (i.e. live births) while maternal mortality rate talks about women of reproductive age whether or not they are pregnant or not, this will not give a true reflection of the death rates from pregnancy because among women of reproductive age not all of them will give birth. Maternal mortality rates include teenage girls who have not started a family, nulliparous women and women with subfertility amongst the denominator therefore it will not give a true reflection of the maternal deaths from women who are pregnant.

3.3 Approaches to Measuring Maternal Mortality

Below are the approaches in measuring maternal mortality ratio and mater mortality rate.

1. Civil registration system
2. Household survey
3. Sisterhood methods
4. Reproductive age mortality studies
5. Verbal autopsy
6. Census

3.4 Importance of Maternal Mortality Ratio and Maternal Mortality Rate as a Health Indicator

Reliable data on causes of maternal death can be used for:

1. Policymakers to set priorities based on reliable data and information and to appropriately allocate resources.
2. Monitoring and Evaluation.
3. Increasing awareness about safe motherhood.
4. Encourage accountability.
5. Appropriate advocacy.
6. Help in raise funds.

4.0 CONCLUSION

In this unit, you have learnt the definitions of maternal mortality ratio and maternal mortality rate. The importance of measuring maternal mortality was also highlighted. And differences between maternal mortality rate and the ratio was discussed. Also, approaches to measuring maternal mortality were highlighted.

SELF-ASSESSMENT EXERCISE

1. What is the difference between Maternal Mortality Ratio and Maternal Mortality Rate?

5.0 SUMMARY

Maternal mortality is difficult to measure accurately, even in countries with the complete vital registration systems. In countries lacking a complete vital registration systems, no approach is guaranteed to give accurate estimates. Data need careful evaluation and periodic measurement by multiple methods is recommended. In the long run, essential to improve the vital registration system.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss in detail approaches to measuring maternal mortality.
2. Discuss in detail the importance of measuring maternal mortality.

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UNIT 3 OBSTETRIC CARE (EONC, EMCOR, BOC), UNMET OBSTETRIC NEED, DELAYS IN OBSTETRIC CARE

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Definition of Obstetric Care
  3.2 Definition of Unmet Obstetric Care
  3.3 Delays in Obstetric Care
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Essential obstetric and newborn care (EONC) encompasses all care that is provided during pregnancy, labour, childbirth, and the postpartum period to prevent and manage complications. Basic and comprehensive emergency obstetric and newborn care (EMONC) addresses the main causes of maternal and newborn mortality.

2.0 OBJECTIVES

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

- discuss the concept of obstetric care
- explain the concept of unmet obstetric care
- discuss the delays in Obstetric care.

3.0 MAIN CONTENT

3.1 Definition of Obstetric Care

Essential obstetric care means professional medical and surgical care for pregnant women with a special focus on the delivery and immediate post-partum period. It is defined by WHO in 1985 with refinements made in 1995, essential obstetric care consists of:

1. Facilities for surgery
2. Ability to provide intravenous oxytocin
3. Provision of anaesthesia
4. Availability of medical treatment (for shock, sepsis, anaemia, and

hypertensive disorders of pregnancy)
5. Availability of blood transfusion
6. Manual procedures
7. Monitoring of labour
8. Management of problem pregnancies
9. Manual vacuum aspiration
10. Special care for neonates.

Essential obstetric care is of two types- basic essential obstetric care and comprehensive essential obstetric care. Ensuring access to essential obstetric care is important in reducing maternal deaths.

Basic emergency obstetric and newborn care includes the following signal functions:

- Administration of parenteral (intravenous or intramuscular) antibiotics
- Administration of a parenteral uterotonic
- Administration of a parenteral anticonvulsant
- Manual removal of the placenta
- Removal of retained products of conception (e.g., manual vacuum aspiration)
- Assisted vaginal birth (e.g., with vacuum or forceps)
- Newborn resuscitation
- Care of the low-birth-weight (LBW) newborn
- Administration of a parenteral antibiotic to the newborn

Comprehensive emergency obstetric and newborn care includes all of the basic emergency obstetric and newborn care functions PLUS:

- Performing a cesarean section (C-section)
- Administration of blood

3.2 Definition of Unmet Obstetric Care

The unmet obstetric care indicator provides knowledge of the nature and magnitude of the need for essential obstetric care in a defined geographical area. The indicator is therefore appropriate for identifying geographical differences in access to life-saving obstetric interventions. It further provides answers as to whether pregnant women are receiving the major obstetric interventions they need, where those with unmet needs are, and how many they are. The maternal mortality ratio does not address any of these.

It is suggested that the unmet obstetric care was created in and to be used in low-income countries. Indeed, unmet obstetric care has been

applied in several African countries to measure deficits in obstetric care, contributing to changes in maternal health practice in some.

3.3 Delays in Obstetric Care

Timing is critical in preventing maternal death and disability. Although post-partum haemorrhage can kill a woman in less than two hours, for most other complications, a woman has between six and 12 hours or more to get life-saving emergency care. Similarly, most perinatal deaths occur around delivery or in the first 48 hours afterwards. A 'three delays' model (see below) helps identify the points at which delays can occur in the management of obstetric complications. Understanding these delays can help health officials design programmes to address these delays. The first delay often happens when a woman, or her family, put off seeking care. The second delay can occur when she tries to reach appropriate care.

Both of these delays relate to the issue of access to care, involving factors such as family and community beliefs, awareness, affordability of care, availability of transport and distance to care. Improved awareness in the community and the use of new communications technologies- including mobile phones – can address the first delay. Improved transport services and reduced transport costs can effectively address the second delay.
The third delay is a delay in receiving care at health facilities. This involves factors within the health facility, including organisation, quality of care, and availability of staff and equipment. Addressing these situations is an essential condition for ensuring that obstetric emergencies are efficiently managed.

Unless all three delays are addressed, no safe motherhood programme can succeed.

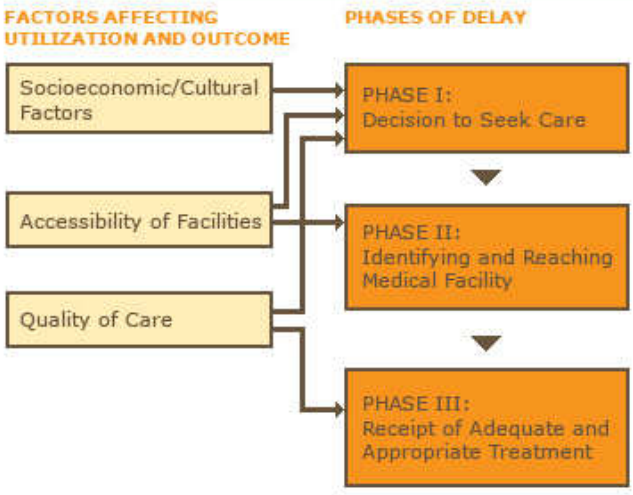

Fig.3.1

4.0 CONCLUSION

In this unit, you've learnt about obstetric care which comprises essential obstetric care, basic essential obstetric care and comprehensive essential obstetric care. We also discussed unmet obstetric care and finally, the delays in seeking obstetric care were discussed.

SELF-ASSESSMENT EXERCISE

1. What is unmet Obstetric care?
2. What is the three delay model in seeking Obstetric care?

5.0 SUMMARY

Essential obstetric care (EOC) or Comprehensive essential obstetric care (CEOC) provides not only the means to manage emergency complications when they happen, but also includes procedures for early detection and treatment to prevent the progression of problem pregnancies to the level of an emergency.

Preventing or addressing the 3 delays in obstetrics care will go a long way to improve maternal health as well as child health which in turn improve the health status of the nation. Unmet obstetric need is an estimate of the number of women needing a major obstetric intervention.

6.0 TUTOR-MARKED ASSIGNMENT

1. What are unmet obstetric needs?
2. Explain what you understand by the three delays in seeking Obstetric care.

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UNIT 4 INTEGRATED APPROACH TO NEWBORN CARE

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Developing a Package for the Integration of Newborn Care
  3.2 Why Integration is Important for MNCH Service Delivery
  3.3 Challenges of the Integration of New Born Care
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

The introduction of the Integrated Maternal, New-born and Child Health (IMNCH) strategy has provided a uniquely understandable approach for targeting interventions and leveraging resources for addressing the inter-related problems of maternal, newborn and child mortality, especially within the context of developing countries. This approach provides a simplified continuum of care framework for integrated service delivery, leveraging and coordinating the use of resources, involving a broad range of stakeholders and engaging families and communities in providing care for women and children. It was hoped that the integrated approach would improve the delivery of maternal, newborn and child health services better than previous approaches based on the separate implementation of these programs.

2.0 OBJECTIVES

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

- relate the concept of the integrated approach to newborn care
- explain the importance of integrating newborn care.

3.0 MAIN CONTENT

Integrated maternal, newborn and child health strategy is an important approach for accelerating the tempo of service delivery for the reduction in rates of maternal and child mortality in African countries.

It is an integrated approach for the care of mothers, newborns and children. It includes essential evidence-based interventions likely to improve MNCH survival and nutrition. It aims to coordinate all existing

efforts and resources for MNCH and further for Primary Health Care (PHC) services. It is a phased approach that is built on the existing structure with a focus on improving the delivery system.

3.1 Developing a Package for the Integration of Newborn Care

The following are the reasons to develop a package for the integration of newborn care:

- To respond to the health and nutrition needs of women, newborns and children under-5-year-old
- To accelerate progress towards the achievement of MDG 1, 4 and 5
- To improve efficiency, quality and utilisation of the MNCH services

3.2 Why Integration is Important for MNCH Service Delivery

- To reduce missed opportunities – particularly important when coverage is low and needs high
- To reduce duplication of efforts – particularly important when resources are limited
- To make better use of resources (infrastructure, staff and client's time, funds) – important when quality is low

3.3 Challenges of the Integration of New Born Care

Below are the challenges affecting the integration of newborn care

- Insufficient Health System Capacity
- Fragmented Responsibilities
- Lack of Investment and out-of-pocket expenses
- Availability and quality of services
- Access and utilisation of services
- Insufficient Human resources
- Poor Knowledge and Practice at Household level
- Not enough community participation

4.0 CONCLUSION

In this unit, you've learnt the integrated approach to newborn care.

5.0 SUMMARY

As integrated maternal, newborn, and child health (MNCH) packages

are now being delivered to scale across many low-income countries, there has been an acceleration in the decline of global childhood mortality since 2000.

6.0 TUTOR-MARKED ASSIGNMENT

Briefly describe the integrated approach to newborn care.

SELF-ASSESSMENT EXERCISE

What are the reasons for developing the MNCH package?

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MODULE 4 MATERNAL AND CHILD NEEDS OF SPECIAL POPULATIONS

UNIT 1 ISSUES OF ADOLESCENTS AND YOUNG ADULTS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Adolescence Development
3.2 Understanding Why Reproductive Health Focuses on Adolescents
3.3 Global Youth Today
3.4 Reproductive Health Risks and Consequences for Adolescents
3.5 Psychological and Socio-Economic Consequences of Pregnancy for Unmarried Adolescents
3.6 Factors Affecting Reproductive Health Needs of Adolescents
3.7 Adolescent Reproductive Health Services
4.0 Conclusion
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6.0 Tutor-Marked Assignment
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1.0 INTRODUCTION

Adolescence from Latin *adolescere* 'to grow up is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood (age of majority). Adolescence is usually associated with the teenage years, but its physical, psychological or cultural expressions may begin earlier and end later. For example, puberty now typically begins during preadolescence, particularly in females. Physical growth (particularly in males) and cognitive development can extend into the early twenties. Thus, age provides only a rough marker of adolescence, and scholars have found it difficult to agree upon a precise definition of adolescence.

A thorough understanding of adolescence in society depends on information from various perspectives, including psychology, biology, history, sociology, education, and anthropology. Within all of these perspectives, adolescence is viewed as a transitional period between childhood and adulthood, whose cultural purpose is the preparation of children for adult roles. It is a period of multiple transitions involving

education, training, employment, and unemployment, as well as transitions from one living circumstance to another.

The end of adolescence and the beginning of adulthood varies by country. Furthermore, even within a single nation, state or culture, there can be different ages at which an individual is considered mature enough for society to entrust them with certain privileges and responsibilities. Such privileges and responsibilities include driving a vehicle, having legal sexual relations, serving in the armed forces or on a jury, purchasing and drinking alcohol, purchase of tobacco products, voting, entering into contracts, finishing certain levels of education, marriage, and accountability for upholding the law. Adolescence is usually accompanied by an increased independence allowed by the parents or legal guardians, including less supervision as compared to preadolescence.

2.0 OBJECTIVES

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

- explain the meaning of adolescent development
- discuss the importance of adolescents reproductive health
- describe the reproductive health risks and consequences in adolescents
- discuss the challenges of adolescent reproductive health
- explain adolescent reproductive health services
- state the factors affecting reproductive health needs
- discuss the socioeconomic and psychological consequences of pregnancy for unmarried adolescents.

3.0 MAIN CONTENT

3.1 Adolescence Development

Adolescence begins with the onset of physiologically normal puberty and ends when an adult identity and behaviour are accepted. This period of development corresponds roughly to the period between the ages of 10 and 19 years, which is consistent with the World Health Organization’s definition of adolescence. The broader terms "youth" and “young” encompass the 15 to 24-year-old and 10 to 24-year-old age groups, respectively.

The five leading characteristics of adolescence are;

1. biological growth and development
2. an undefined status

3. increased decision making
4. increased pressures
5. Search for self.

In studying adolescent development, adolescence can be defined:

1. Biologically as the physical transition marked by the onset of puberty and the termination of physical growth;
2. Cognitively, as changes in the ability to think abstractly and multi-dimensionally
3. Socially, as a period of preparation for adult roles.

Major pubertal and biological changes include changes to the sex organs, height, weight, and muscle mass, as well as major changes in brain structure and organisation. Cognitive advances encompass both increments in knowledge and in the ability to think abstractly and to reason more effectively.

The study of adolescent development often involves interdisciplinary collaborations. For example, researchers in neuroscience or bio-behavioural health might focus on pubertal changes in brain structure and their effects on cognition or social relations. Sociologists interested in adolescence might focus on the acquisition of social roles (e.g., worker or romantic partner) and how this varies across cultures or social conditions.

Developmental psychologists might focus on changes in relations with parents and peers as a function of school structure and pubertal status. Some scientists have questioned the universality of adolescence as a developmental phase, arguing that traits often considered typical of adolescents are not in fact inherent to the teenage years.

3.2 Understanding Why Reproductive Health Focuses on Adolescents

For girls, puberty is a process generally marked by the production of estrogen, the growth of breasts, the appearance of pubic hair, the growth of external genitals, and the start of menstruation. For boys, it is marked by the production of testosterone, the enlargement of the testes and penis, a deepening of the voice and a growth spurt.

Why Focus on Young People?

Young people constitute a large and growing segment of the population. At the turn of the 21st century 1.7 billion people were between the ages of 10 and 24. – Eighty-six per cent of these live in less developed

countries. Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19. It is a unique stage of human development and an important time for laying the foundations of good health. They experience rapid physical, cognitive and psychosocial growth. This affects how they feel, think, make decisions, and interact with the world around them.

Despite being thought of as a healthy stage of life, there is significant death, illness and injury in the adolescent years. Much of this is preventable or treatable. During this phase, adolescents establish patterns of behaviour (for instance, related to diet, physical activity, substance use, and sexual activity) that can protect their health and the health of others around them, or put their health at risk now and in the future.

While young people face many new problems, there are also new opportunities which if combined with the energy and creativity of young people can bring tremendous dividends and can help them play a vital role in their family and in society as a whole. Future economic development depends on having the increasing proportion of the reasonably well educated, healthy and economically productive population.

3.3 Global Youth Today

The current generation of young people is the healthiest, most educated, and most urbanised in history. However, there remain some serious concerns:

Education:

About 258 million children and youth are out of school, according to UIS data for the school year ending in 2018. The total includes 59 million children of primary school age, 62 million of lower secondary school age and 138 million of upper secondary age.

One in every five of the world's out-of-school children is in Nigeria. Even though primary education is officially free and compulsory, about 10.5 million of the country's children aged 5-14 years are not in school.

In Nigeria and according to the NDHS 2018, the primary school net attendance ratio (NAR) for children age 6-12 is 61% (59% for girls and 62% for boys). The secondary NAR drops drastically to 47% among girls and 52% among boys. There is a substantial difference in the primary school NAR between urban and rural areas (72% and 53%,

respectively). The difference increases at the secondary school level (65% in urban areas and 37% in rural areas).

Youth with low levels of education experience severely limited prospects for economic self-sufficiency. Educating girls is essential to reducing child mortality, HIV/AIDS, and other diseases. Furthermore, educated women will most likely have healthy children who will complete schooling. Decades of research have shown that educated women have greater control of their reproductive lives, such as decisions about the number and spacing of their children.

Sexuality

Globally, most people become sexually active during adolescence. Premarital sexual activity is common and is on the rise worldwide. Rates are highest in sub Saharan Africa, where more than half of girls aged 15-19 are sexually experienced. Approximately 12 million girls aged 15–19 years and at least 777,000 girls under 15 years give birth each year in developing regions. At least 10 million unintended pregnancies occur each year among adolescent girls aged 15–19 years in the developing world. The need for improved health and social services aimed at adolescents, including reproductive health services, is being increasingly recognised throughout the world.

Health

Sexual activity puts adolescents at risk of various reproductive health challenges. Complications during pregnancy and childbirth are the leading cause of death for 15–19-year-old girls globally. Of the estimated 5.6 million abortions that occur each year among adolescent girls aged 15–19 years, 3.9 million are unsafe, contributing to maternal mortality, morbidity and lasting health problems.

Adolescent mothers (ages 10–19 years) face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years, and babies of adolescent mothers face higher risks of low birth weight, preterm delivery and severe neonatal conditions.

An estimated 1.7 million adolescents (age 10–19 years) were living with HIV in 2019 with around 90% in the WHO African Region (2). While there have been substantial declines in new infections amongst adolescents from a peak in 1994, adolescents still account for about 10% of new adult HIV infections, with three-quarters amongst adolescent girls These health risks are influenced by many interrelated factors, such as expectations concerning early marriage and sexual relationships,

access to education and employment, gender inequities, sexual violence, and the influence of mass media and popular culture.

Challenges

Adolescents often lack basic reproductive health information, skills in negotiating sexual relationships, and access to affordable, confidential reproductive health services. Incompetent providers further limit access to services where they exist, as do legal barriers to information and services. Many adolescents lack strong stable relationships with parents or other adults whom they can talk to about their reproductive health concerns.

Despite these challenges, programs that meet the information and service needs of adolescents can make a real difference. Successful programs help young people develop life-planning skills, respect the needs and concerns of young people, involve communities in their efforts, and provide respectful and confidential clinical services.

3.4 Reproductive Health Risks and Consequences for Adolescents

Adolescent reproductive health is affected by a pregnancy, abortion, STIs, sexual violence, and by the systems that limit access to information and clinical services. Reproductive health is also affected by nutrition, psychological well-being, and economic and gender inequities that can make it difficult to avoid forced, coerced, or commercial sex.

The following are a reproductive health risks and consequences for an adolescent:

1. Pregnancy
2. Unsafe abortion
3. STIs, including HIV/AIDS
4. Female genital cutting
5. Commercial sex
6. Sexual violence

3.5 Psychological and Socio-Economic Consequences of Pregnancy for Unmarried Adolescents

Below are the socioeconomic and psychological consequences of pregnancy for unmarried adolescents:

1. Psychological stress, poor self-esteem, lack of hope and social stigma
2. Disrupted education, poor academic achievement
3. Leaving home and prostitution
4. Poor socio-economic future, poor earning capacity: fewer career or job opportunities.
5. Unstable marriage
6. Unwanted child- mistreated, abandoned
7. Their children face psychological, social and economic obstacles

3.6 Factors Affecting Reproductive Health Needs of Adolescents

Factors affecting reproductive health needs of adolescents

1. Age
2. Marital status
3. Gender norms
4. Sexual status
5. School status
6. Childbearing status
7. Rural/urban residence
8. Peer pressure
9. Cultural/ political conditions

3.7 Adolescent Reproductive Health Services

Here, you are to note the following considerations.

3.7.1 Making Clinical Services Available

Adolescent clinical health services are best staffed by providers trained to deal with specific adolescent health concerns and to counsel adolescents about sensitive reproductive health issues and contraceptive use. In all interventions, providers must consider adolescents' marital status, overall health, and how much power they have in sexual activity.
Adolescents often name the following characteristics as important to meeting their health needs confidentiality; convenient location and hours; youth-friendly environment; open to men and women; strong counselling component; specially trained providers; and comprehensive clinical service.

3.7.2 Providing information

Providing appropriate and relevant information about reproductive health is essential to any program. Clinic-based education and

counselling are important to this effort, as are school-based programs. Parents are a key source of information, although they may feel ill-informed or embarrassed to discuss these topics with their children, or simply may disapprove of young people expressing an interest in sexuality.
Youth-friendly approaches such as radio call-in shows, drop-in centres, magazines, and hotlines also can be effective strategies for reaching adolescents.

3.7.3 Ensuring Community Support

Programs for adolescents often encounter problems gaining community acceptance since adults fear that access to education and services will encourage adolescent sexual activity. Program evaluations have shown this not to be the case. Some programs have found that explaining objectives to parents, religious leaders, and community leaders, and inviting them to discussion sessions with adolescents helps reduce opposition.

Adolescent Reproductive life involves government representatives, NGOs, community groups, young people, and others in a program to increase awareness about reproductive health issues, encourage advocacy, and provide service.

4.0 CONCLUSION

In this unit, you've learnt the meaning of adolescence development; we also discussed the importance of adolescents' reproductive health; more so, the reproductive health risk, socioeconomics and psychological consequences in adolescents.

5.0 SUMMARY

Most adolescent mortality and morbidity is preventable or treatable, but adolescents face specific barriers in accessing health information and services. Restrictive laws and policies, parental or partner control, limited knowledge, distance, cost, lack of confidentiality, and provider bias can all restrict adolescents from getting the care they need to grow and develop in good health.

6.0 TUTOR-MARKED ASSIGNMENT

1. Explain in detail the factors affecting the reproductive health needs of adolescents.
2. Discuss the challenges of adolescent reproductive health.

SELF-ASSESSMENT EXERCISE

List the socioeconomic and psychological consequences of pregnancy for unmarried adolescents.

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UNIT 2 NEEDS OF AND ISSUES FOR MEN

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Improving the Sexual and Reproductive Health of Men and Boys
  3.2 Building Blocks to Working on Men's Sexual and Reproductive Health
  3.3 SRH Service Package for Men and Adolescent Boys
4.0 Conclusion
5.0 Tutor-Marked Assignment
6.0 Summary
7.0 References/Further Reading

1.0 INTRODUCTION

Men's sexual and reproductive health advice can be overlooked, with the focus is more often given to women's more complex sexual and reproductive health. Men have substantial sexual and reproductive health needs, including the need for contraception, prevention and treatment of HIV and other sexually transmitted infections (STIs), sexual dysfunction, infertility and male cancers. Yet these needs are often unfulfilled due to a combination of factors, including a lack of service availability, poor health-seeking behaviour among men, health facilities often not considered "male-friendly," and a lack of agreed standards for delivering clinical and preventative services to men and adolescents boys.

2.0 OBJECTIVES

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

- explain the concept of needs and issues for men
- describe how to improve men's and boys' sexual and reproductive health
- discuss the building blocks to working on men's sexual and reproductive health
- explain the sexual and reproductive health service package for men and adolescent boys.

3.0 MAIN CONTENT

Ensuring that the sexual and reproductive health needs of men and adolescent boys are sufficiently addressed, along with those of women and girls, is also part of a comprehensive gender-transformative approach. Existing gender inequalities, to a large extent- due to rigid gender norms and harmful perceptions of what it means to be a man, have far-reaching consequences on health and well-being. For example, in many contexts, women do not control decision making, including sexual and reproductive health choices, yet they bear a significant burden of contraceptive use and childbearing. Where men and adolescent boys are engaged in tackling gender inequality and promoting women's choices, the resulting outcomes are positive and men and women can enjoy equitable, healthy and happy relationships.

3.1 Improving the Sexual and Reproductive Health of Men and Boys

Men have a variety of sexual and reproductive health needs such as contraception, prevention and treatment of HIV and other STIs, sexual dysfunction, infertility and male cancers.

Yet these sexual and reproductive health needs are often unmet due to a combination of factors:

1. Low utilisation of sexual and reproductive health services due to services that are not seen as "male-friendly" and also due to poor health-seeking behaviour among men.
2. Policy and structural level factors, such as inclusive language in policies, access to and availability of services as well as addressing structural stigma so that men, regardless of sexual orientation, can be successfully reached;
3. Lack of focus on men and adolescent boys' sexual and reproductive health including a limited articulation of what these services are, to whom they should be delivered and how to do so in a way that is inclusive of men in a meaningful way; and
4. Insufficient evidence about large scale and implementable approaches to addressing the sexual and reproductive health needs of men, both as supportive partners as well as clients.

It is important to note that sexual and reproductive health provision for men and adolescent boys is not only about providing services within a clinical setting. Innovative service delivery methods are needed, for example, at workplaces, places of worship, sports gatherings and other community venues.

3.2 Building Blocks to Working on Men's Sexual and Reproductive Health

The following are the seven essential and interlinked building blocks to support the efforts of organisations to operationalise a greater focus on men's sexual and reproductive health:

i. Using a gender-transformative approach
ii. Delivering quality gender-sensitive sexual and reproductive health clinical services
iii. Meeting men's diverse sexual and reproductive health needs often requires a different approach
iv. Including a focus on young men and couples
v. Adapting to the context and local needs among men
vi. Building a committed organisation and workforce
vii. Taking primary prevention and integrated approach

3.3 SRH Service Package for Men and Adolescent Boys

A combination of sexual and reproductive health services are required to respond effectively to the needs of men and adolescent boys in all their diversity.

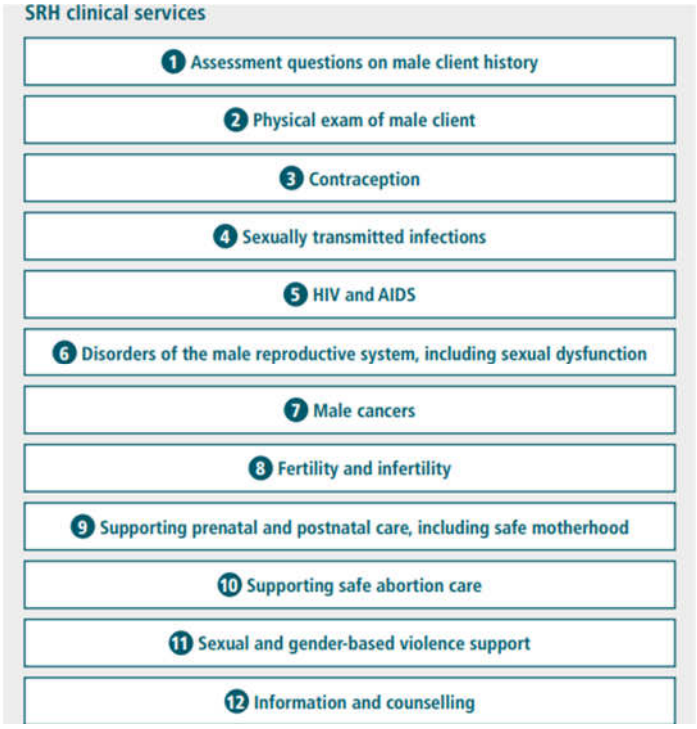

Fig.2.1 Source: Global Sexual and Reproductive Health Service Package for Men and Adolescent Boys

4.0 CONCLUSION

In this unit, you've learnt the concept of needs and issues for men, understood how to improve men's and boys' own sexual and reproductive health.

5.0 SUMMARY

There is now a body of research, however, that documents that men, throughout their lives, have important sexual and reproductive health needs of their own. To effectively meet those needs, work must be done to better define the set of medical, educational and counselling services that men require and to determine how and by whom these services should be delivered. At the same time, policymakers, advocates, providers and men themselves must be made aware that men have sexual and reproductive health needs and that meeting men's needs would have considerable social benefits.

6.0 TUTOR-MARKED ASSIGNMENT

Describe how to improve the sexual and reproductive health of Men and Boys.

SELF-ASSESSMENT EXERCISE

List the building blocks to working on men's sexual and reproductive health.

7.0 REFERENCES/ FURTHER READING

Clearinghouse on Male Circumcision for HIV Prevention: www.malecircumcision.org

EngenderHealth: www.engenderhealth.org/pubs/gender
Family Planning: A Global Handbook for Providers: www.fphandbook.org

Global Action for Men's Health: www.gamh.org/ Global Network of People Living with HIV: www.gnpplus.net

Guttmacher Institute: www.guttmacher.org/search/site/men

Health Provider Toolkit for Adolescents and Young Adult (AYA) Males: www.ayamalehealth.org International Planned Parenthood Federation (IPPF): www.ippf.org/search?s=men IPPF South Asia Region: www.ippfsar.org/search?s=men

Interagency Gender Working Group: www.igwg.org/priorityareas/male.aspx Interagency Working Group on SRH and HIV Linkages: http://srhhivlinkages.org/key-technical

UNIT 3 ROLE OF MALES IN SAFE MOTHERHOOD

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Definition of Safe Motherhood
    3.2 Safe Motherhood Action
    3.3 Role of Men in Safe Motherhood
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Reproductive health should be a concern not just for women, as reproductive health issues involve the whole family and, indeed, society. The International Conference on Population and Development's Programme of Action introduced a new concept of male responsibility and participation in reproductive health care at the Cairo conference in 1994, but since then, not much has been done in practical terms in most of the developing world.

Male involvement in reproductive health is a complex process requiring a social and behavioural change for men to play a more responsible role in reproductive health. It underscores contraceptive acceptance by men and implies the need to change men's attitudes and behaviour towards women's health, encouraging men to be more supportive of women's use of health care services including concerning child-bearing.

Male involvement in reproductive health issues engenders a better understanding between husband and wife; it reduces the number of unwanted pregnancies and the unmet need for family planning. Male involvement in reproductive health is also important in the present context of the huge burden of sexually transmitted infections (STIs) including HIV/AIDS. In patriarchal societies, where women lack autonomy in reproductive decision-making, especially in contraceptive use, men can contribute to the improvement in women's health and, consequently, the overall improvement in women's status. Despite consensus on the importance of the involvement of men in reproductive health and reasonably supportive policy environments in many developing countries, including Nigeria, reproductive health care services are largely female-oriented.

2.0 OBJECTIVES

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

- explain the concept of safe motherhood
- describe the roles of males in safe motherhood
- discuss the Safe Motherhood Action
- explain the essential services of safe motherhood.

3.0 MAIN CONTENT

3.1 Definition of Safe Motherhood

Safe motherhood encompasses a series of initiatives, practices, protocols and service delivery guidelines designed to ensure that women receive high-quality gynaecological, family planning, prenatal, delivery and postpartum care, to achieve optimal health for the mother, fetus and infant during pregnancy, childbirth and postpartum.

Safe motherhood is a key component of reproductive health; it decreases maternal and infant mortality and morbidity. Although most maternal and infant deaths can be prevented through safe motherhood practices, millions of women worldwide are affected by maternal mortality and morbidity from preventable causes.

Safe motherhood programs emphasise addressing all of these issues as well as other reproductive health issues: sexually transmitted infections, unplanned pregnancy, obstetric fistula, and female genital cutting (FGC).

Essential Services for Safe Motherhood include:

- Community education on safe motherhood
- Prenatal care and counselling, including the promotion of maternal nutrition
- Skilled assistance during childbirth
- Care for obstetric complications, including emergencies
- Postpartum care
- Post-abortion care and, where abortion is not against the law, safe services for the termination of pregnancy
- Family planning counselling, information and services
- Reproductive health education and services for adolescents

3.2 Safe Motherhood Action

Making motherhood safe requires action on three fronts:

1. Reducing the numbers of high-risk and unwanted pregnancies
2. Reducing the number of obstetric complications
3. Reducing the case fatality rate in women with complications

3.3 Role of Men in Safe Motherhood

Reproductive health programmes have traditionally focused on women to the exclusion of men. The patriarchal nature of many of these societies ensures that decisions are mostly made by men. There is therefore a need to include men in all matters that require joint spousal decisions in achieving key reproductive health goals. For example, numerous reports show that men's general knowledge and attitudes towards ideal family size, sex preference of children, ideal spacing between births and contraceptive method greatly influence their partner's preferences and opinions.

Fertility and family planning research and programmes have, however, ignored men's roles in the past, focusing instead on female behaviour. Family planning services are also traditionally presented in the context of maternal and child health. Everyone, men included, should have the right to information and access to safe, effective, affordable and acceptable reproductive health care services. It is very important to ensure gender balance in the reproductive health rights and responsibilities of both men and women.

A renewed interest in male participation in reproductive health is related to the HIV/AIDS pandemic and has focused on increasing the use of condoms. Family planning plays a key role in ensuring optimal maternal and child health and well-being. The promotion of family planning in countries with high birth rates has the potential to reduce poverty and hunger, as well as avert 32% of all maternal deaths and nearly 10% of childhood deaths. Adequate birth spacing gives mothers enough time to recover from the previous pregnancy. In most parts of Africa and the developing world, men dominate decision-making in family affairs, including reproductive health care matters. The dominance of the male is underscored by the cultural institutions of patriarchy and religion, as well as the economic power that tends to favour men.

Involving men in reproductive health care services and decisions can, however, be inherently difficult. Men may not always make the best health care decisions. Men have their reproductive health concerns. Their involvement should not be seen purely as a means to achieve better reproductive health care for women. Men's sexual and reproductive well-being and behaviours directly affect those of their

partners. The involvement of men in reproductive health care issues is pertinent to achieving the Millennium Development Goals.

Reproductive health programmes are likely to be more effective when men are involved. The willingness of husbands to use, or allow their spouse to use, family planning services determines the rate of fertility reduction. Studies have shown that male involvement improves couples' knowledge and husband-wife communication about family planning, and the wife's perception of her husband's approval positively influences the couple's contraceptive use.

In Nigeria, involving men in reproductive health care services is important to enhance couples' reproductive health. Efforts to identify the demographic variables relating to male involvement will therefore help in formulating policies to increase male involvement in reproductive health. This study assesses the relationship between the level of men's involvement in reproductive health and demographic variables, to measure the contribution of different factors to the involvement of men in reproductive activities. It also assesses the effect of access to the media, contraceptive use and attitudes towards family planning on men's involvement in reproductive health issues.

Most men approved of family planning, but only about half of them were current users of male contraceptive methods. Male involvement was associated with education, occupation, average monthly income, access to the media, duration of the marriage, number of living children, approval of family planning, current use of a male contraceptive method, and having a wife working outside the home. Some studies showed that education, number of living children and approval of family planning were the factors that were independently related to male involvement in reproductive health.

Male involvement was also related to occupation. Men whose wives worked outside the home were more involved in reproductive health. Such women are likely to be more involved in decision-making; hence, the probability of their husband's involvement in reproductive health is higher.

The media plays a vital role in providing information and motivation about reproductive issues and encouraging involvement in reproductive health. Men have more access to radio, TV and newspapers compared with women because they usually have more free time, more education, more disposable income and, in many cultures, more freedom of movement compared with women. Access to the media may enhance attitudes and behavioural change leading to improved male participation in reproductive health.

Some studies showed that men with a higher level of education who approved of family planning and who had one or no living children were more likely to be involved in reproductive health. Men who had higher levels of education were more involved in reproductive health than those with lower levels of education. Educated men were more likely to have good knowledge about family planning and reproductive health matters.

4.0 CONCLUSION

In this unit, you learnt about the role of male involvement in safe motherhood and the factors affecting it.

5.0 SUMMARY

Male involvement in reproductive health care is predicted by the level of education, the number of living children and approval of family planning. There is a need to focus on the identified factors to strengthen and increase male participation in reproductive health care.

The patriarchal nature of Nigerian and many other sub-Saharan societies, in which decision-making is predominantly a male affair, makes the limitation of reproductive health issues to women unrealistic. Male involvement in reproductive health activities is therefore relevant to the achievement of reproductive health goals, especially as this achievement is one of the Millennium Development Goals.

The media has a vital role to play in raising awareness about the importance of male involvement in reproductive health care. A favourable social and cultural climate should be created by media campaigns and increased community-based awareness. The Government, development partners and NGOs at all levels should be committed with a strong political will in this regard.

SELF-ASSESSMENT EXERCISE
Define safe motherhood?

6.0 TUTOR-MARKED ASSIGNMENT

1. What is the role of men in ensuring safe motherhood?

7.0 REFERENCE/FURTHER READING

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MODULE 5 DISEASES OF PUBLIC HEALTH IMPORTANCE IN MATERNAL HEALTH

UNIT 1 CANCERS OF REPRODUCTIVE TRACT, BREAST CANCERS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Cancers of Reproductive Health
  3.2 Breast Cancer
  3.3 Endometrial Cancer
  3.4 Ovarian Cancer
  3.5 Cervical Cancer
  3.6 Vulva Cancer
  3.7 Prostate Cancer
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Reproductive cancers are those which occur in the reproductive organs. Breast, cervical and prostate cancers are the most common reproductive cancers. 2006 Estimated US Cancer Cases shows the following:

Women

Breast	31%
Lung & bronchus	12%
Colon & rectum	11%
Uterine corpus	6%
Non-Hodgkin L	4%
Melanoma of skin	4%
Thyroid	3%
Ovary	3%
Urinary bladder	2%
Pancreas	2%
All Other Sites	22%

Men

Prostate	33%
Lung & bronchus	13%
Colon & rectum	10%
Urinary bladder	6%
Melanoma of skin	5%
Non-Hodgkin	L4%
Kidney	3%
Oral cavity	3%
Leukemia	3%
Pancreas	2%
All Other Sites	18%

The site and lifetime probability of developing cancer

All sites	1 in 3
Breast	1 in 7
Lung & bronchus	1 in 17
Colon & rectum	1 in 18
Uterine corpus	1 in 38
Non-Hodgkin lymphoma	1 in 57
Ovary	1 in 59
Pancreas	1 in 83
Melanoma	1 in 82
Urinary bladder	1 in 91
Uterine cervix	1 in 128

2.0 OBJECTIVES

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

- identify common cancers in this region
- recognise aetiology and risk factors
- state Screening methods and
- explain the treatment modalities and Prevention.

3.0 MAIN CONTENT

3.1 Cancers of Reproductive Health

The following are examples of cancers of reproductive health:

- Breast Cancer
- Endometrial Cancer
- Ovarian Cancer
- Cervical Cancer
- Vulva Cancer
- Prostate Cancer

3.2 Breast Cancer

Cancer of the breast is the most common malignancy affecting women worldwide. Globally, it accounts for about 31% of female cancers. The highest age standardised incidence and mortality is found in the United Kingdom where incidence among women aged 50 and above approaches two per 1000 women per year. About one in seven will develop the disease in their lifetime.

It is the commonest cause of death among women aged 40-50, accounting for 1/5 of all deaths in this age group. In the US, 175,000 new cases are diagnosed and 46,000 die of it annually. In Japan, one in sixty women develops the disease in their lifetime and the death rate is about 30% that in the U.K.

In Africa, the true incidence is not known but it is being reported more often than before. In UCH, Ibadan, it accounted for 6% of the 17,496 cancer cases recorded at the cancer registry between 1960-1980. In Uganda, it accounts for 4% of all cancers. In Ghana, it accounts for 13% of all cancers.

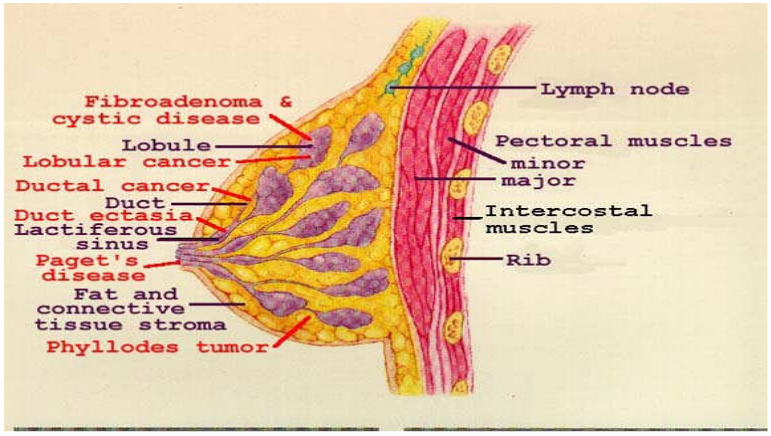


Fig.1.1**: **The Breast Anatomy (Source https://fpnotebook.com/_media/GynBreastAnatomyGeneral.jpg)

- **Normal Breast Development**

- **Puberty:** hypothalamus, anterior pituitary and ovary, insulin and thyroid hormone. About 3 to 4 days before menses: estrogen and progesterone cause growth and proliferation.
- **Pregnancy:** growth and proliferation, estrogen, progesterone, placental lactogen, prolactin and chorionic gonadotropin
- **Lactation:** prolactin
- **Menopause:** involution of breast tissue

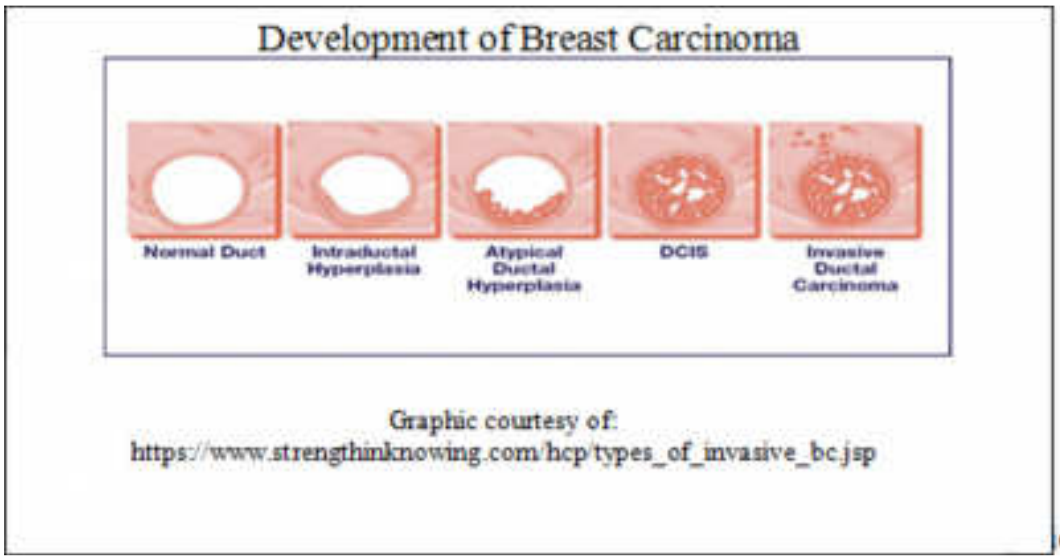


Fig.1.2: Development of Breast Cancer over a Period of Years

3.2.1 Aetiology and Risk Factors

Despite decades of research, no aetiologic factor(s) for human breast cancer has been identified.

Recently, there's an increased interest in the possibility that a great percentage of human breast cancer may be caused by VIRAL INFECTION. A human retroviral analogue of murine mammary tumour virus (MMTV) and the Epstein-Barr virus has been reported to occur in about 37% and 50% of breast cancer cases respectively.

Predisposing Factors

- Gender
- Age
- Family history
- Parity
- Age at first pregnancy and nulliparity
- Age of menarche and menopause

- Hormonal factors
- Prior breast biopsy
- Previous breast cancer
- Cancer of the corpus uteri and ovary
- Diet and fat intake
- Drugs
- Socio-economic status.

- **Alcohol and Breast Cancer**

Biological rationale for epidemiological findings

Ethanol ----acetaldehyde ---acetate
ADH ALDH
Acetaldehyde – DNA damage
Intervention studies – alcohol increases plasma estradiol in pre and post-menopausal women
High intake of folic acid mitigates excessive risk

3.2.2 Screening

Breast cancer screening involves testing otherwise healthy women for breast cancer in an attempt to achieve early diagnoses. The assumption is that early detection will improve outcomes. Many screening tests have been employed. These include:

- Breast self-examination (BSE)
- Palpation by a certified physician
- Thermography
- Mammography

Table 1.1: Techniques in Breast Cancer Screening

Breast cancer	**Screening Procedure**	**Frequency**
Technique 1.	Breast Self-Examination	Monthly after age 20.
Technique 2.	Palpation	Every 3yrs for women aged 20-40; yearly after age 40.
Technique 3.	Thermography	No longer recommended.
Technique 4.	Mammography	Yearly after age 40.

Breast Self-Examination (BSE)
Examinations a woman can personally perform to detect abnormalities

in her breasts. It involves visual and manual inspection of breasts for shape, size, dimples, changes in the breast skin, retraction of nipple, bumps, swelling or lumps. It is performed monthly after age 20 preferably a few days after the menstrual period.

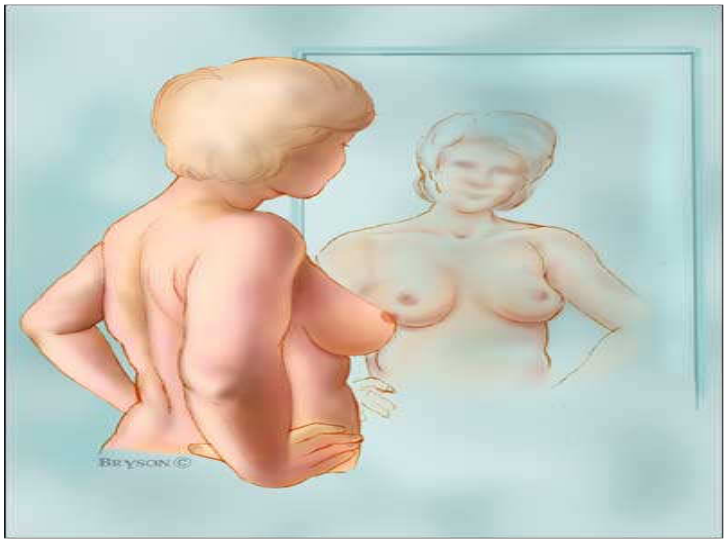


Fig. 1.3: Visual Examination of breasts before a mirror

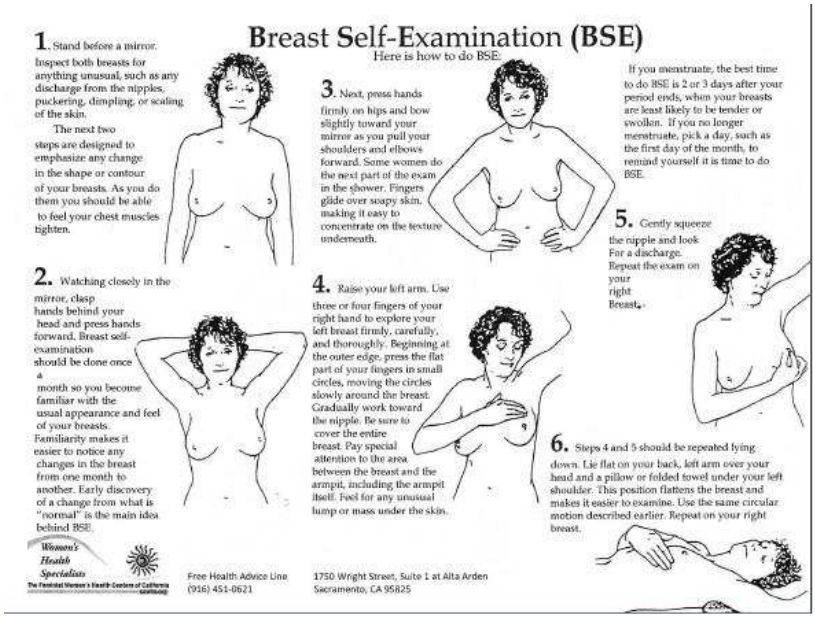


Fig.1.4: Breast Self-Examination

- **Benefits and Limitations of SBE**

SBE is the most widespread technique. It increases the chances of detecting breast cancer at an early stage. Early detection increases the survival rate. About 80% of breast cancer cases are diagnosed because a

woman has found a lump in her breast.
The outcome of BSEs not detailed enough. Increase risk of women thinking that it is the only form of early screening they require to protect themselves against breast cancer. BSE harms in terms of the increased numbers of benign lesions identified and the increased number of biopsies performed.

Palpation by a certified physician

Also referred to as clinical breast examination; it is the clinical examination of the breast by a certified physician (gynaecologist). Recommended for women between ages 20-40 at least once every 3years and annually above the age of 40. Detect lesions 1cm or more.
Much more detailed detection can be made as to the experience of the physician aids in identifying what a lay woman cannot identify. Although more detailed than BSE, it is also flawed by human frailty as it is not reliable for large fatty breasts.

Thermography

This is also called thermal or infrared imaging, approved by the US Food and Drug Administration in 1982; used to determine whether a local abnormality in breast tissue temperature is present, which may indicate the presence of disease. Since the temperature of human skin changes in response to disorders in the underlying tissue, conditions such as poor circulation, swelling, and cancer are visible with cameras sensitive to infrared heat.

- Benefits and Limitation

1. Patient is not exposed to radiation.
2. It is a pain-free examination.
3. Gives the physician a clearer understanding of the condition under review.
4. It is not a sensitive tool.
5. It is not an effective means of detecting breast cancer.

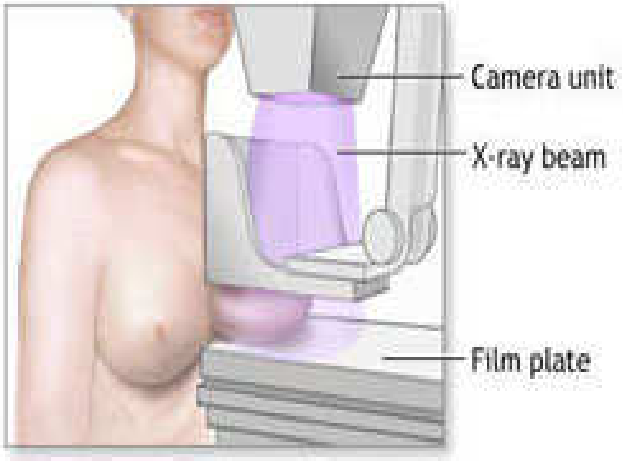
Computerised thermal imaging

Computerised thermal imaging (CTI) is a new, non-invasive imaging method that is being developed using the principles of traditional thermography but with the addition of digital image reconstruction.
CTI is a heat-sensing and processing system that uses a thermal sensitive camera to capture a digital image based on the heat radiating from the body. The main component of the CTI technology is the highly sensitive, high-speed infrared camera.

Mammography

Mammography is a special X-ray technique that is used to visualize soft tissues of the breast as a means for screening women for breast cancer. It is the most sensitive and specific in detecting small tumours that are sometimes missed by the other techniques. It is currently the only FDA approved exam to help screen for breast cancer in women who show no signs or symptoms of the disease.

The first mammography machine was produced in 1966 by general electric. Since its introduction, there have been several improvements in the device. Current mammograms use digital systems.



In mammography, each breast is compressed horizontally, then obliquely and an x-ray is taken of each position

Fig.1.5: Mammography

It is recommended on an annual basis for all women once they reach 40 years of age. All women 40 years of age and older should have annual screening mammograms. Breast cancers detected by mammography are usually in their earlier stage than those detected by patients or doctors as a breast lump, hence will reduce mortality from breast cancer by about 30% in women older than 50 years.

The ability of a mammogram to find breast cancer may depend on the size of the tumour, the density of the breast tissue, and the skill of the radiologist. Mammograms are less likely to find breast tumours in women less than 50 years of age. This may be because younger women have denser breast tissue that appears white on a mammogram; a tumour also appears white on a mammogram, which makes it hard to find

- **Benefits**

1. Reduce mortality
2. Reduce rates of late-stage breast cancer
3. Detect tumor before it is palpable
4. Better range of treatment

- **Limitation**

1. It is very expensive.
2. Radiation exposure is high. 500 milliroentgen compared to 30-40 milliroentgen exposed to during chest x-ray.
3. Repeated exposures may lead to the causation of breast cancer itself.
4. Requires technical equipment and expert personnel (radiologists).
5. Biopsy from a suspicious lesion may end up in a false positive in 5-10 cases.

3.2.2 Diagnosis and Treatment

1. Histology of biopsy specimen
2. Treatment: Surgery followed by a course of chemotherapy

3.3 Endometrial Cancer

Is a cancer of the endometrial lining (epithelial lining). In developing countries, it ranks third after cervix and ovaries. In developed countries, where deaths from cervical cancer have been reduced by up to 50% because of screening, endometrial cancer ranks alongside ovarian cancer as the leading type of gynaecological cancer.
Reported global cancer statistics show the incidence to be highest in

North America, then Europe and temperate South America. The incidence of endometrial carcinoma is low in southern and eastern Asia, as well as in most of Africa.

- Ilorin: 10.7% (unpublished data)
- Benin: 6.47% Okobia et al 2005
- Maiduguri: 8.5% Kyari et al 2004
- Port Harcourt: 8.3% (Briggs, *et al.* 1990)
- Zimbabwe: 6% 1989

3.3.1 Etiology/Causes and Risk Factors

Cause not known but predisposing /risk factors have been identified.
NOTE: Both major and minor risk factors have one common thread – unopposed oestrogen stimulation of the endometrium.

- Obesity
- Syndromes of increased endogenous estrogen stimulation
- Familial and hereditary factors
- Lifestyle factors
- Exogenous estrogens
- Other factors

Obesity – A major risk factor

- Circulating androgens in the fatty tissue can be converted to estrone.
- An increase in free, unbound oestrogen because SHBG which inactivates E2 is decreased.
- Upper body fat localisation is a significant risk factor & have a poorer prognosis.
- Associated with the other major risk factors like DM & hypertension.

Syndromes of increased endogenous oestrogen stimulation

- Early menarche (4-fold increase esp. in premenopausal women) & late menopause (menstruation span >39yrs have 4.2 times increase than <25yrs).
- Infertility and low parity:
  - ✓ PCOS, probably due to long anovulatory cycles.
  - ✓ One-third of patients are nulliparous.
  - ✓ The risk decreases with increased parity.
- Estrogen producing ovarian tumors:
  - ✓ Granulosa cell tumors.

- ✓ Theca cell tumors.

Familial and hereditary factors

- Familial adenocarcinoma syndrome (Lynch type II).
- Hereditary non-poliposis colorectal cancer

Lifestyle factors

- Diet: animal fat & proteins increases risk.
- Sedentary lifestyles increase the risk.

Exogenous estrogens

- Prolonged use of unopposed estrogen is associated with a high risk of endometrial ca.
- Stimulation of the endometrium occurs despite the route of administration.
- Increasing the duration of use also increases the risk. The risk persists for many years after use.
- Risk also increases with increasing doses of conjugated estrogen.

An increased incidence has also been found in association with tamoxifen treatment of breast cancer, perhaps related to the estrogenic effect of tamoxifen on the endometrium. The cancers associated with exogenous estrogen may behave biologically differently from their non-estrogen associated counterparts. Most estrogen-induced tumors is of low virulence, well-differentiated, with minimal myometrial invasion.

Other factors

- Age is an important risk factor. it is a cancer of post & perimenopausal women.
- Race: White race has twice the lifetime risk than the black race.
- High social class.

The last 2 factors may be related to the availability of exogenous estrogen.

Protective factors

The use of concomitant or cyclic progestins will greatly reduce the risk. It inhibits the synthesis of both estrogen and progesterone receptors. Within the cell, it stimulates the 17β dehydrogenase enzyme that converts estradiol to the less potent estrone. In some women, moderately to poorly differentiated adenocarcinoma may develop despite the use of progestins.

Prior use of COCP reduces the risk. Protection may be due to the net progestational effect that results in virtually inactive endometrium with long term use. The protection may last 20 or more years after discontinuation in long term users (10 or more years) but maybe reversed by unopposed postmenopausal estrogen.

Lifestyle factors - Smoking may have a protective effect probably due to the reduced circulating estrogen it induces. Active lifestyle may be protective. Consumption of vegetables, fresh fruits and high fibre reduces the risk. Alcohol in moderate quantities may be protective.

3.3.2 Clinical Presentation and Screening

The most common symptom is postmenopausal bleeding usually in their 60s. In postmenopausal women, any vaginal bleeding is considered to be from cancer until proven not to be. About 5-10% occur in women<40yrs. Some may have offensive vaginal discharge if there is an infection.

Routine screening of women is not of any proven benefit. Occasionally, however, the Pap smear may fortuitously identify endometrial abnormalities.

3.3.3 Diagnosis and treatment

Detailed history and physical examination help to identify risk factors and associated Medical conditions.

Investigations

Definitive diagnosis - Dilatation and (fractional) curettage, Traditional 4 quadrant biopsy Other means of obtaining sample includes Lavage, brush or use of suction devices Others - Haematological profile, E/U/Cr, LFTs, FBS, USS, Abdo/pelvic. CT Scans, MRIs
CXR, Cystoscopy/sigmoidoscopy-if necessary

Pattern of Spread

- Lymphatic spread via:
  - ✓ Lymphatics from the infundibulopelvic lig
  - ✓ Paracervical & parametrial lymphatics
  - ✓ Round lig lymphatics to:
  - ✓ Ext Iliac, obturator, hypogastric, common iliac and paraaortic.
- Direct spread into the peritoneal cavity

- Hematogenous to liver, lung, bone.

Precursors

- Simple hyperplasia (cystic hyperplasia). The risk of malignant potential/transformation is very low.
- Complex hyperplasia is also called adenomyohyperplasia without atypia. Risk about 2% of either harbouring or developing a malignancy within one year following that diagnosis. The risk is extremely low.
- Atypical hyperplasia also called adenomyohyperplasia with atypia carries a 15-25% risk.

Histologic Type

- Adenocarcinoma (well-differentiated col cell with glandular pattern(90%)
- Adenocanthoma (adenocarcinoma with squamous metaplasia 5%)
- Adenosquamous carcinoma (mixed adenocarcinoma and squamous cell carcinoma)
- Anaplastic carcinoma- undifferentiated

Staging

The clinical staging adopted by FIGO in 1971 is based on a standard uterine cavity length and extension of the disease beyond the uterus and pelvis. The FIGO Committee on Gynecologic Oncology, in 1988, recommended that endome[trial cancer be surgically staged.

Surgical staging - The procedure includes:

- Peritoneal washings.
- TAH (simple) + BSO - If there is occult invasion outside the lower segment, the parametria is involved or the uterosacral ligaments are involved, a more radical operation may be done.
- Lymph node sampling of all major node bearing areas, the “10 lymphatic zones”.
- Laparoscopic staging may be done.

Histopathology – degree of differentiation. Cases of carcinoma of the corpus should be grouped concerning the degree of differentiation of the adenocarcinoma as follows:

- G1: < 5% of a nonsquamous or non modular solid growth

pattern.

- G2: 6-50% of a nonsquamous or non modular solid growth pattern.
- G3: > 50% of a nonsquamous or non modular solid growth pattern.

➢ **I Tumour confined to the corpus uteri**
✓ IA: Tumour limited to the endometrium
✓ IB: Tumour invades < 1/2 myometrium
✓ IC: Tumour invades > 1/2 of the myometrium
➢ **II Tumour invades cervix**
✓ IIA: Endocervical glandular involvement
✓ IIB: Cervical stromal invasion
➢ **III Local and/or regional spread**
✓ IIIA: involves serosa and/or adnexa and/or +ve peritoneal washings.
✓ IIIB: Vaginal involvement.
✓ IIIC: pelvic/paraaortic lymph nodes
➢ **IV Distance spread**
✓ IVA: Tumour invades bladder mucosa and/or bowel mucosa
✓ IVB: Distant metastasis including metastasis to intra-abdominal lymph nodes (other than para-aortic) and/or inguinal nodes

Prognostic factors

- **Histological grade** (Tumour grade 3): Decrease survival, Increased risk of lymph node involvement, Increased risk of recurrence,
- **Deep myometrial invasion**: A most reliable indicator of tumour volume - Lymph vascular channel involvement and Positive peritoneal cytology
- **Histologic type** - Serous papillary & Clear cell tumours
- **Cervical involvement** (stage II)
- Adnexal spread
- Intraperitoneal disease
- Increasing age
- **Steroid receptors** - Most endometroid ca have ER & PR. The presence & quantity of the receptors correlates with the histologic differentiation, FIGO staging & survival. High levels found in well-differentiated tumors & ass with better survival rates. Receptor status influences tumor response to progestin therapy.

3.3.4 Treatment

Clinical stage I

TAH (total abdominal hysterectomy), BSO (bilateral salpingo-oophorectomy). Routine node sampling is not done, but any suspicious node is removed for histological evaluation. If there is deep myometrial involvement, sampling may be done. Consider postoperative radiation therapy, if there is deep myometrial involvement or G2, G3

Clinical stage II

Radical TAH, pelvic & para-aortic node dissection, followed by irradiation. Primary irradiation (intracavitary & external beam) followed by surgery. May be done where there are technical problems e.g. extreme ballooning of the cervix. Radiation alone in patients not medically fit for surgery.

Clinical stage III

Complete surgical resection where possible followed by extended field RT and/or systemic therapy with cytotoxic or hormones. Preoperative pelvic irradiation followed by exploratory laparotomy. If good intracavitary radiation was delivered, a subtotal hysterectomy may be done to avoid bladder or bowel fistula.

Clinical stage IV

Optimal cytoreduction followed by systemic chemotherapy. High doses of progestins may be used esp in distant metastasis and include hydroxyprogesterone (Delalutin), medroxyprogesterone (Provera), and megestrol (Megace). Pelvic RT may be given to achieve local control & prevent bleeding. Local RT in the brain or bone may be useful.

Prognosis: Overall 5year survival rate:

- Stage I: 80% up to 95% reported.
- Stage II: 60%
- Stage III: 30%
- Stage IV: 5%

3.4 Ovarian Cancer

In the year 2000 (the most recent for which figures are available) there were 6,734 cases of ovarian cancer diagnosed in the UK. In the USA the estimated 2004 incidence is 25,500 cases. Overall, about one woman in

50 will get ovarian cancer at some time during her life.

In 2002, 4,687 women in the UK died of ovarian cancer, making it a more common cause of death than cervical and uterine cancer combined. In the USA it is estimated that 16,000 women will die from ovarian cancer in 2004.

There are few clear symptoms of ovarian cancer. Typically, it can cause pain in the abdomen, a feeling of being bloated, fatigue, weight loss, or problems with urination. However, these can all be caused by many other diseases. This makes it difficult to diagnose ovarian cancer by symptoms alone

3.4.1 Etiology and risk factors

Like most cancers, it is more common with increasing age. The other risk factor is if you carry certain genes (see below). Having children reduces the risk: women with three or four children have only half the risk of a childless woman. Infertile women (i.e. women who cannot conceive despite trying for several years) appear to have an even higher risk than other childless women. Taking the contraceptive pill reduces the risk of ovarian cancer by somewhere between a third and a half, depending on how long it is taken for.

Although the effect of hormone replacement therapy (HRT) on ovarian cancer risk has been studied, the results are unclear. Some studies have found an increased risk, but analysis of all the published research shows conflicting results. There have been some reports claiming that using talc in the genital area increases the risk of ovarian cancer. However, most of the research conducted on this has not produced reliable findings and there is no good evidence to support these claims.

There is some evidence that being overweight can increase your risk of ovarian cancer. Some research has suggested that beta-carotene in the diet can reduce the risk of this cancer, although this finding has not yet been confirmed.

There are several genes, which are known to carry increased risks of various cancers, which can run in families. The BRCA1 and BRCA2 genes were originally discovered because they cause an increased risk of breast cancer, but we now know that they also substantially increase the risk of ovarian cancer. The HNPCC gene was discovered because it increases the risk of colon cancer, but women with this gene also have a greater chance of getting ovarian cancer. Overall, if you have one close relative (mother, sister or daughter) who has had ovarian cancer, your risk goes up about 4-fold. If you have two cases amongst close

relatives, your risk goes up 10-fold or more.

3.4.2 Screening

There is no reliable method of screening for ovarian cancer. However, both the CA125 blood test and vaginal ultrasound are currently being tested as possible methods for screening women for ovarian cancer.

3.4.3 Diagnosis and Treatment

If ovarian cancer is suspected, two main tests are used to make the diagnosis. First, an ultrasound scan of the abdomen is performed. Sometimes the scan is taken from inside the vagina. The second test is to measure the level of the CA125 marker in the blood. Neither of these tests gives a definite diagnosis of ovarian cancer, but if both tests are positive, the patient is usually referred to a surgeon who will operate to see if the ovaries show any signs of cancer.

The treatment used will depend on how advanced the cancer is and how old the patient is. For younger patients with early cancer, limited surgery is used to preserve their fertility. For older patients with more advanced cancers, the ovaries and the womb are usually removed. If cancer has spread, further tissue may need to be removed to get out as much of cancer as possible. Chemotherapy is normally used after the surgery to kill any remaining cancer cells. Sometimes it is also used before the surgery to shrink the tumour and make it easier to remove completely.

Effectiveness of treatment

Overall, only about two out of every five women with ovarian cancer can be cured. Like all other cancers, the stage at which ovarian cancer is diagnosed determines how easy it is to cure. If diagnosed and treated while the cancer is still confined to the ovaries, nearly 75% of women can be cured. However, once it has spread into the pelvic cavity, the cure rate drops to one third. If it has spread further, only one quarter to one sixth of patients can be cured. For these figures 'cured' is defined as surviving for five years after the first diagnosis.

3.5 Cervical Cancer

Cervical Cancer is a malignancy in the cervix, the narrow opening at the lower end of the female uterus, or womb that leads into the vagina. The disease most commonly affects women between the ages of 40 and 55. Cervical cancer can be prevented by screening for precancerous cells, and it can be cured if detected in an early stage.

In its early stages, cervical cancer may not cause any noticeable symptoms. As cancer progresses, the woman may experience an abnormal vaginal discharge, vaginal bleeding between menstrual periods, or bleeding and pain after sexual intercourse. Over time, the bleeding becomes heavier and more frequent, and pain becomes noticeable in the lower abdomen or back.

Cervical cancer is a major concern for many women. Screening programmes have done much to put minds at ease over recent years, but just how much do you know about Cervical Cancer symptoms, causes and treatments?

Symptoms: It is unusual for women to experience the symptoms of cervical cancer these days as the vast majority of cases are diagnosed during cervical screening. When symptoms are observed, they are abnormal vaginal bleeding (between periods) and – more rarely – discomfort during intercourse.

- **History**

- 400 BCE - Hippocrates: cervical cancer incurable
- 1925 - Hans Hinselmann: invented colposcope
- 1928 - Papanicolaou: developed Pap technique
- 1941 - Papanicolaou and Trout: Pap screening
- 1946 - Ayer: spatula to scrape the cervix
- 1976 - Zur Hausen and Gisam: found HPV DNA in cervical cancer and warts
- 1988 - Bethesda System for Pap results developed

It was not until the 1980s that human papillomavirus (HPV) was identified in cervical cancer tissue (Dürst et al, 1983). A description by electron microscopy was given earlier in 1949 and HPV-DNA was identified in 1963. It has since been demonstrated that HPV is implicated in virtually all cervical cancers.

- **Types**

This is one of the few types of cancer where there are clear early stages which can be diagnosed and treated. The first stage is called CIN 1 and simply means that the cells on the cervix are slightly abnormal. This may have several causes and often clears up after a while. CIN 2 is not cancer, but the cells on the surface of the cervix show a number of cancer-like changes which can be seen under the microscope. The third stage, CIN 3, is close to cancer and is also known as 'carcinoma in situ'. If left untreated, CIN 3 has a 50% chance of developing cancer

3.5.1 Etiology and Risk Factors

- Age: early age at sexual intercourse
- Multiple sexual partners
- STDs especially ulcerative infections
- HIV
- Immunosuppression
- CINs

Each year, over 40,000 women are found to have CIN 2 or CIN 3. Almost all of them are successfully treated. However, over 3,000 new cases of cervical cancer are diagnosed each year in the UK and 11,000 in the USA. Younger women are more likely to have CIN 3 than older women. The risk is low during the teens but is highest during the ages of 20 to 29, slowly decreasing thereafter

3.5.2 Screening

To check for CIN, a doctor or nurse will take a smear from the surface of the cervix. A small wooden or plastic spatula is inserted into the vagina and painlessly scraped over the cervix. Many cells from the cervix stick to the spatula. These are examined under the microscope for any abnormalities. Women found to have CIN2 or CIN 3 can be treated to prevent them from getting cervical cancer.
All women over the age of 20 should have a cervical screen at least every five years. The cervical screening started in 1964 and the effects have been quite clear. The death rate from this cancer has fallen by two thirds since then. It has been estimated that, over 10 years, cervical screening has saved the lives of 8,000 women in the UK.

3.5.3 Diagnosis, Treatment and Prevention

The treatment for CIN 2 or CIN 3 is very effective indeed. Overall, three out of every five patients will be cured of cancer.is diagnosed early and appropriate therapy commenced early. For women under 50, nearly four out of every five are cured if diagnosed early.

Cryotherapy (the therapeutic use of cold): Medical treatment that involves cooling the body, especially by applying ice packs. **Cryosurgery** uses extreme cold to destroy tissue; laser surgery uses a beam of concentrated light to destroy tissue, and **loop electrosurgical excision procedure** (LEEP) uses electric current passed through a wire to remove tissue. Another surgical procedure removes a cone-shaped piece of tissue containing the cancerous cells from the cervix.

3.6 Vulva Cancer

Vulva cancer is the 4th most common gynecologic cancer in the USA (following uterus, ovary and cervix). It comprises 5% of gynecologic malignancies and there are an estimated 3,500 new cases and 870 associated deaths per year in the USA. The mean age at diagnosis is 65years, but is decreasing.

3.6.1 Etiology/Risk factors

- Cigarette smoking
- Human Papilloma Virus (HPV) infection
- Immunosuppression
- Chronic vulvar conditions such as lichen sclerosus
- VIN/CIN
- Prior history of cervical cancer

Carcinogenesis

Two pathways of vulvar carcinogenesis:

1. HPV infection (60%)
2. Chronic inflammatory (vulvar dystrophy) or autoimmune processes

Clinical manifestation

- Most patients present with a single vulvar plaque, ulcer or mass
- Labia majora is the most common site
- Lesions are multifocal in 5% of cases so complete examination of the vulva, perianal area, vagina and cervix is required
- A synchronous second malignancy is found in 22% of cases, usually CIN/cervical cancer
- Pruritus is the most common presenting symptom (especially if associated with vulvar dystrophy such as lichen sclerosus)
- Vulvar bleeding or discharge
- Dysuria
- Enlarged groin lymph node

3.6.2 Screening and Diagnosis

Biopsy of gross lesions, if no gross lesion present but high clinical suspicion, perform colposcopy with 5% acetic acid solution.

Types of Vulva cancer

- Squamous cell carcinoma (>90% of cases)
- Melanoma
- Sarcoma
- Basal cell carcinoma
- Verrucous carcinoma
- Adenocarcinoma (Bartholin gland)
- Breast carcinoma (ectopic breast tissue in milk line that extends to the perineum)

Squamous cell carcinoma – most common type (>90% of cases)
Two subtypes:

1. Warty/Basaloid: It is associated with HPV infection, younger women
2. Keratinising/Simplex/Differentiated: It is associated with vulvar dystrophies (e.g. lichen sclerosus), not HPV related and common in older women

Table 1.2: Staging of Vulva cancer

Stage	Description
IA	Lesion ≤2 cm with ≤1 mm stromal invasion, no nodal metastases
IB	Lesion >2 cm with >1 mm stromal invasion, no nodal metastases
II	Lesion any size, extension to adjacent structures, no nodal metastases
III	Lesion of any size with involvement of the lower urethra, vagina or anus OR groin lymph node metastases
IVA	Tumor invading upper urethra, bladder mucosa, rectal mucosa, pelvic bone
IVB	Any distant metastases, including pelvic lymph nodes

3.6.3 Treatment and Prognosis

Table1. 3: Treatment of Vulva Cancer

Stage	Treatment
IA	Wide local excision (WLE)
IB	Wide radical excision (WRE) and inguinal-femoral lymphadenectomy
II	WRE and inguinal-femoral lymphadenectomy
III	WRE and inguinal-femoral lymphadenectomy OR chemoradiation +/- surgery to resect residual disease as needed
IVA	chemoradiation +/- surgery to resect residual disease as needed
IVB	Chemotherapy

Radiation Therapy:

- Indicated if positive margins after WRE if re-excision not possible or desirable (i.e. around the clitoris or anal sphincter)
- Indicated if positive inguinal/pelvic nodes
- Radiation in combination with chemotherapy is an alternative to surgery in women with stage III/IVA disease

Chemotherapy:

- Indicated for metastatic disease (stage IVB)
- Similar regimens as those used for metastatic cervical cancer
- Platinum-based
- Treatment is palliative

Summary

- Comprises 5% of gynecologic malignancies
- 2 pathways of vulvar carcinogenesis:
  - HPV infection (60%)
  - Chronic inflammatory (vulvar dystrophy)
- The most common histology is squamous cell carcinoma
- Treatment includes surgery, radiation and/or chemotherapy depending on the stage

3.7 Prostate Cancer

Prostate cancer is the second most diagnosed form of cancer in men and is the sixth most frequent cause of death among all cancers. The prostate produces seminal fluid, which is responsible for the nourishment and

transport of sperm. The prostate also controls urinary continence, the ability to control urination.

3.7.1 Etiology/Risk factors

Genetic Risk Factors for Developing Prostate Cancer

The risk for developing prostate cancer is affected by polymorphisms in specific genes. One controls the absorption of calcium in cells of the small intestine. Prostate cells respond to increased calcium intake by multiplying at a faster rate.

- Blacks are more likely to have the more active allele, leading to more receptor production
- Since increased calcium absorption leads to a higher risk of prostate cancer, blacks are more likely to suffer from the disease
- High levels of calcium intake increased men's risk for advanced prostate cancer
- People with a family history of prostate cancer are more likely to develop the disease
- Obesity -
  - ✓ Obesity increases calcium absorption - Leads to the increased likelihood of developing prostate cancer
  - ✓ Detection biases among obese men:
    - o Naturally lower PSA levels prevent further screenings
    - o Physicians have a more difficult time performing complete digital rectal exams
    - o Obese men have larger prostates, increasing the surface area that prostate cancer could occur over
  - ✓ In addition to higher rates of incidence, obese men are more likely to experience fatal cases of prostate cancer. Larger amounts of fat tissue cause the prostate and prostate cancer to move more in obese men. Less radiation hits the cancerous mass during radiation therapy, leaving some behind. As a result, obese patients who undergo radiation therapy are more likely to experience biochemical recurrence.

3.7.2 Screening and Diagnosis

1. Prostate-specific antigen (PSA) is a protein produced by prostate cells and can occur in high amounts when prostate cancer is present. PSA levels are often detected via blood tests. Levels above 4 ng/mL often lead to biopsy.
2. Digital rectal examination
3. Biopsy - Tissue sample from the prostate is taken and checked for a cancerous mass

3.7.3 Treatment Modalities and Prognosis

Treatment Modalities

1. Chemotherapy
2. Surgical procedure

Prognosis

In general, the earlier prostate cancer is caught, the more likely it is for a man to get successful treatment and remain disease-free. The overall prognosis for prostate cancer is among the best of all cancers. It's important to keep in mind that survival rates and the likelihood of recurrence are based on averages and won't necessarily reflect any individual patient outcome.

High Cure Rates for Local and Regional Prostate Cancers

Approximately 80 percent to 85 percent of all prostate cancers are detected in the local or regional stages, which represent stages I, II and III. Many men diagnosed and treated at the local or regional stages will be disease-free after five years.

Stage IV Prostate Cancer Prognosis

Prostate cancers detected at the distant stage have an average five-year survival rate of 28 percent, which is much lower than local and regional cancers of the prostate. This average survival rate represents stage IV prostate cancers that have metastasised (spread) beyond nearby areas to lymph nodes, organs or bones in other parts of the body.

Long-Term Prognosis

Because most prostate cancers are diagnosed with early screening measures and are curable, the average long-term prognosis for prostate cancer is quite encouraging. The figures below, provided by the American Cancer Society, represent the average relative survival rate of all men with prostate cancer. They represent a patient's chances of survival after a specified number of years as compared with the larger population's chances of survival during that same timeframe. Since these numbers include all stages of prostate cancer, they will not accurately predict an individual man's prognosis.

- **The 5-year relative survival rate of nearly 100 percent**: Five years after diagnosis, the average prostate cancer patient is about as likely as a man without prostate cancer to still be living.
- **The 10-year relative survival rate of 98 percent**: Ten years after diagnosis, the average prostate cancer patient is just 2 percent less likely to survive than a man without prostate cancer.
- **The 15-year relative survival rate of 95 percent**: Fifteen years after diagnosis, the average prostate cancer patient is 5 percent less likely to survive than a man without prostate cancer.

SELF-ASSESSMENT EXERCISE

Mention the risk factors in Vulva cancer.

4.0 CONCLUSION

Reproductive cancers occur in the reproductive organs. Breast and prostate are some of the most common reproductive cancers. Screening, early diagnosis and prompt treatment have proved to be effective for most cancer.

5.0 SUMMARY

Reproductive cancers occur in the reproductive organs. Breast and prostate are some of the most common reproductive cancers. Screening, early diagnosis and prompt treatment have proved to be effective for most cancer.

6.0 TUTOR-MARKED ASSIGNMENT

List cancers of reproductive health and explain one using classification, aetiology, screening, treatment and prevention.

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UNIT 2 SEXUALLY TRANSMITTED INFECTIONS, HIV/AIDS

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1.0 INTRODUCTION

STIs is usually used to describe disorders spread by intimate contact-sexual intercourse. It also includes close body contact, kissing, cunnilingus, anilingus, fellatio, mouth breast contact, anal intercourse. Many of these infections can be transmitted to the fetus by trans-placental spread, during delivery, passage through the birth canal and lactation. Having one STI increases the risk of co-infection with others. STIs are important because they are common, often asymptomatic, have major complications and sequelae, are expensive and are in synergy with HIV.

2.0 OBJECTIVES

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

- explain the aetiology and mode of transmission of STIs, HIV/AIDS
- classify STIs and HIV/AIDs
- discuss prevention and treatment of STIs.

3.0 MAIN CONTENT

3.1 Definition of-STIs, HIV/AIDS

STIs including HIV/AIDs is usually used to describe disorders spread by intimate contact- sexual intercourse. It also includes close body contact, kissing, cunnilingus, anilingus, fellatio, mouth breast contact, anal intercourse. Effective treatment is currently available for several STIs.

Three bacterial STIs (chlamydia, gonorrhoea and syphilis) and one parasitic STI (trichomoniasis) are generally curable with existing, effective single-dose regimens of antibiotics. For herpes and HIV, the most effective medications available are antivirals that can modulate the course of the disease, though they cannot cure the disease. For hepatitis B, antiviral medications can help to fight the virus and slow damage to the liver.

3.2 Classification of STIs

There are several broad groups which include:

- Vulvar lesions and genital ulcers
- HSV, condylomata acuminata, granuloma inguinale, lymphogranuloma venerum, syphilis, chancriod
- Vaginitis
- Bacterial vaginosis, Trichomoniasis, candidiasis
- Urethritis and cervicitis
- Chlamydia & gonorrhoea
- Bloodborne infections
- Hepatitis B, Hepatitis C, HIV

Table2.1*: STIs classification*

VIRUSES	BACTERIA	CHLAMYDIA	PROTOZOA	FUNGI
Human Immunodeficiency Virus	Neisseria Gonorrhoea	Chlamydia Trachomatis (lymphogranuloma venereum-LGV)	Trichomonas Vaginalis	Candida Albicans
Human Papilloma Virus (HPV)	Treponema Pallidum Syphilis			
Herpes simplex Virus types 1&11 (HSV)	Haemophilus Ducreyii (chancroid	Non-specific Infections in females		

	)			
	Klebsiella Granulomatis (Granuloma inguinale)			

Table2.2: Presenting Symptoms

Sexually transmitted infections and associated presenting symptoms

	Urethral discharge	Vaginal discharge	Genital ulceration	Skin symptoms	Other
Bacteria					
Chlamydia trachomatis	++	+/−			
Neisseria gonorrhoeae	++	+/−			
Treponema pallidum			++	+	+
Gardnerella vaginalis	+/−	++			
Haemophilus ducreyi			++		
Klebsiella granulomatis			++		
Shigella					+
Mycoplasmas					
Ureaplasma urealyticum	+				
Mycoplasma genitalium	+	+			+
Parasites					
Sarcoptes scabiei				+	
Phthirus pubis				+	
Viruses					
Herpes simplex virus types 1 and 2	(+)	(+)	++		
Wart virus (papillomavirus)	(+)	(+)		+	+
Molluscum contagiosum (pox virus)				+	
Hepatitis A, B, and C					+
HIV				+	++
Protozoa					
Entamoeba histolytica					+
Giardia lamblia					+
Trichomonas vaginalis	(+)	++			
Fungi					
Candida albicans	(+)	++			

+ Common. – Less common

3.2.1 Vulvar Lesions & Genital Ulcers

Genital herpes, syphilis, and less commonly, chanchroid are the most prevalent genital ulcerative lesions. Diagnosis is difficult to make by physical exam alone. Serologic screening is used for syphilis, culture and antigen testing for HSV-1 and 2 while culture for H ducreyi as well. More than one aetiology may be present in a single lesion.

3.2.2 Herpes simplex

Most commonly caused by HSV-2, increasing also by HSV-1. It is a painful genital ulcer, it is a chronic, lifelong, relapsing condition that is transmissible even in the absence of lesions. Antivirals improve symptoms, speed healing of lesions, and may decrease asymptomatic viral shedding. Consistent condom use is associated with a decline in

transmission of genital HSV infection.

3.2.3 Condylomata Aculminata (Veneral Warts)

It is caused by human papilloma virus serotype 6 and 11. There is a papillary growths, small at first tend to coalesce and form large cauliflower-like masses that may proliferate profusely during pregnancy. Before treatment is undertaken, the entire lower genital tract should be examined with the colposcope and a cytologic smear taken from the cervix.

Treatment

- ➢ Bichloacetic acid or trichloacetic acid (weekly until wart is gone) - Standard
- ➢ Cryosurgery
- ✓ Electrosurgical destruction
- ✓ Excision
- ✓ Laser vaponzation/ ablaton
- ✓ Intralesion interferon in retractory cases
- ✓ Podofilox 0.5% solution as gel
- ✓ Imiquimod 5% cream
- ➢ Differential diagnosis- condyloma lata – a variation of 2^0 syphilis

3.2.4 Chancroid (Soft Chancre)

The causative organism is Hemophilus ducreyi. It is characterized by suppurative inguinal adenopathy (in over 50% of cases), painful genital ulcers which are pathognomonic (initially vesicopustular on pudendum, vaginal & cervix) and exposure are usually through coitus. It has a shorter incubation period and the lesion appears 3-5 days sooner.

Chancroid is a cofactor for HIV transmission and about 10% of patients with genital chancroid may have coinfection with herpes and syphilis.

- ➢ **Clinical Diagnosis** is more reliable than smear or culture as it is difficult to isolate the organism
- ✓ Isolation of H. ducreyi – Diagnosis (Possible in < 1/3)
- ✓ Aspiration of pus from a bubo – best material for culture
- ✓ Serum adsorption enzyme immunoassays (EIA)
- ✓ PCR
- ➢ Prevention-Reportable disease.

Treatment via antibiotics

- ✓ Azithromycin 1g orally stat
- ✓ Ceftriaxone 250mg IM single dose
- ✓ Erythromycin 500mg Tab – 1w
- ✓ Ciprofloxacin 500mg BD – 3d
- ✓ Aspirate fluctuant Lymph Node.

3.2.5 Granuloma Inguinale (Donovanosis)

Causative organism is klebsiella granulomatis formerly known as Calymmatobacterium granulomatis (Donovan bodies). Donovan bodies are bacteria encapsulated in mononuclear leucocytes which is gram-negative bipolar rods. Its incubation period is 8-12weeks.

It is characterised as **painless,** slowly healing progressive ulcerative lesions in the perineum or genitals without regional lymphadenopathy. Although granulomaaaa inguinale most often involve the skin and subcutaneous tissues of the vulva and inguinal regions, cervical, uterine, orolabial and ovarian sites have been reported.

It has characteristic maladrous discharge and it usually begins as popular, then ulcerated, beef red granular zone with clear, sharp edges. Ulcer shows little tendency to heal and usually no local or systemic symptoms. Inguinal swelling is common with the late formation of abscesses (buboes).

Diagnosis – Take a smear, if negative, take a biopsy.

Treatment

- ✓ Septrin 960mg BD- $^{3}/_{52}$
- ✓ Doxycycline 100mg BD - $^{3}/_{52}$
- ✓ Ciprofloxacin 750mg BD $^{3}/_{52}$
- ✓ Erythromycin 500mg QDS -2-3weeks
- ✓ Azithomycin 1g weekly - $^{3}/_{52}$
- ✓ Penicillin – Not effective

3.2.6 Lymphogranuloma Venerum (LGV)

The causative organism is L- serotypes L_1, L_2 and L_3 of clamydia trachomatis. Transmission is via sexual contact and men are frequently more affected than women (M: F- 6:1). The incubation period is 7-21days.

Phases:

Early phase – vesicopustular eruption, Inguinal (vulvar) ulceration, lymphedema, 2^0 bilateral invasion

Inguinal bubo phase – Tender groin, hard, cutaneous induration; ano-rectal lymphedema, defecation is painful, stool may be blood – streak later ulceration, undergo cicatrization and development of rectal stricture.

Late phase –systemic symptoms. Fever headache, arthralgia, abdominal cramps

Diagnosis – Isolate C Trachomatis:

Treatment

Doxycycline 100mg BD 4 2w
Erthromycin 500mg QDS -2w

3.2.7 Syphilis

Syphilis is caused by treponema pallidium (a spirochete) and transmitted by direct contact with an infectious moist lesion. T. pallidum passes through intact mucous membranes or abraded skin
10-90 days after the treponemes enter, a 1^0 lesion (chancre) develops. The chancre persists for 1-5weeks and then heals spontaneously. 2weeks to 6 months (average 6weeks) after the 1^0 lesion appears the general cutaneous eruption of 2^0 syphilis may appear. The skin lesions heal spontaneously within 2 to 6weeks. Latent syphilis may follow the 2^0 stages and may last a lifetime or 3^0 syphilis may develop. The latter usually becomes manifest 4-20 or more years after the disappearance of the 1^0 lesions.

Clinical Feature

1^0 syphilis

- ✓ -Formation of chancre which is an indurations, firm, painless, papule or ulcer with raised borders
- ✓ Groin lymph nodes may be enlarged, firm & painless
- ✓ Darkfield examination is required for all suspected lesion
- ✓ Serologic tests should be done every week for 6weeks or until positive (+ve in 70% of the case)

2^0 syphilis

- ✓ Diffused systemic infection
- ✓ Viral syndrome presentation often with diffused lymphadenopathy is common
- ✓ Hepatitis, nephritis, patchy alopecia and xtic dermatitis < diffused. bilateral, symmetric papulo-squamous, lesions often involving palms & soles, lesion, may also cover trunk & be macular, maculopapular or pustular)
- ✓ Moist papules in the perineal area – condyloma lata
- ✓ Darkfield positive infectious lesions
- ✓ Serologic tests for syphilis are invariably reactive in this stage

Latent syphilis

- ✓ Hx or serologic evidence of the previous infection
- ✓ Persons are infectious in the 1^{st} 1-2y of latency, with clinical relapse resembling the 2^0 stage
- ✓ occurring in about 25% cases in the 1^{st} year
- ✓ The United States public health services define
- ✓ Early latent syphilis – dx of <ly duration
- ✓ Late latent syphilis – infection of indeterminate or >lyr duration

Neurosyphilis

- ✓ CNS vulnerable to T palladium and not commonly infected during latent syphilis
- ✓ Neurologic involvement of ophthalmic and auditory systems can be detected
- ✓ CSF for cell counts, protein, VDRL and FTA ABS. [FTS-ABS less specific BUT very sensitive when diagnosing neurosyphilis]

Syphilis during pregnancy

- ✓ a course of syphilis is unaltered by pregnancy.
- ✓ effect on pregnancy can be profound.
- ✓ risk of fetal infection depends on
- ✓ the degree of maternal spirochetemia ($2^0 > 1^0$ or latent)
- ✓ gestational age of the fetus
- ✓ treponema may cross the placenta at all stages of pregnancy but fetal involvement is rare b4 18w.
- ✓ the earlier in pregnancy the fetus is exposed, the more severe the fetal infection and risk of premature delivery or stillbirth.

Congenital syphilis

- ✓ 2^0 syphilis
- ✓ lymphadenitis, enlarged liver and spleen, osteochondritis etc.

Investigation / laboratory

- ✓ dark field examination of specimen from cutaneous lesions
- ✓ silver staining of the biopsy specimen, placental section or autopsy material
- ✓ serologic test
- ❖ Non-treponemal test
  VDRL, Slide test, Rapid reagin test, automated reagin test
- ❖ Treponemal antibody test

FTA- ABS – fluorescent treponemal antibody absorption test
MHA- TP – Microhaemagglutination assay

Treatment

Benzathine penicillin G 2.4M unit IM
Tetracycline hydrochloride 500mg qds or 100mg doxycycline BD – 2weeks
IM or IV Ceftriaxone 1g daily – 8 to 10 days

3.2.8 Vaginitis

It is a clinical syndrome characterized by vaginal discharge, vulvar irritation or malodorous discharge. It can be infective or atrophic. Infective form includes bacterial vaginosis, trichomonas vaginalis, candidiasis.

Bacterial Vaginosis

Most prevalent vaginal infection, 50% of women are asymptomatic. It refers to the intricate changes of vaginal bacterial flora with loss of lactobacilli, an increase in vaginal pH (PH > 4.5) and an increase in multiple anaerobic and aerobic bacteria. It is a polymicrobial infection and commonly involved are- Gardnerella vaginalis (formerly C. vaginale & Haemopilus vaginalis) which is small, non-motile, non-encapsulated, pleomorphic rods.

Bacteriodes, Prevotella, Ureaplasma, Peptostreptococcus, Mobilincus spp, Genital mycoplasma BV is associated with multiple sexual partners, new sex partner, douching, lack of condom use, and lack of vaginal lactobacilli.

Clinical criteria - Amstel criteria

- ✓ Homogeneous white non-inflammatory discharge
- ✓ Microscopic presence of clue cells
- ✓ Vaginal discharge with PH> 4.5
- ✓ Fishy odour with or without the addition of 10% KOH, due to anaerobic bacteria 3 of these 4 criteria are required to make a clinical diagnosis of BV.

Clue cells are the unstained vaginal cells in a wet preparation that appear to be dusted with many small dark particles, which are G. vaginalis organisms

Treatment

- ✓ Metronidazole 500mg BD 4 1w
- ✓ Metronidazole gel 0.75%
- ✓ 2% clindamycin cream 1 applicator full - (5g) intravaginally at night for 1w

Candidiasis

- The commonest cause of vaginitis, caused by candida albican (yeast) found in the vagina, mouth, skin and GIT. Risk factors include decreased immunity e.g- pregnancy and HIV, Diabetes mellitus, Broad-spectrum antibiotics, immuno-suppressive drugs. It causes thick whitish curdy vaginal discharge accompanied by pruritus and labial pain; vaginal is red and discharge is moderate in amount without significant odour.
- **Diagnosis** at microscopy & culture- filament and spores of candida.
- **Treatment** – antifungal such as Polyzene – nistatin (↑ permeability of fungal membrane causing leakage in cellular content), imidazole eg clotrimazole, imidazole (alter structures & property of fungal cell membrane) and Triazole anti-fungal eg fluconazole.

Trichomoniasis

- It is the commonest STD worldwide and associated with PID, preterm labour, PROM and increased perinatal loss. It is caused by T vaginalis (protozoan) and affects mainly the vagina and lower urinary tract. Often asymptomatic in 50% of cases. Symptoms include foul swelling vaginal discharge, itching, burning and occasionally painful intercourse. Urinary symptoms

are dysuria and urethral discharge.

- **Vaginal examination** shows profuse redness of the vagina in acute infection, vaginal discharge, frosty, greenish. Cervical epithelium may be arranged with contact bleeding, appearance is the strawberry cervix.
- **Microscopy** – actively motile flagellate
- **Treatment** – metronidazole 400mg tds – 5 –days or 2g stat.

3.2.9 Urethritis and Cervicitis

They include Neisseria gonorrhea, Chlamydia trachomatis and genital herpes.

Gonorrhoea

- It is caused by N. gonorrhoea – Gram –ve diplococcus, it may be recovered from the urethra, cervix, anal canal or pharynx. It forms oxidase-positive calories, Ferments glucose
  - Optimum recovery medium – Thayer Martin or Martin – Lester (Transglow) medium
  - Rapidly killed by drying, sunlight, heat and most disinfectants.
  - The principal site of invasion - Columnar and transitional epithelium of the GUT
  - Incubation period – 3-5days
- **Clinical Features** - asymptomatic in most cases
- Others – localised to lower GUT- purulent Vaginal discharge, Urinary frequency or dysuria & rectal discomfort. Bartholinitis, Anorectal inflammation, Pharyngitis, tonsillitis, Dissemination infection, Polyarthralgia, tenosynovitis and dermatitis, Conjunctivitis, Vuvovaginitis
- **Complications -** Sapingitis, which may result in tubal scarring, infertility, increased risk of ectopic gestations.
- **Treatment**
  - Ceftriaxone 125mg IM stat + 100mg BD
  - Doxycycline x 1w or azithromycin 1g orally if a chlamydial infection is not ruled out
  - Cefixime 0.4g oral once + Doxycycline and azithromycin as above.
  - Ofloxacin 0.4g levofloxacin 0.25g or ciprofloxacin 0.5mg orally + doxycycline + azithromycin

Chlamydial Infections

- It is the most common sexually transmitted bacterial disease in women. It's an obligate intracellular microorganism with a cell wall similar to that of gram –ve bacteria.
- Classified as bacterial and has both DNA and RNA; divide via binary fission but like viruses, grows intracellular. It can be grown only by tissue culture, with exception of L serotypes. Chlamydia attaches only to columnar epithelial cells without deep tissue invasion, and as a result of this characteristic, a clinical infection may not be apparent. C trachomatis infections are associated with many adverse sequelae due to chronic inflammatory changes as well as fibrosis eg tubal infertility and ectopic pregnancy.
- **Pathogenesis** of chlamydial disease – immune-mediated response. The associated factors /risk factors for chlamydial infections
  - ✓ Sexually active woman < 20years 2-3x > older woman
  - ✓ No of sexual partners
  - ✓ Low socioeconomic status
- **Clinical Features** - usually asymptomatic - Women with cervical infection generally have a mucopurulent discharge with hypertrophic cervical inflammation.
- **Diagnosis**
  Laboratory tests - Using cell culture isolation – 70%-90% sensitivity, 100% specificity, Direct means fluorescent antibody testing, PCR - Ligase chain reaction, Current DNA probes.
  Children with conjunctivitis – Giemsa stain of purulent discharge from the eye to identify chlamydial inclusions.
- **Complications** - Salpingitis = Infertility & ectopic gestations, Conjunctivitis, Chlamydial pneumonia, Fetal and perinatal wastage by abortion, premature delivery or Stillbirth.
- **Treatment** – 100mg BD doxycycline or azithromycin

Bloodborne Infections

Hepatitis B

It is caused by hepatitis B virus (HBV), and hepadnavirus. Acute illness can be asymptomatic. It can lead to a chronic carrier state- more likely if acquired earlier in life. Treatment of acute illness is supportive and vaccination is available. Hepatitis immunoglobulin is indicated for post-exposure prophylaxis along with vaccination.

The concentration of HBV is highest in the blood, with a lower concentration in other body fluids such as wound exudates, semen,

vaginal secretions and saliva. HBV is more infectious and relatively more stable in the environment than other blood-borne pathogens such as hepatitis C virus (HCV) and HIV.

HBV is transmitted by percutaneous or mucous membrane, exposure to blood or body fluids containing blood. The primary risk factors associated with infection among adolescents and adults is unprotected sex with an infected partner, history of STIs and illegal injected-drug use. Patients known to be chronic carriers should be counselled to have their household contacts and sexual intercourse and cover cut and skin lesions to prevent transmission to others.

Hepatitis C

Caused by hepatitis C virus (HCV), and RNA virus; primarily transmitted by the parenteral route, rarely sexually transmitted. No effective vaccine and no effective treatment for acute disease. Chronic HCV can be treated with combination therapy of pegylated interferon and ribavirin. Up to 85% of affected patients become chronic carriers; of these, up to 70% will develop chronic liver disease.

Vaccine and other biomedical interventions

Safe and highly effective vaccines are available for 2 STIs: hepatitis B and HPV. These vaccines have represented major advances in STI prevention. The vaccine against hepatitis B is included in infant immunisation programmes in 95% of countries and prevents millions of deaths from chronic liver disease and cancer annually. As of October 2018, the HPV vaccine is available as part of routine immunisation programmes in 85 countries, most of them high- and middle-income. HPV vaccination could prevent the deaths of millions of women over the next decade in low- and middle-income countries, where most cases of cervical cancer occur, if high (>80%) vaccination coverage of young women (ages 11-15) can be achieved.

Research to develop vaccines against herpes and HIV is advanced, with several vaccine candidates in early clinical development. Research into vaccines for chlamydia, gonorrhoea, syphilis and trichomoniasis is in earlier stages of development. Other biomedical interventions to prevent some STIs include adult male circumcision and microbicides. Male circumcision reduces the risk of heterosexually acquired HIV infection in men by approximately 60% and provides some protection against other STIs, such as herpes and HPV. Tenofovir gel, when used as a vaginal microbicide, has had mixed results in terms of the ability to prevent HIV acquisition, but has shown some effectiveness against HSV-2.

Prevention

- Lifestyle and behavioural modification
- Use of condoms
- Vaccination
- Health education
- Handwashing with soap and water

SELF-ASSESSMENT EXERCISE
Discuss the blood-borne infections.

4.0 CONCLUSION

In this unit, you have learnt about STIs, its classification of which includes- Vulvar Lesions and Genital Ulcers, Herpes simplex, Condylomata Aculminata (Veneral Warts), Chancroid (Soft Chancre), Granuloma Inguinale (Donovanosis), Lymphogranuloma Venerum (LGV), Syphilis, Vaginitis, Urethritis and Cervicitis and Bloodborne infections as well as their treatment and prevention.

5.0 SUMMARY

This is a Public health problem and the role of PH expert and clinician is imperative in terms of understanding the microbiology of STIs i.e. diagnosis and treatment, alleviating symptoms and preventing further sequelae and preventing transmission to others including health care professionals. Patient's education and counselling are key.

6.0 TUTOR-MARKED ASSIGNMENT

Classify STIs with examples.

7.0 REFERENCES/FURTHER READING

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MODULE 6 HEALTH SYSTEMS ISSUES

Unit 1 Access to Services at Various Levels
Unit 2 Role of the District Health System in Reproductive Health
Unit 3 Role of the Tertiary Care Hospital in Reproductive Health
Unit 4 Primary Health Care and Reproductive Health Including Community Based Interventions

UNIT 1 ACCESS TO SERVICES AT VARIOUS LEVELS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Health System
  3.2 Access at Levels of Care
  3.3 Reproductive Health Functions at First Levels of Care
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

"Access"/" Rights"/" Justice"/" Fairness" all have very different meanings to different people. For example, is access to health care a "right"? Is it given by the constitution? Is it a trans-national "human right"? These terms are used to describe aspects or deficiencies in our system.

Primary Care: disease PREVENTION & health promotion -e.g. Vaccine administration, prenatal care

Secondary Care: disease DETECTION -e.g. Breast cancer, hypertension

Tertiary Care: disease TREATMENT -e.g. Pneumonia, major depression

2.0 OBJECTIVES

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

- explain health system
- discuss principal health system
- discuss the essence of access to care at all levels.

3.0 MAIN CONTENT

3.1 Health System

A **health system**, also sometimes referred to as a **health care system** or **healthcare system** is the organisation of people, institutions, and resources that deliver health care services to populations in need.

The principal health systems are as follows:

- Primary health service delivery system
- Health workforce
- Leadership and governance to ensure quality
- Health system financing
- Supplying medical products and technologies
- Health system information and Households

3.2 Access at Levels of Care

Note the following.

- Family / Decision makers' level
- Community-level
- Sub-health post /Health post level
- Primary health care centre level
- District level.

3.3 Reproductive Health Functions at First Levels of Care

Family Planning

- Need identification
- Knowledge of shops and institutions where contraceptives are available

Safe Motherhood

- Identification of pregnant women and recognition of danger signs
- Provide nutritious diet, supplements and adequate rest to pregnant women.
- Encourage the utilisation of antenatal care services.
- Identify SBA for care during delivery.
- Birth preparedness and complication readiness including arrangement of emergency funds and transport.
- Encourage utilisation of postnatal care.
- Encourage registration of maternal death

Newborn care

- Proper care of newborn baby
- Identification of danger signs and complications related to newborn and seek care from appropriate health institution.
- Complete immunisation as the schedule of EPI programme.
- Registration of neonatal birth and death event

Prevention and management of abortion complications

- Recognition of signs and symptoms of abortion complications.
- Know where to seek help

RTI/STI/HIV/AIDS

- Promotion of condoms.
- Recognize RTI/STD symptoms and seek care.
- Treatment of both partners in the case of infection

Infertility

- Identification of Infertility
- Seek care and treatment of infertility by both partners

Adolescent Health Family Life Education Programme, e.g. discussion between parents and children about

- Delayed marriage,
- Delayed pregnancy,
- A nutritious diet, especially to a daughter
- Education to daughters etc.

Elderly Reproductive Health problem

- Identification of Reproductive Health problems of reproductive organs.
- Identification of different health institutions for their treatment and management

4.0 CONCLUSION

Health, itself, is not simply a function of health care, but rather a complex interplay of genetics, behaviour, social circumstances, and environmental exposure. The structure and function of the health care system are tremendously complicated, with a myriad of stakeholders

advocating policies in their self-interest. PH/Physicians must acknowledge our society's need for them to be leaders and agents for change in this complicated system.

5.0 SUMMARY

PHC focuses on the person, not the disease, considers all determinants of health, integrates care when there is more than one problem, uses resources to narrow differences, forms the basis for other levels of health systems, addresses the most important problems in the community by providing preventive, curative, and rehabilitative services and organises deployment of resources aiming at promoting and maintaining health.

6.0 TUTOR-MARKED ASSIGNMENT

1. What are health system and access at various levels?

SELF-ASSESSMENT EXERCISE

Discuss safe motherhood concerning reproductive health functions.

7.0 REFERENCES/FURTHER READING

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UNIT 2 ROLE OF THE DISTRICT HEALTH SYSTEM IN REPRODUCTIVE HEALTH

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Reproductive Health and its Components
    3.2 District Health System
    3.3 RH at District Health/Hospital Level
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

The district is the most peripheral fully organised unit of local government and administration. It differs greatly from country to country in size and degree of autonomy, and the population may vary from less than 50,000 to over 300,000. It comprises first and foremost "a well-defined population living within a delineated administrative and geographical area".

2.0 OBJECTIVES

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

- define Reproductive Health
- explain district health system
- identify key reproductive health services at the district level.

3.0 MAIN CONTENT

3.1 Reproductive Health

RH is a state of complete physical, mental, and social wellbeing in all matters related to the reproductive system and its function and processes. RH implies that people can have a satisfying and safe sex life and that they can reproduce and the freedom to decide if, when, and how often to do so. The right of men and women to be informed and have access to the safe, effective, affordable and acceptable methods of family planning of their choices and the right to access to appropriate health care services that will enable women to go safely through pregnancy and childbirth. It recognised that RH is a crucial part of

overall health and is central to human development which affects everybody.

Components of RH: Safe motherhood, family planning, child health, prevention and management of complications of abortion, RTI/STI/HIV/AIDS, prevention and management of subfertility, adolescent reproductive health, problems of elderly women and gender-based violence.

3.2 District Health Systems

A district health system includes the interrelated elements in the district that contribute to health in homes, educational institutions, workplaces, public places and communities, as well as in the physical and psychosocial environment. A district health system based on PHC is a self-contained segment of the national health system. It includes all the relevant health care activities in the area, whether governmental or otherwise. It includes self-care and all health care personnel and facilities, whether governmental or non-governmental, up to and including the hospital at the first referral level and the appropriate support services (laboratory, diagnostic and logistic support). It will be most effective if coordinated by an appropriately trained District Health Management Team (DHMT) and DHM Team Leader/Organization Manager, working to ensure as comprehensive a range as possible of promotive, preventive, curative and rehabilitative health activities.

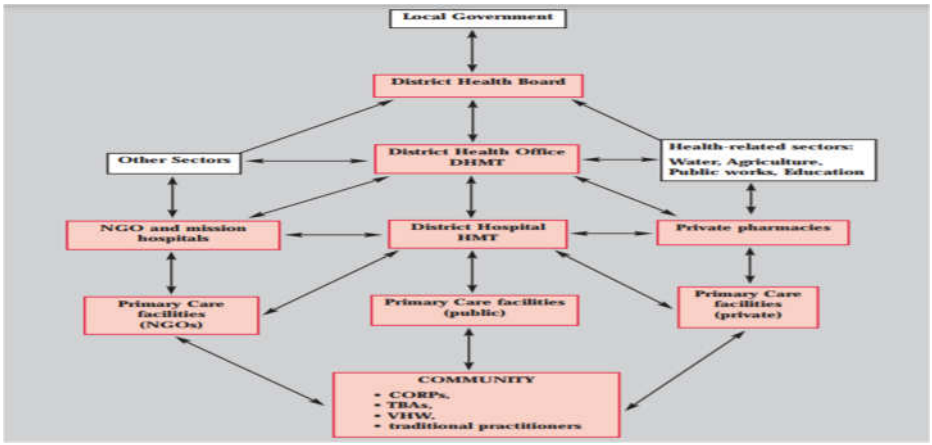

Fig.2.1: Organisation of District Health

Component of District Health System (DHS)

The following are some of the components of a DHS:

- District health office
- District hospital or hospitals
- Health centres
- Community, neighbourhoods and households
- The private health sector, NGOs and mission health services.

Characteristics of DHS

A district health system is large enough to justify the costs involved for investment in and management of health services, particularly where hospitals are concerned (favourable cost-benefit ratio). It is small enough to know and take account of the demographic and socio-economic situation. Both top-down and bottom-up planning approaches can easily be coordinated because of direct contact at all levels. Communication with the target population and its participation in planning and organisation is fairly easy to handle. Management (e.g. supervision) is more transparent and reliable. Coordination is easy to achieve between the various programmes and services at different levels. Intersectoral cooperation can take place (e.g. with agriculture, education, water, sanitation and housing sectors).

Some Major District Structures

The **District Council** is a form of local legal administrative body or government authority in the district. It is composed of councillors who are elected according to the legislation prevailing in a country.

The **Chief Executive Officer** (CEO) conducts the day-to-day business of the council which employs workers in various disciplines. The CEO also manages a group of technical experts in various fields like agriculture, water, public works and health.

The district council usually has legal status and powers, a defined geographical area under its jurisdiction and powers to collect and review revenue. The district council also manages its budget, makes development plans and provides economic and social services in its area of jurisdiction.

The **District Health Board** (DHB) is a policy body consisting of elected or appointed members drawn from both public and private health sectors in the district. Members serve for a fixed term as stipulated by law. The DHB ensures that the District Health Management Team

provides quality, cost-effective and equitable district health services. Members should understand main health and management issues in the district and contribute to the development of appropriate health policies under national policies.

Its concrete functions include:

- Approval of health development plans, annual plans, budgets, quarterly progress reports and all initiatives for local resource generation
- Monitoring and evaluation of the progress of health activities and taking appropriate decisions
- Ensuring internal and external audit of all assets, equipment, financial and human resources in the district
- Attending to appeals, petitions, complaints etc. from the public and staff
- Ensuring inter-sectoral cooperation in the district with relevant government departments and private health sector
- Initiating mechanisms for the sustainability of community involvement in planning, implementing, monitoring and evaluation
- Ensuring involvement of the community in health care management of local facilities at a community level
- Facilitating the establishment of committees that promote PHC operations at all levels.

The **Hospital Management Team** (HMT) is answerable to the DHMT, and the head of the hospital (Hospital Director) is the chairman. Preferably the hospital administrator should be the secretary. Other members usually include heads of departments according to the organisation of the hospital.

The Hospital Management Team should:

- Ensure that the hospital provides appropriate quality diagnostic clinical services (including referral services), technical support (including training in clinical care to peripheral health institutions), monitoring, evaluation and corrective action as required;
- Take care of day-to-day management of the hospital and PHC in the catchment area;
- Oversee all expenditures for the hospital according to existing regulations;
- Prepare and submit quarterly and annual plans, budgets and reports;

- Hold regular staff meetings and involve hospital departmental staff in budgetary planning and sometimes allocation of recurrent budget for use in service areas.

Health Facility Committees may include the Health Centre Committee, Dispensary Committee or Clinic Committee as applicable to the situation in different countries. Committees at the community level have a big role to play because of the importance of health centres, dispensaries and clinics in district health development activities.

Health Facility Committees are expected to:

- Mobilise and support community involvement at all stages of health care provision;
- Consolidate and prioritise community health needs to be included in the district plan and budget;
- Initiate and participate actively in health-related activities at the household and community level;

The **Community Health Committee** (CHC) is answerable to the health facility committee. However, in some countries, there is a village development committee that is responsible for all development in the village. Such a committee will also be responsible for specific health activities.

Community Health Committees should:

- Identify community needs and integrate these into the health facility action plan;
- Act as a link between community and health facility staff;
- Initiate and participate actively in health-related activities at household and community level (for example, community transport for patients);
- Develop mechanisms for the sustainability of community-based health care workers and community own resource persons (CORPs);
- Initiate and strengthen all local health development initiatives with other government sectors;
- Collect vital community-based health data;
- Mobilise and account for local resources;
- Initiate formal and non-formal education in healthy lifestyles. Figure 4 depicts the hypothetical model of a district health system showing the various linkages with other structures in the district.

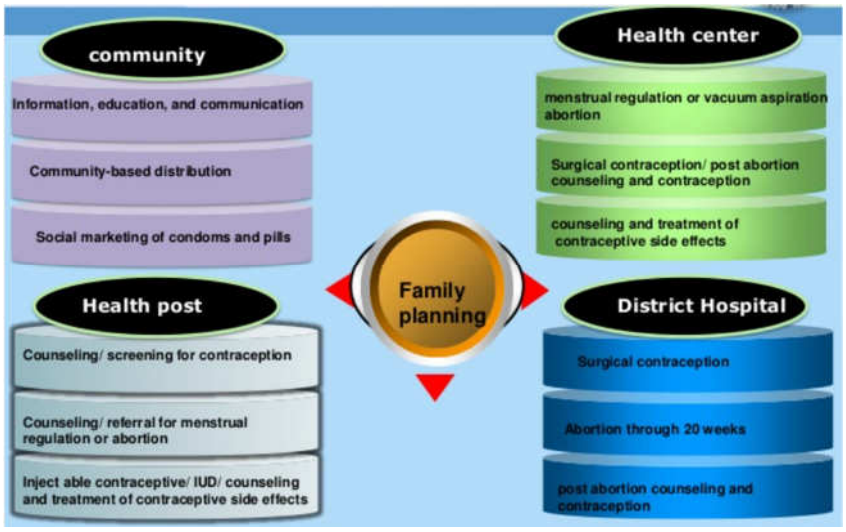

Fig.2.2: Roles of District Hospital at various Levels

3.3 RH at District Health/Hospital Level

Family Planning

In addition to services provided by the primary health centre, the following are performed:

- Provision /expansion of VSC e.g., tubal ligation, minilap and vasectomy including non-scalpel method,
- Provision of long-acting contraceptive methods and management of side effects.

Safe Motherhood

- Four focused antenatal visits.
- Monitor BP, weight, FHR.
- IEC /counselling for danger signs during pregnancy, delivery, postpartum for mother.
- Birth preparedness (delivery by SBA and complication readiness with families).
- Detection and management of co-existing conditions and Basic Essential Obstetric Care (BEOC) service for complications with a facilitated referral if necessary.
- Iron folate supplementation
- Treatment for night blindness.
- Tetanus toxoid immunisation.
- Universal treatment for worms.
- Haemoglobin estimation.
- Blood group typing including Rhesus.
- VDRL test
- Urine analysis (protein, sugar, and bacteria).
- Stool test for ova and cyst.

- Facilitated referrals to higher levels of care as necessary.
- Clean and safe delivery (partograph, active management of the third stage of labour) by SBA.
- Monitor BP, FHR
- Detection and management of complications (BEOC/CEOC service) with facilitated referral if necessary.
- Management of shock.
- Suture vaginal tears and rectal tears.
- Vacuum delivery.
- C-section
- Blood transfusion.
- Three Postnatal visits for mother and baby.
- Detection of complications of mother, BEOC/CEOC service, and referrals if necessary
- Identification and treatment of puerperal sepsis.
- Detection and treatment of mastitis.
- Detection and management of heavy postpartum bleeding with oxytocin and blood transfusion.
- IEC/counselling for postpartum danger signs for mother
- Vitamin A for mother.
- Detection and management of postpartum eclampsia.
- Encourage for registration of maternal death

Newborn care

- Immediate and exclusive breastfeeding.
- Resuscitation and stabilisation of newborn with asphyxia using the bag and mask hypothermia and sepsis.
- Identify, stabilise and manage premature / LBW newborn with kangaroo mother care and refer if necessary.
- Treatment of minor and major infections in newborns with a referral if necessary.
- BCG immunisation for the newborn.
- IEC/Counseling for danger signs for newborns.
- Encourage for registration of neonatal birth and death event
- Management of abortion complication
- Diagnosis of early pregnancy.
- Counselling on unwanted pregnancy and safe abortion service.
- MVA (safe abortion procedure) if required.
- Referral to nearest safe abortion service if required.
- Detection, management of spontaneous and induced abortion complications with antibiotics, oxytocins, and MVA/D&C if necessary.
- Post-abortion detection and management of complications with

antibiotics, oxytocins and MVA/D&C if necessary.
- Post-abortion FP counselling and service

RTI/STI/HIV/AIDS

- Clinical diagnosis, laboratory diagnosis and treatment of RTI/STD.
- Diagnosis and treatment of RTI/STD, including HIV/PMTCT in selected areas according to policy guidelines.
- Condom promotion and distribution. } IEC on preventive aspects above condition

Infertility

- Management of infertility and referrals to tertiary care, if necessary

Adolescent health

- FP/HIV/STD service modified and delivered as package e.g., life education clinics in selected areas.
- Linkage with school systems and NGOs.
- Publicity regarding family life clinics in selected areas.
- Antenatal, delivery, postpartum, newborn care services per MNH guidelines.
- FP service as per national guideline

Elderly RH problem

- Health promotion information (including information on prevention of uterus prolapse and avoidance of smoking).
- Identification of RH problem related to reproductive organs and their treatment and management.
- Identification of different health institutions for their treatment and management and referral

4.0 CONCLUSION

This unit has introduced you to the concept of a district health system; it presented various components of a district health system, essentials of teamwork and various sources that make the district health system function properly, how they interrelate with each other and their functions in reproductive health. You have also learnt about RH at District health/hospital level.

SELF-ASSESSMENT EXERCISE
What are the functions of the hospital management team?

5.0 SUMMARY

A district health system based on PHC is a self-contained segment of the national health system. It includes all the relevant health care activities in the area, whether governmental or otherwise. It includes self-care and all health care personnel and facilities, whether governmental or non-governmental, up to and including the hospital at the first referral level and the appropriate support services.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define a district health system and its components.
2. Differentiate roles of a district health system and those of a national health system.
3. What is a referral system?
4. What are the RH functions of District Hospital?

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UNIT 3 ROLE OF THE TERTIARY CARE HOSPITAL IN REPRODUCTIVE HEALTH

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Tertiary health care
    3.2 RH roles at Tertiary Care Hospitals
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Within the framework of the World Health Organisation's (WHO) definition of health as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity," **reproductive health**, or **sexual health/hygiene**, addresses the reproductive processes, functions and system at all stages of life. Tertiary health care has a vital role to play in ensuring comprehensive reproductive health care is delivered by the specialist at the highest level of care.

2.0 OBJECTIVES

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

- discuss tertiary health care
- describe Reproductive health roles and functions.

3.0 MAIN CONTENT

3.1 Tertiary Health Care

Tertiary care is specialised consultative health care, usually for inpatients and on referral from a primary or secondary health professional, in a facility that has personnel and facilities for advanced medical investigation and treatment, such as a tertiary referral hospital. The term **quaternary care** is sometimes used as an extension of tertiary care in reference to advanced levels of medicine which are highly specialised and not widely accessed. Experimental medicine and some types of uncommon diagnostic or surgical procedures are considered quaternary care. These services are usually only offered in a limited number of regional or national health care centres

3.2 RH Roles at Tertiary Care Hospitals

Tertiary levels of care offer super-specialist care and it is provided by regional/central level institutions. Provide training programs. The functions of tertiary hospitals may broadly be categorised into (a) the direct clinical services provided to individual patients within the hospital and the community and (b) a set of broader functions only indirectly related to patient care. The primary function of the referral hospital is to provide complex clinical care to patients referred from lower levels; however, no agreed international definition exists of which specific services should be provided in secondary or tertiary hospitals in developing countries. The exact range of services offered tends to vary substantially, even between tertiary hospitals within the same country, as much because of a historical accidents as deliberate design.

Some specific roles in the Safe Motherhood initiative in addition to district health

- Four focused antenatal visits.
- Monitor BP, weight, FHR.
- IEC /counselling for danger signs during pregnancy, delivery, postpartum for mother.
- Birth preparedness (delivery by SBA and complication readiness with families).
- Detection and management of co-existing conditions and Basic Essential Obstetric Care (BEOC) service for complications with a facilitated referral if necessary.
- Iron folate supplementation
- Treatment for night blindness.
- Tetanus toxoid immunisation.
- Universal treatment for worms.
- Haemoglobin estimation.
- Blood group typing including Rhesus.
- VDRL test
- Urine analysis (protein, sugar, and bacteria).
- Stool test for ova and cyst.
- Facilitated referrals to higher levels of care as necessary.
- Clean and safe delivery (partograph, active management of the third stage of labour) by SBA.
- Monitor BP, FHR
- Detection and management of complications (BEOC/CEOC service) with facilitated referral if necessary.
- Management of shock.
- Suture vaginal tears and rectal tears.
- Vacuum delivery.
- C-section

- Blood transfusion.
- Three Postnatal visits for mother and baby.
- Detection of complications of mother, BEOC/CEOC service, and referrals if necessary
- Identification and treatment of puerperal sepsis.
- Detection and treatment of mastitis.
- Detection and management of heavy postpartum bleeding with oxytocin and blood transfusion.
- IEC/counselling for postpartum danger signs for mother
- Vitamin A for mother.
- Detection and management of postpartum eclampsia.
- Encourage for registration of maternal death

Other Roles

Echocardiography, stress electrocardiogram, Specialist immunology nurse, Regional intensive care unit, Diabetes, endocrine clinic, Gastroenterology, including endoscopy, proctoscopy, sigmoidoscopy, colonoscopy (with general surgery), Geriatric care, Genetic nurse and counselling, Oncology palliation and basic care, Neurology basic care, Spirometry and oximetry, Basic rheumatology.

SELF-ASSESSMENT EXERCISE

What are the reproductive health roles in tertiary care hospitals?

4.0 CONCLUSION

In this unit, you have learnt tertiary levels of care, the complex functions performed and specific reproductive health functions.

5.0 SUMMARY

Tertiary institutions have a unique opportunity to promote SRH throughout the wider community and target key demographics that are at high risk of having poor SRH. SRH can be promoted to students, employees and members of the wider community through the delivery of services, education programs, development of SRH research and the promotion of SRH more broadly.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is tertiary and quaternary health care?
2. Mention some specific reproductive health roles at tertiary levels.

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UNIT 4 PRIMARY HEALTH CARE AND REPRODUCTIVE HEALTH INCLUDING COMMUNITY-BASED INTERVENTIONS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 PHC and RH
    3.2 The Reproductive Health within the Context of Primary Health Care
    3.3 Community-Based Intervention of RH Service
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Primary care is the "first" level of contact between the individual and the health system where essential health care is provided and a majority of prevailing health problems can be satisfactorily managed. It is the closest to the people and is provided by the primary health centres.

2.0 OBJECTIVES

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

- define Primary Health Care (PHC)
- explain RH roles at the primary care level
- discuss the major community-based intervention.

3.0 MAIN CONTENT

3.1 Primary health care and RH

PHC is essential health care that is a socially appropriate, universally accessible, scientifically sound first level care provided by a suitably trained workforce supported by integrated referral systems and in a way that gives priority to those most in need, maximises community and individual self-reliance and participation and involves collaboration with other sectors. It includes the following:

- health promotion
- illness prevention
- care of the sick
- advocacy

- community development

3.2 Reproductive health within the context of primary health care:

- Family planning counselling, information, education, communication and services (emphasising the prevention of unwanted pregnancy).
- Safe motherhood; education, and service for a healthy pregnancy, safe delivery and postnatal care including breastfeeding.
- Care of newborn
- Prevention and management of complications of abortion
- Prevention and management of RTIs, STDs, HIV/AIDS and other RH conditions.
- Information, education, and counselling, as appropriate, on human sexuality, reproductive health and responsible parenthood for individuals, couples, and adolescents.
- Prevention and management of subfertility
- Life-cycle issues including breast cancer, cancer of the reproductive system and care of the elderly

Family planning

In addition to services provided by health post/sub-health levels, the following are performed:

- Performing tubal ligation, minilap and vasectomy.
- Semen analysis.
- All other contraceptive methods are according to government guidelines.
- Post-abortion care management.
- Management of complications.

Safe Motherhood

Four focused antenatal visits.

- Monitor BP, weight, FHR, IEC /counselling for danger signs during pregnancy, delivery, postpartum for mother,
- Birth preparedness (delivery by SBA and complication readiness with families),
- Detection and management of co-existing conditions and Basic Essential Obstetric Care (BEOC) service for complications with a facilitated referral if necessary,
- Iron folate supplementation.
- Treatment for night blindness
- Tetanus toxoid immunisation.
- Universal treatment for worms.

- Haemoglobin estimation.
- Blood group typing including Rhesus.
- VDRL test
- Urine analysis (protein, sugar, and bacteria).
- Facilitated referrals to higher levels of care as necessary.
- Clean and safe delivery (partograph, active management of the third stage of labour) by SBA.
- Monitor BP, FHR. Detection and management of complications (BEOC service) with facilitated referral if necessary. Management of shock, and referral if necessary
- Vacuum delivery.
- Suture vaginal tears rectal tears.
- Three Postnatal visits for mother and baby.
- Detection of complications of mother, BEOC service, and referrals if necessary.
- BP, detection of hypertension, management and referrals for postpartum eclampsia if necessary.
- Identification of puerperal sepsis and BEOC service with a referral if necessary.
- Detection and BEOC service for heavy postpartum bleeding and referral if necessary
- IEC/counselling for postpartum danger signs for mother} Vitamin A for mother.
- Encourage for registration of maternal death

Newborn care

- Immediate and exclusive breastfeeding.
- Resuscitation and stabilisation of newborn with asphyxia using the bag and mask hypothermia and sepsis with a referral if necessary.
- Identify, stabilise and manage premature / LBW newborn with kangaroo mother care and refer if necessary.
- Treatment of minor infections and referral after stabilisation for major infections in newborns.
- BCG immunisation for the newborn.
- IEC/Counseling for danger signs for newborns.
- Encourage for registration of neonatal birth and death event

Prevention and management of abortion complications

- Diagnosis of early pregnancy.
- Counselling on unwanted pregnancy and safe abortion service.
- MVA (safe abortion procedure) if required.
- Referral to nearest safe abortion service if required.

- Detection, management of spontaneous and induced abortion complications with antibiotics, oxytocin, and MVA/D&C if necessary.
- Post-abortion detection and management of complications with antibiotics, oxytocins and MVA/D&C if necessary.
- Post-abortion FP counselling and service

RTI/STI/HIV/AIDS

- Management of STD on a syndromic approach basis when diagnostic facilities are not available.
- Syndrome detection, treatment and referral of RTI /STD cases.
- Management of RTI/STD
- Condom promotion and distribution.
- IEC on preventive measures

Infertility

- Diagnosis, treatment and management of infertility and referrals to tertiary care, if necessary

Adolescent health

- FP/HIV/STD service modified and delivered as package e.g., life education clinics in selected areas
- Linkage with school systems and NGOs.
- Publicity regarding family life clinics in selected areas.
- Antenatal, delivery, postpartum, newborn care services per MNH guidelines.
- FP service as per national guideline

Elderly RH problem

- Health promotion information (including information on prevention uterus prolapse and avoidance of smoking).
- Identification of RH problems related to reproductive organs.
- Identification of different health institutions for their treatment and management and referral.

3.3 Community-based intervention of RH Service

Fig.4.1: Strategies for Community-Based Intervention

Family planning

- Sexuality and gender information, education, and counselling for adolescents, youth, men, and women.
- Community-based contraceptives are distribution through community-based health workers/volunteers, women's groups, community-based workers.
- Social marketing of condoms and re-supply of oral pills through community service.
- Counselling and referral for other contraceptive methods.
- IEC for LAM

Safe Motherhood

- Counselling/education for breastfeeding, nutrition, FP, rest exercise etc.
- Awareness raising for risk factors.
- Recognising dangerous signs Support SBA
- Create awareness about services that SBA offers.
- Mobilise community to support referral and transportation (emergency fund and transport)
- Identification of local health institution of maternal and neonatal health MNH) services

Help the poor and underprivileged to utilise MNH services

- IEC /counselling for danger signs during pregnancy, delivery, postpartum for mother.
- Identify potential blood donors for emergency
- Encourage the utilisation of antenatal care services.
- Birth preparedness and complication readiness with families (delivery by SBA and preparation or arrangement of emergency

funds and transport).
- Detection of complication complications in mother and baby and facilitation for referral to the health facility.
- Postnatal visit for mother and baby.
- Encourage for registration of maternal death

Newborn care
- Counselling/education for breastfeeding, baby care prevention from hypothermia, immunisation
- Early and exclusive breastfeeding promotion and counselling.
- Identification of danger sign related to newborn baby refers to the nearest appropriate health facility.
- Promotion and management of neonatal hypothermia by keeping baby warm and immediate breastfeeding.
- Encourage to complete immunisation for the newborn as the schedule of EPI programme
- Encourage for registration of neonatal birth and death event

Prevention and management of abortion complications
- Counselling on prevention of unwanted pregnancy, or FP counselling, and re-supply of oral pills and condoms.
- Recognition of danger signs for spontaneous and induced abortion with referral to the nearest appropriate health facility for diagnosis and treatment.
- Recognition of signs and symptoms of abortion and its complications.
- Timely referral to the appropriate formal health care system.
- Counselling on unwanted pregnancy and safe abortion service

RTI/STI/HIV/AIDS
- Sexuality and gender education and counselling.
- Condom Promotion and distribution.
- Counselling on safe sexual activity.
- Counseling / education on RTI/ STD / HIV infection management and treatment

Infertility
- Prevention and treatment of infertility by counselling and education.
- Refer to the appropriate health facility for treatment and management of infertility to both partners.
- Counselling and education for prevention and treatment of infertility

Adolescent health

- Information on sexuality and gender information.
- Create awareness of risk factors of early marriage and pregnancy.
- Conduct the programme on Family life education.
- Increasing awareness on FP method availability of contraceptives, danger signs and risk factors of teenage pregnancy.
- Adolescent health

Elderly RH problem

- Health promotion information (including information on uterus prolapse and smoking prevention).
- Identification of RH problems related to reproductive organs.
- Identification of different health institutions for their treatment and management and referral.

SELF-ASSESSMENT EXERCISE

Discuss the management of abortion complications.

4.0 CONCLUSION

In this unit, you have learnt about PHC and RH with their various components, reproductive health within the context of primary health care and the community-based intervention of RH Service.

5.0 SUMMARY

PHC focuses on the person, not the disease, considers all determinants of health, integrates care when there is more than one problem, and forms the basis for other levels of health systems. It addresses the most important RH problems in the community by providing preventive, curative, and rehabilitative services as well as organises deployment of resources aiming at promoting and maintaining health.

6.0 TUTOR-MARKED ASSIGNMENT

List the components of RH and the various interventions at the community level.

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MODULE 7 CROSS-CUTTING THEMES

Unit 1 Research, Monitoring and Evaluation
Unit 2 Quality of Care
Unit 3 Integrated Approach to Provision of Reproductive Health Service
Unit 4 Socio-Economics of Reproductive Health Care

UNIT 1 RESEARCH MONITORING AND EVALUATION

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
- 3.1 Overview of the Principles and Processes in Monitoring and Evaluation
- 3.2 What is Monitoring and Evaluation
- 3.3 Monitoring and Evaluation
- 3.4 Indicators Use in Sexual and Reproductive Health Programmes
- 3.5 Limitations to M&E of SRH Programmes

4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Understanding the dynamics of health outcomes requires comprehensive and well-functioning monitoring and evaluation system. The monitoring and evaluation system provides stakeholders with the information necessary to determine the responsiveness of programme interventions and is considered a critical management tool for determining the effectiveness of Health programmes in different contexts. Monitoring and evaluation are not isolated activities, but an integral part of the programme life cycle that begins at the programme or project design phase. To answer monitoring and evaluation questions about programmatic performance—did we achieve our aim? Do our outputs justify the investment—the programme must have specific and measurable objectives.

2.0 OBJECTIVES

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

- discuss the overview of the principles and processes entailed in monitoring and evaluating sexual and reproductive health programmes
- explain the monitoring and evaluation concepts
- state the differences between monitoring and evaluation
- describe the limitation of monitoring and evaluation
- highlight the indicators used in monitoring and evaluation.

3.0 MAIN CONTENT

3.1 Overview of the Principles and Processes in Monitoring and Evaluation

Since the late 1980s, donors and programme managers have increasingly turned towards monitoring and evaluation (M&E) to improve the effective use of limited funds. Today, M&E is incorporated as a routine component of any call for proposals by donor agencies. Further, it is a vital element of any sexual and reproductive health or other public health programme or intervention—one that should be developed before the programme begins, as part of the programme design. M&E works by routinely collecting data on a set of measurable benchmarks to inform implementers, programme designers, funders, and other stakeholders about progress (or lack of progress) made towards achieving the programme's objectives. M&E also provides information on the effect that the project is having on the intended target population. The process of measuring and evaluating accomplishment also fosters accountability, since an implementing organisation will have to show how committed funds were utilised.

Thus, M&E is an invaluable tool for identifying a programme's progress, strengths and weaknesses, areas needing revision, and areas that meet or exceed expectations. Beyond the programme level, data obtained from strong M&E can be used to guide, develop, or change regional or national policy. While in many respects it is donors who have driven the demand for M&E, the ultimate beneficiaries of project evaluations are communities where the interventions take place. By closely examining the implementation and outcome of public health interventions, an organisation or agency can design programmes and activities that are effective and efficient, and that yield significant results for the community.

3.2 What is Monitoring and Evaluation

Monitoring and evaluation are often used synonymously, but there are important distinctions between them. While both processes work together to ensure the most effective and efficient use of resources, each

serves different purposes in the areas of programme organisation and management, with just a few commonalities.

Monitoring is the routine tracking of the performance of key elements of a programme or project, usually the inputs and outputs, through record-keeping, regular reporting and surveillance systems, observation of health facilities, and client surveys. The findings from monitoring data are used to guide the continuing implementation of the project. It is mainly concerned with quantitative information, asking, how much? How many? When? For how long? It is a continuous, routinely implemented process whose main purpose is to provide project management and stakeholders with early indications of progress, or lack thereof, toward the desired results.

Evaluation is the systematic and objective review of an ongoing or completed project to assess its effectiveness and impact. A well-designed evaluation can also reliably identify changes that result from the project, and its findings can provide lessons for incorporation in future projects and policies. Evaluation is episodic rather than continuous—sometimes conducted midway through a project, and always necessary at the end, to determine the project's impact on the target population. The types of questions an evaluation asks have to do with change and the value of the change: What changes occurred in the target population? Did the changes occur because of the intervention? How did participants respond to project activities? What was the overall outcome? Should this intervention be repeated or scaled up?

Project monitoring and evaluation should start before the programme begins. But even if a programme is already underway, it is not too late to introduce monitoring systems and develop an evaluation plan to determine whether or not the programme is on track and having its intended effects on the target population.

3.3 Monitoring and Evaluation

Table 1.1: Differences between Monitoring and Evaluation

MONITORING	EVALUATION
Routine/continuous. Entails data collection and analysis throughout the life of the project	Episodic/intermittent. Data collection at the start of a programme (to provide a baseline) and again at the end, rather than at repeated intervals during programme implementation
Provides early indications of progress and achievement of goals	The systematic data collection process

Measures project inputs, processes, and outputs.	Capable of linking programme activities to behaviours and health outcomes as direct results
Performed throughout the life of a project	Identifies the outcome and impact of a project intending to inform the design of future projects and determine if the interventions carried out were effective

3.4 Indicators Use in Sexual and Reproductive Health ProgrammeS

M&E programmes track project results by using indicators. An indicator is a measurement of health status, service delivery, or resource availability, used to quantify the progress and performance of a programme or project. A good M&E plan typically uses a mixture of several categories or types of indicators. There are two general approaches for categorising indicators used in M&E for Sexual and Reproductive Health (SRH) programmes (though these are not the only approaches). The first is based on how the data used in calculating the indicator were derived from population-or programme-level data; the second is on the relationship between the indicator and the programme logic model or framework in terms of input, process, output, outcome, and impact. The most important point about the types of indicators is that it is crucial to use a range of different types of indicators to comprise a set of indicators that gives a balanced perspective.

1. Programme-level indicators are generated within the programme and by its activities— for example, the number of adolescents counselled, or the number of message-bearing T-shirts distributed, or the number of providers or peer educators who completed training. Indicators at the programme level are appropriate for managing the programmatic performance of the programme; they track the inputs and outputs specified in the programme monitoring and evaluation framework.
2. Population-level indicators describe the outcome or impacts of the programme. They are expressed as a percentage or proportion and are usually generated from data collected from representative samples of the target population, including those who participated (or did not participate) in the interventions. Thus, population-level indicators might include the proportion of youth who attended a youth-friendly centre; the percentage of unmarried youth who used a condom at last sex, or the proportion of deliveries by skilled birth attendants among the two lowest wealth quintile groups.

3.5 Limitations to M&E of SRH Programmes

Despite the important role of M&E as a management tool, some limitations affect M&E performance, especially in sub-Saharan African countries. These problems relate to areas such as policy and legislation, infrastructure, services, human resource development, and partnerships.

1. Lack of an environment or policy framework that supports the M&E system in the SRH sector.
2. Lack of health information systems that collect appropriate data to support decision-making on managing adolescent SRH issues.
3. Difficulties in integrating internationally agreed-upon indicators into the national health data collection framework.
4. Absence of adequate human and technical capacity to manage the M&E system.
5. Inadequate funds.

4.0 CONCLUSION

In this unit, you've learnt about the overview and concept of monitoring and evaluation, differences between monitoring and evaluation. Finally, this chapter highlights the limitation of monitoring and evaluation.

5.0 SUMMARY

M&E is crucial to the success of any health programme—national or regional, large or small. M&E tells stakeholders, government, funders, implementers, researchers, and beneficiaries whether the programme is making a difference, and for whom; and identifies whether programme areas are on target, or need to be changed or redirected. Information collected from M&E systems also helps donors and implementers to determine whether their investments are rational. In the field of public health, understanding the dynamics of sexual and reproductive health and determining the responsiveness of programmatic interventions requires a sound, sustainable, comprehensive, strategic, context-specific M&E system.

Too often, the M&E system is driven by the requirements of funding agencies or international agreements. There is a lack of common understanding of what constitutes M&E systems among those practising it. Thus, many use M&E in idiosyncratic ways, and partner organizations fail to communicate clearly about terminology, goals, and benchmarks, ultimately limiting the progress or impacts of well-intentioned interventions.

SELF-ASSESSMENT EXERCISE
What are the limitations of Monitoring and Evaluation?

6.0 TUTOR-MARKED ASSIGNMENT

1. Differentiate between monitoring and evaluation.

7.0 REFERENCES/FURTHER READING

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UNIT 2 QUALITY OF CARE

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Definition of Quality of Care
  3.2 Conceptual Framework: Quality of the Service Experience
  3.3 Determinants of Quality Improvement
  3.4 Quality of Care Indicators
  3.5 Tools to Measure Improvements in Quality
  3.6 Barriers to Quality of Care
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Traditionally, advocates have emphasised the rights argument to support investments in quality improvement. Quality of care, a client-centred approach to providing high-quality health care as a basic human right, has emerged as a critical element of family planning and reproductive health programs. “Quality of care” was conceptualised at the International Conference on Population and Development in 1994, as a means to assist couples in achieving their fertility intentions through access to improved family planning programmes.

In general, providers, clients, and policy-makers agree that quality improvement is important. Creating consensus on which elements of quality to prioritise, presents a greater challenge. The need to provide robust evidence on the potential impact of investments in quality improvement, and how to sustain programme improvements over time, become even greater given the scarcity of health resources in many low- and middle-income countries.

2.0 OBJECTIVES

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

- explain quality care
- discuss the conceptual framework of quality of care
- state the determinants of quality improvement
- describe the quality of care indicators
- describe the tools to measure improvements in quality.
- discuss the barriers to quality of care.

3.0 MAIN CONTENT

3.1 Definition of Quality of Care

While most people feel that improving the quality of services is important, health specialists do not always agree about which components should be included in the definition of quality. Historically, quality has been defined at a clinical level and involves offering technically competent, effective, safe care that contributes to the client's well-being. But the quality of care is a multidimensional issue that may be defined and measured differently, according to stakeholders' priorities. Many scholars have attempted to define quality within the healthcare setting.

The World Health Organisation (WHO) defines the quality of care as *the extent to which the care provided, within a given economic framework, achieves the most favourable outcome when balancing risks and benefits.* **Donabedian states that** the quality of care consists in the application of medical science and technology in a way that maximises its benefits without correspondingly increasing its risks. The degree of quality is, therefore, the extent to which care provided is expected to achieve the most favourable balance between risks and benefits.

3.2 Conceptual Framework: Quality of the Service Experience

Donabedian identified three categories for assessing quality within the health system, including **"structure", "process", and "outcome".** In the 1990s, Judith Bruce and Anrudh Jain further developed a framework for conceptualising quality as "client-oriented" care. The Bruce–Jain framework focuses on the clinical provision of family planning and defines six elements of quality: provision of choice; information and counselling for clients; technical competence; good interpersonal relations; continuity of care; and an appropriate constellation of services.

The framework is divided into three parts, beginning with programme effort, including the policy and political environment that defines what services are provided, financial and human resources allocated to the provision of services, and programme management and structure. These programme inputs contribute to and influence the six elements of quality originally outlined in the Bruce–Jain framework. The impact of these attributes on changes in client knowledge, satisfaction, health outcomes, and use of services is then measured.

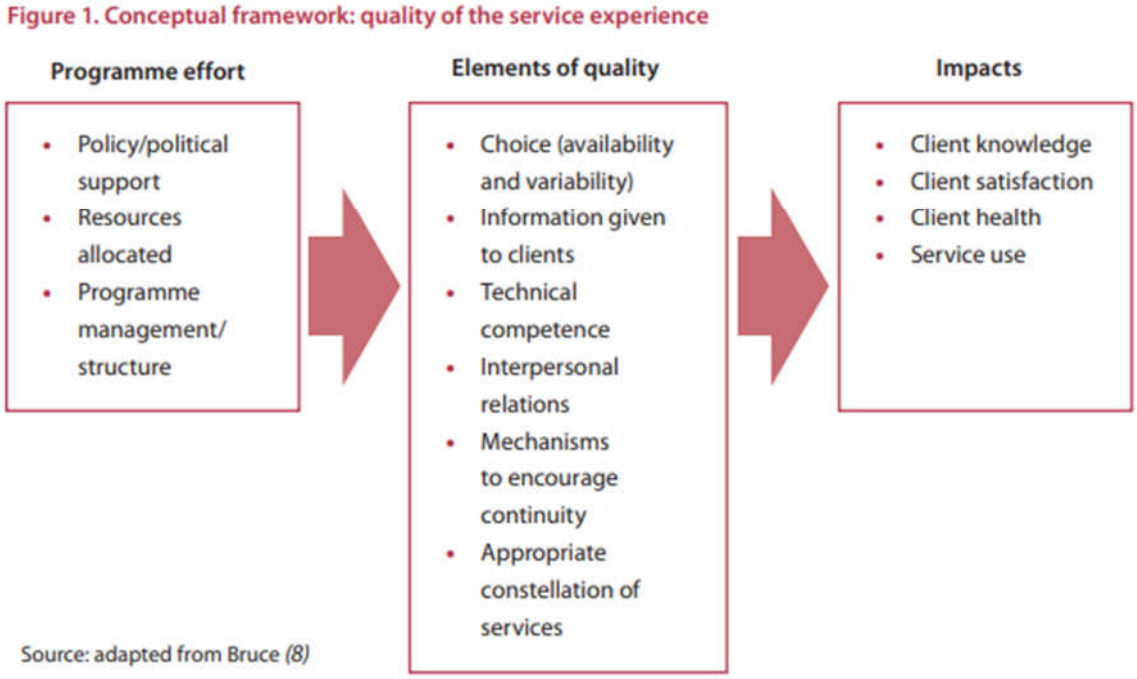

Fig.2.1

3.3 Determinants of Quality Improvement

It is suggested that inherent in the requirement for quality improvements in reproductive-health programmes, is a concern regarding the empirical relationships between determinants of quality of care and outcomes, as shown in Figure 1. As a holistic approach is needed to reduce maternal and neonatal mortality and morbidity, and improve the health of women throughout the life cycle, six major categories for programme development need to be considered:

1. political environment
2. financing
3. socio-cultural factors
4. health systems
5. training/education
6. interaction/collaboration

These are all interlocked and, if included holistically, can be assumed to affect the integration of services, utilisation, health outcomes and sustainability.

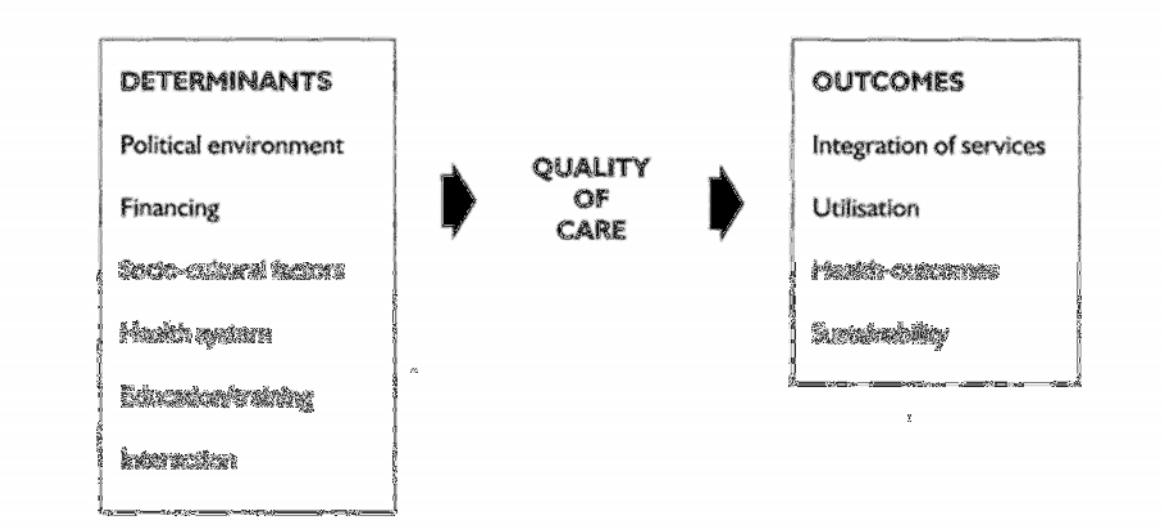

Fig.2.2 (Source: E. Kwast, B. (1998). Quality of care in reproductive health programmes: Concepts, assessments, barriers and improvements — an overview.)

3.4 Quality of Care Indicators

Provider

- Demonstrates good counseling skills
- Assures client of confidentiality
- Asks client about reproductive intentions (asking whether the client wants more children, and when)
- Discusses with client which method he or she would prefer
- Mentions HIV/AIDS (initiates or responds)
- Discusses methods for preventing pregnancy and sexually transmitted infections
- Treats client with respect/courtesy
- Tailors key information to the client's needs
- Gives accurate information on the method accepted (explaining its use, side effects, and possible complications)
- Gives instructions on when to return
- Follows infection control procedures outlined in guidelines
- Recognizes/identifies contraindications, consistent with guidelines
- Performs clinical procedures according to guidelines

Staff (Other Than Provider)

- Treats clients with dignity and respect

Client

- Participates actively in discussion and selection of method
- Receives his or her method of choice
- Believes the provider will keep his or her information confidential

Facility

- Has all (approved) contraceptive methods available; no stock-outs
- Has basic items needed for delivery of methods offered by the facility (including sterilizing equipment, gloves, blood pressure cuffs, specula, adequate lighting, water)
- Offers privacy for pelvic exams/IUD insertions
- Has mechanisms to make programmatic changes based on client feedback
- Has received a supervisory visit within a certain predetermined period
- Has adequate storage of contraceptives and medicines (away from water, heat, direct sunlight) on premises
- Follows state-of-the-art clinical guidelines
- Has acceptable waiting time

Fig.2.3 [Source: Measure Evaluation, "Quick Investigation of Quality" (2001).]

3.5 Tools to Measure Improvements in Quality

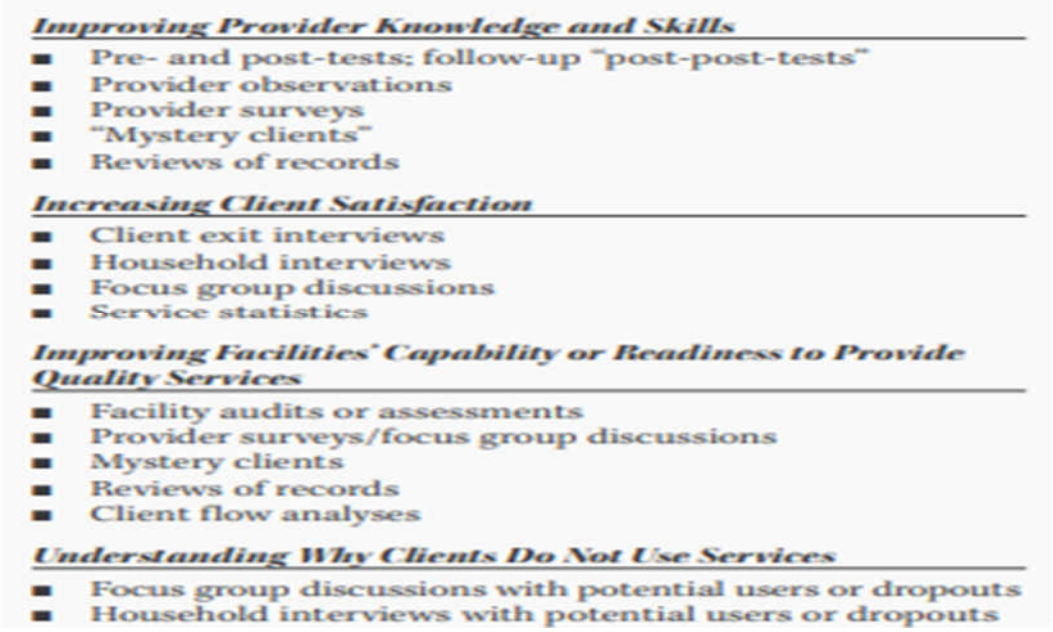

Fig.2.4 [SOURCE: Family Planning Service Expansion and Technical Support/John Snow, Inc., Mainstreaming Quality Improvement in Family Planning and Reproductive Health Services Delivery (2000).]

3.6 Barriers to Quality of Care

The barriers to quality of care include the following:

1. Political instability
2. Civil war
3. Natural disasters
4. Serious shortages of drugs and supplies,
5. Nonfunctional equipment and
6. Unavailability of blood for transfusion,
7. Shortage of doctors in rural areas and insufficient education and training
8. Health information systems are often inadequate

4.0 CONCLUSION

In this unit, you've learnt about the definition of quality of care, conceptual framework, determinants of quality of care. And finally, the barriers to quality of care

5.0 SUMMARY

High-quality services ensure that clients receive the care that they deserve. Furthermore, providing better services at reasonable prices attracts more clients, increases the use of family planning methods, and reduces the number of unintended pregnancies.
Providing high-quality care also makes sense for service providers, since improving basic standards of care attracts more clients, reducing per capita costs of services and ensuring sustainability. Improving the quality of reproductive health care programs benefits other health services as well; in part by encouraging users to seek higher-quality services for all of their health care needs. In addition, improvements to health care facilities can enhance the quality of care for a wide range of adult and child health care needs.

SELF-ASSESSMENT EXERCISE

i. Highlight the barriers to quality of care.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the determinants of quality of care.
2. Explain tools to measure improvements in quality.

7.0 REFERENCES/FURTHER READING

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UNIT 3 INTEGRATED APPROACH TO PROVISION OF REPRODUCTIVE HEALTH SERVICES

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Integration at the Point of Service Delivery
  3.2 Integration at the Health Sector Level
  3.3 Integration at the National Development Planning Level
4.0 Conclusion
5.0 Tutor-Marked Assignment
6.0 Summary
7.0 References/Further Reading

1.0 INTRODUCTION

The Programme of Action of the 1994 International Conference on Population and Development (ICPD) calls on countries to provide a full range of sexual and reproductive health services in an integrated manner in the context of the primary health care system. In this regard, many different definitions of integration have been proposed and various operational concepts for integration have been put forward.

A sexual and reproductive health programme has five major components: maternal and newborn health; family planning; prevention of unsafe abortion; management of reproductive tract infections (RTIs) and sexually transmitted infections (STIs), including HIV/AIDS; and promotion of sexual health. A programme needs to serve all segments of the population, including adolescents.

2.0 OBJECTIVES

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

- discuss integration at the point of service delivery
- explain integration at the health sector level
- discuss integration within national development planning processes.

3.0 MAIN CONTENT

3.1 Integration at the Point of Service Delivery

Integration means bringing together these components and establishing strong linkages with other health care and related social services. The rationale for integration is to increase the effectiveness and efficiency of the health system and to meet people's needs for accessible, acceptable,

convenient, client-centred comprehensive care. This should include prevention of ill-health, provision of information and counselling, screening, diagnosis and curative care and/or referral for a full range of sexual and reproductive health and other healthcare needs.
Integration does not mean that all sexual and reproductive health or other services must be provided on-site, but it does require that healthcare providers have the knowledge and skills to provide an appropriate basic package of services and to refer patients for other necessary services that are not provided at that site. Sexual and reproductive health services must have the capacity to provide basic, quality services to individuals with different needs.

In making decisions regarding which services to provide at any given level, policy-makers will need to consider the capacities of available healthcare providers, the available equipment and supplies, and whether referral to other sites or levels of the healthcare system is feasible. They will also need to take account of local social and cultural norms in making decisions about what services are provided in physical proximity by the same providers, as opposed to those that are integrated through referral mechanisms.

3.2 Integration at the Health Sector Level

The responsibility for policy and programme development, implementation and evaluation may rest with different managers or departments. In this context, integration is achieved through effective communication and collaboration aimed at ensuring that necessary linkages are established at all levels of service delivery. Collaboration between different healths programmes. For example, sexual and reproductive health and other priority programmes, such as HIV/AIDS, malaria, tuberculosis or immunisation—is necessary for a range of health system issues. Sexual and reproductive health services, like other health services, require a strong functioning health system.

Policies concerning financing and payment for health services, procurement and distribution of essential medicines through an efficient logistics system, as well as planning and management processes related to human resources (i.e. staffing patterns, remuneration and motivation, training and supervision) must be developed to support the integration of sexual and reproductive health services.
As sexual and reproductive health services become integrated within the broader health care system, the provision of all services becomes more complex. Therefore, both the technical and managerial capabilities of service providers must be increased simultaneously.

3.3 At the National Development Planning Level

Integration involves linkages between sexual and reproductive health policy within health sector planning and similar planning processes taking place in and across other sectors, such as education, agriculture, youth, women's affairs, environment and finance. Sexual and reproductive health policies and programmes need to be strongly linked to planning and policy development in these sectors, as effective linkages can lead to synergies in the provision of services and thus improved health outcomes.

For example, efforts to decrease gender disparities in education, economic opportunities and decision-making in households are essential in maximising access to, and utilisation of, health services by women: these measures have been shown to lead to improved health outcomes. Linkages and coordination with income-generating activities for women, community forestry projects, work-based social insurance schemes and other similar activities implemented by ministries outside of the health sector can serve both as entry points to reach women with health information and as a means of increasing their capacity to have the resources to access services and improve their health and that of their families. Similarly, youth programmes can help support and encourage young people to access health services.

4.0 CONCLUSION

In this unit, you've learnt about the integrated approach to the provision of reproductive health services at the point of service delivery, at the health sector level and finally, at the national development planning level.

5.0 SUMMARY

An integrated sexual and reproductive health package is widely regarded as essential for meeting the needs of both men and women. One of the main arguments in support of the integration of more sexual and reproductive health services is that it will improve women's health by encouraging greater use of services. That is why family planning and maternal and child health (MCH) services were and still are considered highly appropriate for integration with each other: the same women need both at different moments in their reproductive lives. Integration of sexual and reproductive health services cannot take place at the primary health care level alone but is required across all three levels of care.

SELF-ASSESSMENT EXERCISE

Discuss the integrated approach to the provision of reproductive health

services at the health sector level and National development planning level.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the integrated approach to the provision of reproductive health services at the point of service delivery.

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UNIT 4 SOCIO-ECONOMICS OF REPRODUCTIVE HEALTH CARE

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Socio-Economics of Reproductive Health Care
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

From available proof, these three health indicators (maternal death rate, infant death rate and Under-five deaths) are highly affected by socioeconomic characteristics. Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socio-economic development and quality of life.

For example, according to the NDHS 2018, the infant mortality rate was 67 deaths per 1,000 live births for the 5 years preceding the survey, while under-5 mortality was 132 deaths per 1,000 live births and the maternal mortality ratio was512 maternal deaths per 100,000 live births.

2.0 OBJECTIVES

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

- explain the effect of education on reproductive health
- discuss the effect of employment on reproductive health
- describe the effect of income on reproductive health
- explain the effect of family and social support on reproductive health
- discuss the effect of community safety on reproductive health.

3.0 MAIN CONTENT

3.1 Socio-Economics of Reproductive Health Care

Social and economic factors, such as income, education, employment, community safety, and social supports can significantly affect how well and how long we live. These factors affect our ability to make healthy choices, afford medical care and housing, manage stress, and more. The social and economic opportunities we have, such as good schools, stable jobs, and strong social networks are foundational to achieving long and healthy lives. For example, employment provides income that shapes

choices about housing, education, child care, food, medical care, and more. In contrast, unemployment limits these choices and the ability to accumulate savings and assets that can help cushion in times of economic distress.

Social and economic factors are not commonly considered when it comes to health, yet strategies to improve these factors can have an even greater impact on health over time than those traditionally associated with health improvement, such as strategies to improve health behaviours. Across the nation, there are meaningful differences in social and economic opportunities for residents in communities that have been cut off from investments or have experienced discrimination. These gaps disproportionately affect people of colour – especially children and youth.

Education: Education is one of the most important aspects of social and economic development. Education improves capabilities and is strongly associated with various socioeconomic variables such as lifestyle, income, and fertility for both individuals and societies. Overall, 36% of females and 27% of males in Nigeria have no education. Eighteen percent of females and 19% of males age 6 or older have attended some primary school; however, only 11% of both sexes have completed primary education. The median number of years of schooling is 3.6 for women and 5.4 for men. Higher levels of education can lead to a greater sense of control over one's life, which is linked to better health, healthier lifestyle decisions, and fewer chronic conditions.

Employment: Employment provides income and, often, benefits that can support healthy lifestyle choices. Unemployment and underemployment limit these choices, and negatively affect both quality of life and health overall. The economic condition of a community and an individual's level of educational attainment both play important roles in shaping employment opportunities. Most adults spend nearly half their waking hours at work. Working in a safe environment with fair compensation often provides not only income, but also benefits such as health insurance, paid sick leave, and workplace wellness programs that, together, support opportunities for healthy choices. Employers and communities can work together to create opportunities to increase job skills for their residents, enhance local employment opportunities, and create supportive and safe work environments – to the benefit of the entire community.

Income: Income provides economic resources that shape choices about housing, education, child care, food, medical care, and more. Wealth, the accumulation of savings and assets, helps cushion and protect us in times of economic distress. As income and wealth increase or decrease,

so does health. Income can come from jobs, investments, government assistance programs or retirement plans. Income allows families and individuals to purchase health insurance and medical care, but also provides options for healthy lifestyle choices. Poor families and individuals are most likely to live in unsafe homes and neighbourhoods, often with limited access to healthy foods, employment options, and quality schools. Communities can adopt and implement policies that help reduce and prevent poverty, now and for future generations. The greatest health improvements may be made by increasing income at the lower levels, where small increases can have the greatest impacts.

Family & Social Support: People with greater social support, less isolation, and greater interpersonal trust live longer and healthier lives than those who are socially isolated. Neighbourhoods richer in social capital provide residents with greater access to support and resources than those with less social capital. Social support stems from relationships with family members, friends, colleagues, and acquaintances. Social capital refers to the features of society that facilitate cooperation for mutual benefits, such as interpersonal trust and civic associations. Individual social support and cohesive, capital-rich communities help to protect physical and mental health and facilitate healthy behaviours and choices. Adopting and implementing policies and programs that support relationships between individuals and across entire communities can benefit health. The greatest health improvements may be made by emphasising efforts to support disadvantaged families and neighbourhoods, where small improvements can have the greatest impacts.

Community Safety: Injuries through accidents or violence are the third leading cause of death in the United States and the leading cause for those between the ages of one and 44. Accidents and violence affect health and quality of life in the short and long-term, for those both directly and indirectly affected, and living in unsafe neighbourhoods can impact health in a multitude of ways. Community safety reflects not only violent acts in neighbourhoods and homes but also injuries caused unintentionally through accidents. Many injuries are predictable and preventable, yet about 30 million Americans receive medical treatment for injuries each year, and more than 243,000 died from these injuries in 2017. Communities can help protect their residents by adopting and implementing policies and programs to prevent accidents and violence.

SELF-ASSESSMENT EXERCISE

Discuss the effect of income on reproductive health.

3.0 CONCLUSION

In this unit, you've learnt about the socio-economics of reproductive health care in terms of education, employment, family and social support, income and finally community safety.

4.0 SUMMARY

The socio-economic factors, especially the level of income, played an important role in the reproductive health of female-headed households. A major proportion of health inequality is avoidable because it is a result of modifiable factors such as income, employment and education status. Based on the importance of the impact of social factors on health dimensions, in particular reproductive health, policy interventions should be guided to improve the economic and social status of female-headed households.

5.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the effect of socioeconomic on reproductive health care

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MODULE 8 DATA SOURCES IN REPRODUCTIVE HEALTH

Unit 1 Websites, Reports, Surveys and Publication Focusing on Maternal and Child Health
Unit 2 MCH Programmes at the District Level by UNFPA
Unit 3 MIS in Reproductive Health
Unit 4 Reproductive Health Indicators

UNIT 1 WEBSITES, REPORTS, SURVEYS, AND PUBLICATIONS FOCUSING ON MATERNAL AND CHILD HEALTH

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Publications and Reports Focusing on MCH
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Maternal health refers to the health of women during pregnancy, childbirth, and the postnatal period. Each stage should be a positive experience, ensuring women and their babies reach their full potential for health and well-being. Although important progress has been made in the last two decades, about 295 000 women died (during and after pregnancy and childbirth) in 2017. This number is unacceptably high. The most common direct causes of maternal injury and death are excessive blood loss, infection, high blood pressure, unsafe abortion, and obstructed labour, as well as indirect causes such as anaemia, malaria, and heart disease. Most maternal deaths are preventable with timely management by a skilled health professional working in a supportive environment.

2.0 OBJECTIVES

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

- list the different publications and reports focusing on MCH
- highlight different websites and surveys on MCH.

3.0 MAIN CONTENT

3.1 Publications and Reports Focusing on MCH

Below are the publications, website, report, and survey by WHO on MCH:

- Exploratory meeting to review new evidence for Integrated Management of Childhood Illness (IMCI) danger signs
- Lessons learned from applying the Accelerated Action for the Health of Adolescents (AA-HA!) guidance for policy development in early adopter countries: Barbados
- Lessons learned from applying the Accelerated Action for the Health of Adolescents (AA-HA!) guidance for policy development in early adopter countries: Sudan
- Levels and trends in child mortality report 2019
  Estimates developed by the UN Inter-agency Group for Child Mortality Estimation
- Management of the sick young infant aged up to 2 months
  Chart booklet
- Management of the sick young infant aged up to 2 months: IMNCI training course
  Participant manual and facilitator guide
- Maternal Immunisation and Antenatal Care Situation Analysis (MIACSA) Project. Results Dissemination Meeting
- Strengthening quality midwifery education for Universal Health Coverage 2030: Framework for action
- Survive and thrive: transforming care for every small and sick newborn
- Guideline: implementing effective actions for improving adolescent nutrition
- HIV and infant feeding in emergencies: operational guidance
  The duration of breastfeeding and support from health services to improve feeding practices among mothers living with HIV
- Improving the quality of paediatric care: an operational guide for facility-based audit and review of paediatric mortality
- Levels and trends in child mortality report 2018
  Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation
- Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential
- Operationalising nurturing care: meeting report
- Quality, equity, dignity: the network to improve quality of care for maternal, newborn, and child health – strategic objectives

- Standards for improving the quality of care for children and young adolescents in health facilities
- WHO recommendation on the duration of bladder catheterisation after surgical repair of simple obstetric urinary fistula
- WHO recommendations on home-based records for maternal, newborn, and child health
- WHO recommendations: intrapartum care for a positive childbirth experience
- WHO recommendations: non-clinical interventions to reduce unnecessary caesarean sections
- https://www.who.int/health-topics/maternal-health#tab=tab_1
- https://www.ncsl.org/research/health/maternal-and-child-health-overview.aspx
- https://www.who.int/healthsystems/topics/health-law/chapter17.pdf
- https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health
- https://www.mchip.net/sites/default/files/MCH%20Program%20Indicator%20Survey%20Report%202013%20Sindh%20Province.pdf
- https://dhsprogram.com/data/DHS-Survey-Indicators-Maternal-and-Child-Health.cfm
- https://www.mchip.net/qocsurveys/

4.0 CONCLUSION

In this unit, you learned about the publications, surveys, reports, and websites focusing on MCH.

5.0 SUMMARY

Maternal and child health (MCH) programs focus on health issues concerning women, children, and families, such as access to recommended prenatal and well-child care, infant and maternal mortality prevention, maternal and child mental health, newborn screening, child immunisations, child nutrition and services for children with special health care needs. States invest in healthy children and families to strengthen communities and avoid unnecessary health care costs.

SELF-ASSESSMENT EXERCISE

What are the WHO recommendations on home-based records for maternal, newborn, and child health?

6.0 TUTOR-MARKED ASSIGNMENT

List the WHO publications focusing on MCH.

7.0 REFERENCES/FURTHER READING

Centres for Disease Control and Prevention. Recommendations to improve preconception health and health care-United States: A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR. 2006;55(RR-06):1–23.

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UNIT 2 MCH PROGRAMMES AT THE DISTRICT LEVEL BY UNFPA

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Overview of MCH Programmes
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

The United Nations Population Fund (UNFPA), formerly the United Nations Fund for Population Activities, is a UN agency aimed at improving reproductive and maternal health worldwide. Its work includes developing national healthcare strategies and protocols, increasing access to birth control, and leading campaigns against child marriage, gender-based violence, obstetric fistula, and female genital mutilation.

The UNFPA supports programs in more than 150 countries across four geographic regions: the Arab States and Europe, Asia and the Pacific, Latin America and the Caribbean, and sub-Saharan Africa. Around three-quarters of the staff work in the field. It is a founding member of the United Nations Development Group, a collection of UN agencies and programmes focused on fulfilling the Sustainable Development Goals.

2.0 OBJECTIVES

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

- state the various MCH programmes at the district level by UNFPA
- discuss the functions of UNFPA.

3.0 MAIN CONTENT

3.1 Overview of MCH Programmes

The agency began operations in 1969 as the United Nations Fund for Population Activities under the administration of the United Nations Development Fund. In 1971 it was placed under the authority of the United Nations General Assembly. Its name was changed to United

Nations Population Fund in 1987. However, the shortened term of UNFPA has been retained. In September 2015, the 193 member states of the United Nations unanimously adopted the Sustainable Development Goals, a set of 17 goals aiming to transform the world over the next 15 years. These goals are designed to eliminate poverty, discrimination, abuse and preventable deaths, address environmental destruction, and usher in an era of development for all people, everywhere.

The Sustainable Development Goals are ambitious, and they will require enormous efforts across countries, continents, industries and disciplines, but they are achievable. UNFPA works with governments, partners and other UN agencies to directly tackle many of these goals – in particular Goal 3 on health, Goal 4 on education and Goal 5 on gender equality – and contributes in a variety of ways to achieve many of the other goals.
Executive Directors and Under-Secretaries-General of the UNFPA

- 2017–present: Dr Natalia Kanem (Panama)
- 2011–2017: Dr Babatunde Osotimehin (Nigeria) (Deceased 4 June 2017)
- 2000–2010: Ms Thoraya Ahmed Obaid (Saudi Arabia)
- 1987–2000: Dr Nafis Sadik (Pakistan)
- 1969–1987: Mr Rafael M. Salas (Philippines)

UNFPA is the world's largest multilateral source of funding for population and reproductive health programs. The Fund works with governments and non-governmental organisations in over 150 countries with the support of the international community, supporting programs that help women, men, and young people:

- to voluntarily plan and have the number of children they desire and to avoid unwanted pregnancies
- undergo safe pregnancy and childbirth
- avoid spreading sexually transmitted infections
- decrease violence against women
- increase the equality of women
- encouraging the use of birth control

UNFPA uses a human rights-based approach in programming to address three "transformative goals":

- Zero preventable maternal death
- Zero gender-based violence
- Zero unmet need for family planning.

The Fund raises awareness of and supports efforts to meet these goals, advocates close attention to population concerns and helps nations formulate policies and strategies in support of sustainable development. Dr Osotimehin assumed leadership in January 2011. The Fund is also represented by UNFPA Goodwill Ambassadors and a Patron. UNFPA works in partnership with governments, along with other United Nations

agencies, communities, NGOs, foundations and the private sector, to raise awareness and mobilise the support and resources needed to achieve its mission to promote the rights and health of women and young people.

Contributions from governments and the private sector to UNFPA in 2016 totalled $848 million. The amount includes $353 million to the organisation's core resources and $495 million earmarked for specific programs and initiatives.

Detailed List of Joint Programmes

1. CAJ02 - Sexual Violence Project in DRC
2. CAJ04 - Amelioration de l'etat de sante de la reporducion en Haiti
3. ZZJ29 - Abandonment of Female Genital Mutilation-Cutting
4. UZJ02 - Multi-Sectoral Gender-Based Violence at District Level
5. UZJ03 - Combating Violence against Women and Girls in Papua Province Indonesia
6. UZJ04 - Prevention of Gender-Based Violence in Sri Lanka
7. UZJ05 - Implementing the National Population Policy 2011-2014
8. UZJ06 - Promoting Gender Equality at Local Level, in Turkey
9. UZJ07 - Development National Capacity to Counteract Domestic Violence in Belarus
10. UZJ08 - Gender-Based Violence Prevention & Response in North and North Eastern Uganda
11. UZJ09 - Maternal & Neonatal Mortality, & Morbidity Reduction in Bangladesh
12. UZJ10 - H4 Global Initiative for Maternal & Newborn Health
13. UZJ11 - Sexual & Gender-Based Violence in Liberia-Phase II
14. UZJ12- Women's and Children's health in Kosovo
15. UZJ13 - Programme of Adolescent Girls MWI-2658
16. UZJ14 - H4+ Global Initiative for Reproductive, Maternal, Newborn, & Child Health
17. UZJ15 - Maternal Mortality Survey & Emergency Obstetric & Newborn Care (EMONC) Needs Assessment in S. Sudan
18. UZJ16 - Prevention of Violence against Women in Central America
19. UZJ17 - Gender-Based Violence Survivors to Access Life Saving Services in Jordan
20. UZJ18 - Reproductive Maternal & Child Health Financing-RMNCH Fund
21. UZJ19 - Supporting the Sexual and Gender-Based Violence Survivors to Access Life Saving Services-Part II
22. (Heymati: Promoting women and Girls Health and Well Being)
23. UZJ20 - Developing Field-Level GBV Capacity for Improved Service Delivery, Information Management, and Inter-Agency Coordination

24. UZJ21 - Strengthening the Multi Sectorial Approach to Gender-based Violence Prevention and response in North and North Eastern Uganda

SELF-ASSESSMENT EXERCISE

Outline the various MCH programmes at the district level by UNFPA.

4.0 CONCLUSION

In this unit, you have learnt about UNFPA and its functions with various MCH programmes at the district level.

5.0 SUMMARY

UNFPA is the United Nations sexual and reproductive health agency, UNFPA calls for the realisation of reproductive rights for all and supports access to a wide range of sexual and reproductive health services – including voluntary family planning, maternal health care and comprehensive sexuality education.
UNFPA Supports:
1. Reproductive health care for women and youth in more than 150 countries – which are home to more than 80 per cent of the world's population
2. The health of pregnant women, especially the 1 million who face life-threatening complications each month
3. Reliable access to modern contraceptives sufficient to benefit 20 million women a year
4. Training of thousands of health workers to help ensure at least 90 per cent of all childbirths are supervised by skilled attendants
5. Prevention of gender-based violence, which affects 1 in 3 women
6. Abandonment of female genital mutilation, which harms 3 million girls annually
7. Prevention of teen pregnancies, complications of which are the leading cause of death for girls 15-19 years old
8. Efforts to end child marriage, which could affect an estimated 70 million girls over the next 5 years
9. Delivery of safe birth supplies, dignity kits, and other life-saving materials to survivors of conflict and natural disaster
10. Censuses, data collection, and analyses, which are essential for development planning

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss all you know about UNFPA.

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UNIT 3 MIS IN REPRODUCTIVE HEALTH

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Management Information Systems (MIS) in Reproductive Health
4.0 Conclusion
5.0 Summary
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1.0 INTRODUCTION

3.1 Management Information Systems (MIS) in Reproductive Health

Health Management Information Systems (HMIS) are one of the six building blocks essential for health system strengthening. HMIS is a data collection system specifically designed to support planning, management, and decision-making in health facilities and organisations. A well-functioning **health information** system ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, health system performance, and health status.

2.0 OBJECTIVES

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

- define HMIS
- explain the rationale of HMIS
- discuss the benefits of HMIS.

3.0 MAIN CONTENT

The use of an HMIS in support of health systems performance assessment and to address deficiencies and gaps in the services has often been recommended by researchers. Health Information System (HIS) is “a system that provides specific information support to the decision-making process at each level of an organisation. A health management information system is an essential tool for strengthening planning and management in health facilities. Any conventional HMIS enables monitoring of service delivery in terms of access, coverage, expenditure, human resources, disease profiles and health outcomes.

The purpose of HMIS is to routinely generate quality health information

and use that information for management decisions to improve the performance of health services delivery. Another aim or purpose is to ascertain the utility of an HMIS and its use as a tool to monitor the quality of care along with its customary usage. The objective of HMIS would then not only be to record information on health events, but also to check the quality of the services at different levels of health care

Quality HMIS information means that the information generated by HMIS is:

- relevant
- timely
- complete (both in geographical coverage and in terms of range/amount of data it is supposed to provide)
- valid (provides the information that it is supposed to provide)
- reliable (the information is consistent).

Routine information needs for health management:

- information on health service performance and coverage for promotive, preventive, and curative services
- information on diseases, health conditions
- information on health resources.

Expected benefits of adapting the health management information system includeBenefit for the community

- Benefit for health providers
- Benefit for policymakers/local government
- Benefit for health system development

A well-functioning health information system ensures the production, analysis, dissemination and use of reliable and timely health information by decision-makers at different levels of the health system, both regularly and in emergencies. It involves three domains of health information: health determinants; health systems performance; and health status. To achieve this, a health information system must:

- Generate population and facility-based data: from censuses, household surveys, civil registration data, public health surveillance, medical records, data on health services and health system resources (e.g. human resources, health infrastructure, and financing);
- Have the capacity to detect, investigate, communicate and contain events that threaten public health security at the place they occur, and as soon as they occur;
- Have the capacity to synthesize information and promote the availability and application of this knowledge.

SELF-ASSESSMENT EXERCISE

1. Define HMIS to reproductive health.

4.0 CONCLUSION

In this unit, you've learned about HMIS, the rationale, and the benefits of HMIS.

5.0 SUMMARY

Routine Health Management Information Systems (HMIS) are the backbone of monitoring service delivery programs at the national level in low- and middle-income countries. Several global initiatives have issued recommendations for core maternal and newborn health indicators, including some that should be tracked at the global and national levels via routine HMIS. However, it is not well understood which countries are already collecting this information and which ones would need to revise their HMIS to track these indicators.

6.0 TUTOR-MARKED ASSIGNMENT

1. List the benefits of HMIS.

7.0 REFERENCES/FURTHER READING

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UNIT 4 REPRODUCTIVE HEALTH INDICATORS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Reproductive Health Indicators
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

At the Millennium Summit sponsored by the United Nations in September 2000, the members of the United Nations reaffirmed their commitment to working towards a world in which sustainable development and the elimination of poverty would have the highest priority. This initiative is known as the Millennium Project, with its Millennium Development Goals (MDGs) and related targets. The MDGs were guided in part by agreements and resolutions of international conferences over the past decade, including the International Conference for Population and Development (ICPD) in Cairo in 1994. The goals are commonly accepted as a framework for measuring development progress. Reproductive health affects the lives of women and men from conception to birth, through adolescence to old age, and includes the attainment and maintenance of good health as well as the prevention and treatment of ill-health. Indicators are markers of health status, service provision, or resource availability, designed to enable the monitoring of service performance or program goals.

2.0 OBJECTIVES

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

- outline reproductive health indicators
- discuss the importance of reproductive health indicators.

3.0 MAIN CONTENT

In the years following the ICPD, international agencies agreed on a shortlist of 17 indicators for monitoring reproductive health goals. these 17 largely population-based indicators provide an overview of the reproductive health (RH) situation at the global and national levels, endorsed by the WHO and the United Nations Interagency Working Group.

The purpose of this set of indicators is to provide an overview of the reproductive health situation at global and national levels. The objective is not to present a comprehensive set of indicators for program monitoring and evaluation. This set of indicators is not meant to serve as an index; rather, it draws attention to the key measurable areas of reproductive health.

Below are the 17 indicators:

Total Fertility Rate (TFR)
The total number of children a woman would have by the end of her reproductive period if she experienced the currently prevailing age-specific fertility rates throughout her childbearing life. According to NDHS 2018, the total fertility rate for the 3 years preceding the survey is 5.3 children per woman (4.5 in urban areas and 5.9 in rural areas).
Numerator: Sum of the ASFRs x 5
Denominator: 1000

Contraceptive Prevalence Rate (CPR)
Percent of women of reproductive age (15-49) who are using (or whose partner is using) a contraceptive method at a particular point in time. According to NDHS 2018, modern contraceptive use is higher among sexually active unmarried women (28%) than among currently married women (12%). The contraceptive prevalence rate for any method is 17% among currently married women.
Numerator: Number of women of reproductive age at risk of pregnancy who are using (or whose partner is using) a contraceptive method at a given point in time
Denominator: Number of women of reproductive age at risk of pregnancy at the same point in time

Maternal Mortality Ratio (MMR)

The annual number of maternal deaths per 100,000 live births. According to NDHS 2018, the maternal mortality ratio for the 7 years before the 2018 NDHS is estimated at 512 maternal deaths per 100,000 live births. *Numerator: All maternal deaths occurring in a period (usually a year) Denominator: Total number of live births occurring in the same period*

Antenatal Care Coverage
Percent of women attended at least once during pregnancy, by skilled health personnel (excluding trained or untrained traditional birth attendants), for reasons relating to pregnancy. According to NDHS 2018, a***bout*** 67% of women age 15-49 who gave birth in the 5 years preceding the survey received antenatal care (ANC) from a skilled

provider during the pregnancy for their most recent birth. Fifty-seven percent had at least four ANC visits. *Numerator: Number of pregnant women attended, at least once during their pregnancy, by skilled personnel for reasons related to pregnancy during a fixed period*
Denominator: Total number of live births during the same period

Percent of Births Attended by Skilled Health Personnel

On the percentage of births attended by skilled health personnel (excluding trained or untrained traditional birth attendants)- according to NDHS 2018, Forty-three percent of births were assisted by a skilled provider.
Numerator: Births attended by skilled health personnel during a specified period
Denominator: Total number of live births during the specified period

Availability of Basic Essential Obstetric Care

Number of facilities with functioning basic essential obstetric care per 500,000 population
Numerator: Number of facilities with functioning basic care X 500 000
Denominator: Total population

Availability of Comprehensive Essential Obstetric Care

The number of facilities with functioning comprehensive essential obstetric care per 500,000 population.
Numerator: Number of facilities with functioning basic care X 500 000
Denominator: Total population

Perinatal Mortality Rate (PMR)

The number of perinatal deaths per 1,000 total births. Perinatal deaths comprise stillbirths (pregnancy losses occurring after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). According to NDHS 2018, during the 5 years before the survey, the perinatal mortality rate was 49 deaths per 1,000 pregnancies.
Numerator: Number of perinatal deaths (fetal deaths and early neonatal deaths) x 1000
Denominator: Total number of births

Low Birth Weight Prevalence

Percent of live births that weigh less than 2,500g. According to NDHS 2018, the percentage of mothers reporting information on birth weight has fluctuated over the years, decreasing from 18% in 2008 to 16% in 2013 before rising to 24% in 2018. The percentage of infants weighing less than 2.5 kg at birth was 8% in 2008 and 2013 while it was 7% in 2018.
Numerator: Number of liveborn babies who weigh less than 2500 g x 100

Denominator: Total number of live births

Positive Syphilis Serology Prevalence in Pregnant Women
Percent of pregnant women (15-24) attending antenatal clinics, whose blood has been screened for syphilis, with positive serology.
Numerator: Number of pregnant women aged 15–24 years attending antenatal clinics, whose blood has been screened for syphilis, with positive serology during a specified period x 100
Denominator: Total number of pregnant women aged 15–24 years attending antenatal clinics, whose blood has been screened for syphilis during the specified period

Prevalence of Anemia in Women
Percent of women of reproductive age (15-49) screened for hemoglobin levels with levels 110g/l for pregnant women, and 120g/l for non-pregnant women. According to NDHS 2018, 58% of women age 15-49 are anaemic.
Numerator: Number of women of reproductive age screened for haemoglobin levels who have levels below 110 g/l (pregnant women) and 120 g/l (non-pregnant women) during a specified period x 100
Denominator: Total number of women of reproductive age screened for haemoglobin levels during the specified period

Percent of Obstetric and Gynecological Admissions Owing to Abortion
Percent of all cases admitted to service delivery points providing in-patient obstetric and gynaecological services, which are due to abortion (spontaneous and induced, but excluding planned termination of pregnancy).
Numerator: Admissions for abortion-related complications x100
Denominator: All admissions, except those for planned termination of pregnancy

Reported Prevalence of Women with FGC
Percent of women interviewed in a community survey reporting having undergone FGC. According to NDHS 2018, 20% of women age 15-49 are circumcised, a decrease from the figure of 25% reported in 2013.
Numerator: Number of women interviewed in a community survey who report having undergone genital mutilation x100
Denominator: Total number of women interviewed in the survey

Prevalence of Infertility in Women
Percent of women of reproductive age (15-49) at risk of pregnancy (not pregnant, sexually active, non-contracepting, and non-lactating) who report trying for a pregnancy for two years or more.

Numerator: Number of women of reproductive age (15–49 years) at risk of becoming pregnant (as defined above) who report trying unsuccessfully for pregnancy for two years or more x100
Denominator: Total number of women of reproductive age at risk of becoming pregnant

Reported Incidence of Urethritis in Men
Percent of men aged (15-49) interviewed in a community survey reporting episodes of urethritis in the last 12 months
Numerator: Number of men aged 15–49 years who reported having one or more episodes of urethritis in the previous 12 months x 100
Denominator: Number of men aged 15–49 years interviewed in the survey

HIV Prevalence among Pregnant Women
Percent of pregnant women (15-24) attending antenatal clinics, whose blood has been screened for HIV and who are seropositive for HIV.
Numerator: Number of HIV-positive blood samples taken from pregnant women aged 15–24 years at selected antenatal clinics (sentinel surveillance sites) x 100*
Denominator: Total number of blood samples taken from pregnant women aged 15–24 years from selected antenatal clinics that were tested for HIV
**In the immediate post-pubertal age group (i.e. the age group just beginning sexual activity virtually all prevalent infections could be used as a proxy for incident (new) infections.*

Knowledge of HIV-related Prevention Practices
Percent of all respondents correctly identify all three major ways of preventing the sexual transmission of HIV and reject three major misconceptions about HIV transmission or prevention. According to NDHS 2018, 46% of women and 45% of men age 15-49 have comprehensive knowledge about the modes of HIV transmission and prevention.
Numerator: Number of survey respondents (women and men) who correctly identify all three major ways of preventing sexual transmission of HIV, and who also reject all three major misconceptions about HIV transmission or prevention x100
Denominator: Total number of respondents included in the survey

SELF-ASSESSMENT EXERCISE

Write short notes on the following:
i) Total Fertility Rate (TFR) (ii) Low Birth Weight Prevalence
iii) Prevalence of Anemia in Women iv) Knowledge of HIV-related

Prevention Practices

4.0 CONCLUSION

In this unit, you've learned about the 17 indicators of reproductive health.

5.0 SUMMARY

In the years following the ICPD, international agencies agreed on a shortlist of 17 indicators for monitoring reproductive health goals. these 17 largely population-based indicators provide an overview of the reproductive health (RH) situation at the global and national levels, endorsed by the WHO and the United Nations Interagency Working Group.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss in detail the reproductive health indicators.

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