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9. ABSTRACT

Presents an organized compendium of teaching topics related to nursing and midwifery. The volume, prepared by the African Health Training Institutions Project (AHTIP) at the University of North Carolina, is intended as a guide for nursing and midwifery education curriculum developers, particularly those concerned with AHTIP projects. The outline opens with several introductory chapters explaining the development, goals, and most effective methods for using the courses of study suggested. The remainder of the volume consists of separate units, or modules, each dealing with a different aspect of nursing and midwifery. The outline emphasizes a holistic, life-cycle approach, which takes into account the impact of community and family on individual patients. Module topics include, among others, assessment of a community's health service needs, cultural attitudes toward pregnancy and birth, normal labor and delivery care, child development, nursing intervention for adults and the aged, and family planning.

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A TOPICAL OUTLINE

FOR THE TEACHING OF FAMILY HEALTH

A LIFE-CYCLE APPROACH

NURSING AND MIDWIFERY

AFRICAN HEALTH TRAINING INSTITUTIONS PROJECT

A TOPICAL OUTLINE FOR THE TEACHING OF FAMILY HEALTH:

A LIFE-CYCLE APPROACH

(NURSING AND MIDWIFERY)

prepared by the

AFRICAN HEALTH TRAINING INSTITUTIONS PROJECT

1977

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Carolina Population Center
and
The Medical School - Office of Medical Studies
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Many individuals have contributed their time, interest and support to [illegible] as parts of the Topical Outline for the Teaching of Family Health - Nursing and Midwifery. There were many authors, all of whom are identified in the list of contributors.

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CHAPTER 1:

THE ORIGINS AND DEVELOPMENT OF THE TOPICAL OUTLINE

James W. Lea

The development of A Topical Outline for the Teaching of Family Health: Nursing and Midwifery has been a process of nearly two years of international study and cooperation. The process began in 1975 when the staff of The African Health Training Institutions Project (AHTIP) realized the need for an organizational format which would help to group the self-instructional family health teaching materials being produced in significant numbers by African nursing and midwifery faculty in AHTIP-conducted workshops. Such an organizational format, it was felt, should have several characteristics:

1. It should allow participants in future AHTIP workshops to identify those topics upon which instructional units had already been developed, so that they might more wisely choose their own topic for authoring units.
2. It should allow faculty who use it to see what teaching materials were available for their students.
3. It should relate realistically to existing African nursing and midwifery curricula and to those new curricular areas in which family health teaching programs were being, or could be, developed.

It was immediately clear that such a document could only be produced through the mutual efforts of a cross sectional group of professionals representing nursing and midwifery education in Africa. Such a group already existed in the AHTIP Consultative Group for Nursing, Midwifery and the Allied Health Professions, whose eight members represented seven African countries. So a preliminary draft of a conceptual curriculum outline for family health teaching in nursing and midwifery was presented to the Consultative Group at their July, 1975, meeting

in Nairobi. The group agreed upon the usefulness of such an outline and devoted several sessions to analyzing, editing and revising the draft. They sent their revisions back to the AHIP staff for further study and incorporation into a second draft.

For the next year, Ms. Elizabeth M. Edmunds, the General Editor of the document, continued to develop it, with consultation from individual members of the Consultative Group and other professional colleagues. During this time, it began to appear that "Curriculum Outline" was a misnomer for the document, for with inputs from several African professionals it was taking more the form of an organized compendium of teaching topics, with rationale, objectives and related materials, appropriate to structuring Family Health teaching components. Hence, it became known as A Topical Outline. Along with a companion volume being developed for medical teaching, the Topical Outline adopted the family life-cycle approach as its organizational basis.

In September 1976, a much more detailed draft of A Topical Outline was submitted to the Consultative Group at their meeting in Alexandria. At this time, the Group did further editing and individually recommended resource lists and other helpful additions. These contributions, along with further editorial effort, make up the completed Topical Outline.

This volume, then, is the product of great efforts by a great number of nursing and midwifery education professionals. It is the hope of everyone who contributed to it that A Topical Outline will be helpful as a family health curriculum and course planning guide, as a reference for assessing current teaching programs and as a stimulus to more focus upon family health as a thrust in health professional training and practice, in Africa and elsewhere.

CHAPTER 2:

DEVELOPMENT OF THE LIFE-CYCLE APPROACH TO THE TEACHING OF FAMILY HEALTH

Frank T. Stritter and Raymond B. Isely

adapted for Nursing and Midwifery Education by
Elizabeth M. Edmunds

This chapter will describe how the concepts which gave rise to the ideas discussed in the previous chapter were developed. It assumes the viewpoint of the curriculum builder: whether that person be a course instructor, a department chairman, or the person in charge of an entire institution. It poses a set of theoretical questions to which will be given general answers, followed by specific responses taken from the experience of developing the particular approach of this volume. There will thus be constructed simultanously both a general conceptual framework for the curriculum builder in any institution, and a specific one for the life-cycle approach to teaching family health.

I. A CONCEPTUAL FRAMEWORK FOR THE CURRICULUM BUILDER

A. WHAT IS A CURRICULUM?

A curriculum by definition includes two major components. The first is a set of logical and sequential educational goals. These goals are broad statements of what students are expected to achieve as a result of participation in the curriculum. They may be applied to as short a programme as a course of one term (e.g. a curriculum in paediatric nursing within the entire nursing school programme) or to one as long as the entire preparation for a career (e.g. a four year baccalaureate programme in nursing.) They serve both as a planning guide for the developers and evaluators and as a study guide for the student participants in the curriculum. The second component is a series of

learning experiences through which students are helped to achieve the various goals. These activities are experiences in which students participate to various degrees. They can be courses, required or optional, taken on a group basis, or they can be instruction organized individually. The instruction may be didactic or experiential. A curriculum, then, is composed of both the goals and experiences of a specific instructional programme.

B. WHAT ARE THE TASKS OF THE CURRICULUM DEVELOPER?

The curriculum developer can be a single individual or a committee. One or more individuals can be responsible for presenting the curriculum or an organization can be responsible for administration of the programme, such as: a Ministry of Health or Education, a dean or director of a faculty or a faculty committee on educational policy. Whoever or whatever the developer is, several responsibilities or tasks must be accomplished if a curriculum is to be useable. The first task is to select a curriculum framework, that is some type of overriding philosophy or structure into which all the goals and experiences can be fitted. A second responsibility is to determine the basic behaviors, skills, knowledge and attitudes or feelings which the program's graduates should possess as a result of participating in the curriculum. The general outcomes of a curriculum will often be specified by some higher political authority or may be ascertained by the developer from studies of what a society or profession expects. A third responsibility is to design a series of instructional experiences or activities for students that will enable them to meet the desired outcomes, i.e. to evaluate the students and the programme. Once that evaluation is accomplished, the faculty can certify that the students have in fact achieved a standard suitable for entry into a particular profession or occupation, and they can be graduated.

C. WHAT OPTIONS ARE AVAILABLE TO THE CURRICULUM DEVELOPER IN THE CONSTRUCTION OF A TEACHING PROGRAMME?

Decisions affecting curriculum organization are frequently made on the basis of pressure by government, by faculty groups or other influential individuals, on the basis of hunches or on the basis of expediency, instead of clear-cut theoretical considerations or assumptions. In many institutions, this manner of developing curriculum has resulted in a cafeteria array of

unrelated topics through which the student is expected to proceed in a sequence determined by a faculty group. The student must sort out all the concepts and information presented and then put it all together in some meaningful arrangement for future use. This type of curriculum development is of obviously little benefit to the student and questionable from an educational standpoint.

A framework that makes better educational sense can be developed if the needs of one of the constituent groups affected by the curriculum being developed are considered. Some of these groups are the faculty or instructors, the students, or the recipients of the services provided by the graduates.

The needs of a department or a faculty lead a developer to the familiar subject-oriented curriculum from which most instructional programmes have evolved and which characterizes the majority of programmes today. The assumption made is that because the major subjects, such as anatomy and psychiatry, provide a logical and efficient way of organizing existing and new knowledge, they constitute, therefore, an effective way of learning it. A curriculum so organized is characterized by compartmentalization of knowledge and resources, by deficient or absent communication between the individuals responsible for the various subjects and by an overwhelming assortment of material for the student to memorize, some of which is redundant. The advantage of such a curriculum is that it is more easily planned and taught than most other approaches, simply because of the common discipline and the proximity of the individuals responsible for teaching. It is, after all, much easier to discuss curriculum matters with one's peers than with those of different disciplines. This approach thus provides a more efficient structure for development and presentation of facts and preserves faculty time and effort.

The needs of the students form another possible guide for developing a curriculum. For example, students frequently have problems in identifying and integrating the important concepts presented in a compartmentalized curricular approach. Interdisciplinary or interdepartmental approaches have been suggested as solutions. Several specific items can be combined in a discussion of larger unifying principles, problems and themes. Such an approach helps to break down the logical fences that specialists have, for convenience, built up between their subject areas and to stimulate the unification of knowledge. For example, nursing students frequently have difficulty relating a clinical problem or entity to its relevant factual material from the basic sciences.

A curriculum organization designed to address this problem may be organized on the basis of organ systems, wherein all aspects of a given system: the anatomy, physiology, pharmacology, pathology, and therapeutics are taught as a single unit. Another organizational framework might be furnished by clinical problems, e.g. hypertension, diabetes, or respiratory tract infections.

A curriculum could also be based on the needs of a societal group such as a defined community or the recipients of health care. A curriculum of this type would be organized around the functions, activities, events or problems which constitute the significant features of life in a culture or society. This organizational pattern would be responding to human needs rather than to the needs of a particular group, i.e. faculty or students. In addition to forming a basis for the integration of knowledge, such an organization would be of value in outlining a practitioner's responsibilities. Thus a patterned relationship between the curriculum, the skills of the practitioner and lives of the practitioner's constituents would be provided. A combination of societal needs, learner's needs, and the life situations of the recipients of health care would be emphasized. A curriculum of this nature, however is difficult to organize and even more difficult to implement. An example is found in a curriculum based on the life-cycle or life-events of the development of an individual or a family. This approach is the theme of this volume.

D. ARE THERE CRITERIA THAT CAN GUIDE THE CURRICULUM BUILDER'S TASK OR BY WHICH A COMPLETED CURRICULUM PROPOSAL CAN BE ASSESSED?

If a set of standards or guidelines is used by the curriculum builder as the curriculum is developed, then it is likely that a more logical and useable plan will result. The following list includes several categories that constitute a set of criteria.

I. SCOPE

A curriculum should be limited to a specific area of concern rather than a large amorphous body of knowledge that does not appear to have inner connections. It should present concepts and content which are directly related

to that area of concern. If concepts happen to be interrelated, the connections should be identified so that the students will grasp them.

2. COMPREHENSIVENESS

A curriculum should cover all the relevant topics within the specific area chosen. There will often be too much material to include in any one curriculum and the developer will have to establish priorities for selecting the most important topics. When that task is undertaken, however, it should be done empirically to ass e the best choices.

3. SEQUENCE

The curriculum should be arranged in some logical order to facilitate meaningful learning. Some possibilities are a world related sequence, i.e. the way phenomena exist or occur naturally in the world either spatially, temporally or physicallly; a concept related sequence, i.e. the way contents relate conceptually; inquiry related sequence, i.e. a sequence derived from the nature of generating, discovering, or verifying knowledge; learning related, i.e. a sequence derived from the psychology of learning or the way individuals learn; and utilization related, i.e. a sequence based on the way information or concepts are used either procedurally or according to anticipated frequency of use.

4. CUMULATIVE LEARNING

The curriculum should be built up in a meaningful way, such as proceeding from the acquisition of factual knowledge to the application of concepts, or from the aetiology of a condition to its treatment and prevention. What is expected of students should also increase in difficulty and intensity as the programme progresses.

5. INTEGRATION

A curriculum should show how facts and principles from one topic or area of concern relate to elements of other topics within the scope of the curriculum.

6. FLEXIBILITY

Curricula must often be adaptable, i.e. useable in different settings by different instructors or by different students. A curriculum designed to be used in several different institutions should be general and not too specific. To assure its flexibility it should be tested in a variety of locations and should be found useable in those settings by different instructors. Not all curricula will necessarily have the same degree of flexibility but in some cases it will be an important criterion.

7. UTILITY

The curriculum should be practical and useable. It should undergo constant testing. Parts found unuseable should be revised or discarded.

A curriculum which receives a systematic evaluation based on the foregoing criteria will be better designed than one that has not. The reviewer or developer, of course, will make individual decisions as to whether the curriculum meets his standards in these criteria, but the criteria nonetheless provide a guide for such decisions.

E. IS THERE AN ORGANIZATIONAL STRUCTURE FROM WHICH A CURRICULUM CAN BE DEVELOPED?

An organizational structure provides a format by which an instructor or a committee can develop a curriculum. It aids in assuring that all relevant areas are considered for inclusion and in a logical sequence. One such structure is a two-dimensional grid or matrix which provides an interrelated system of premises or guidelines for making the various curriculum-related decisions about objectives, topic headings, content, learning experiences and evaluation. The matrix has two principal components. One is the vertical axis or ordinate which details curricular goals or outcomes expressed as the broad skills or abilities which a competent health practitioner should exhibit at the conclusion of an instructional programme. The horizontal axis or abscissa is labelled Curriculum Organization. It corresponds to the curriculum framework referred to earlier, in which the organizational elements are the needs of one or more of the constituent groups. If the axes are extended,

both vertically form the elements in the Curriculum Organization, and horizontally from the curricular goals, these lines will bisect each other forming cells which provide an additional focus (Figure 1).

Figure 1:

A HYPOTHETICAL CURRICULUM

PLANNING MATRIX

Curricular Goals	Curriculum Organization						
	Elements based on societal needs, for example						
	A	B	C	D	E	F	G etc.
1							
2							
3							
4							
5							
6							

II. DEVELOPMENT OF THE LIFE-CYCLE APPROACH

A. PRELIMINARY CONSIDERATIONS

The first problem encountered was to devise a working concept of family health to guide curriculum building efforts. It needed to be made quite clear that family health does not mean ipso facto family planning or population control. It is not a euphemistic way of talking about birth control. Family health, rather, refers to the health status of the family however family may be defined. Whether the family is made up of four people or an entire hamlet of fifty or sixty people, then, is immaterial. The health status of that social unit is what concerns family health.

The concept of family health embodies the concerns expressed above but also includes emphasis on the family as the unit of practice for health services and on the community context where the health of the family is determined. Family health requires successful adaptation to the total environment. The major family health concerns encompass: the reproductive process, child rearing, nutrition, infectious diseases, health education, and environmental hygiene.

These concepts of family health serve as a good introduction to the problems faced by the curriculum builder in designing a programme for teaching in African health science institutions. What are the problems?

1. The programme must be broad enough to capture all the important aspects of family health. At minimum it should include family sociology, family planning, maternal and child health, nutrition, major diseases and accidents, occupational hazards, and some elements of community health. It should emphasize the major types of intervention made by health personnel both curative and preventive.

2. At the same time it must be focused enough to avoid encompassing all of the health sciences. Criteria need to be developed for delimiting what is important to family health and what is less important.

3. The programme should take cognizance of the cultural context in which family health care takes place. Organized systems of belief and practice, most of them family-centered, already exist. These must be given serious consideration.

4. A serious attempt should be made to emphasize the practice of family health more than a theory. As important as proper theoretical base is, the goal of teaching family health is to equip students to practice it. The programme must care for this delicate balance between understanding and skill in accordance with professional role expectations that are nationally defined.

5. The programme must seek ways of linking the teaching of family health, paediatric nursing, midwifery, medical/surgical nursing, and other speciality areas without attempting to supplant these programmes.

6. Opportunity should be given for the interrelated problems of fertility regulation, control of infections, and nutrition to emerge as priorities.

Taking a general concept of curriculum and combining it with the specific needs of a family health curriculum, the curriculum builder, then, has his task - the construction of a teaching programme. The life-cycle approach represents the results of such an effort.

B. THE LIFE-CYCLE MATRIX

1. THE CURRICULAR GOALS OR OUTCOMES

The following abilities are chosen: They range along the vertical side of the matrix (see Fig. 1):

1. Interpret the given culture
2. Describe normal structure and function, whether of an individual, a family or a community.
3. Make appropriate assessments.
4. Discuss important deviations from normal
5. Describe and apply appropriate preventive, therapeutic and nursing care measures
6. Educate individuals and families in prevention of and care for accidents and illnesses.
7. Provide emotional support to individuals and families during family crises.
8. Correlate the many aspects of health services.
9. Give and receive consultation
10. Function with limited resources
11. Participate in simple research

12. See health problems in a total environment
13. Collaborate with other health workers
14. Continue a process of self-instruction and self-evaluation
15. Behave in a professionally ethical manner.

2. THE CONSTITUENT GROUP

The group chosen in this approach is composed of the individuals, families and communities whom the practitioner will serve. The events and processes in the life of the family serve as delimiting factors. Health care needs related to these events and processes were chosen as the specific foci. The rationale for this choice is discussed in C. below. What are the components and events of the life-cycle? They range from conception to old age in

c. Conception and Infertility
d. Pregnancy, Birth and Puerperium
e. Lactation and Weaning
f. Growth and Development
g. Puberty and Adolescence
h. The Adult (Age 21-44)
i. Old Age (45 years and older)
j. Common Diseases and Accidents Affecting Family Health

Four additional areas which could not be classified as either events or processes in the cycle were thought necessary to include, to understand the cycle. These areas provide the student with the context within which to view the cycle. They are:

a. The Nature of the Community
b. The Family as a Unit
k. Family Planning
l. The Health Worker and the Community

3. CELLS DEFINED

By the intersection of the secondary vertical and horizontal axes cells (see Fig. 2) which represent the interaction of practitioner skills with the events and processes of the life cycle are defined. For example, one cell (C.2) specifies that the normal structure and function of the family and its members should be recognized by the practitioner with respect to matters of conception and infertility occuring in the family life-cycle. One would reason that in this case the normal structures of the male and female genital systems, the normal physiologic processes of spermatogenesis and oogenesis, and the factors affecting fertility, among other matters, should be covered.

In another example, cell I.3 calls for the practitioner to assess the major medical, social and psychological problems of the elderly. Considerations of all these various cells of the matrix provides the topical details for the curriculum.

Figure 2: THE LIFE-CYCLE MATRIX

	A Nature of Community	B Family as a Unit	C Conception and Infertility	D Pregnancy, Birth, and Puerperium	E Lactation and Weaning	F Growth and Development Infancy and Adolescence	G	H The Adult	I Old Age	J Chronic Diseases and Accidents	K Family Planning	L Health Worker and Community
1 Culture												
2 Normal Structure and Function			C.2									
3 Assessment									I.3			
4 Deviations from Normal												
5 Prevent, Treat, Care												
6 Educate Individual and Family												
7 Emotional Support												
8 Correlate Health Services												
9 Consultation												
10 Function With Limited Resources												
11 Participate in Simple Research												
12 Health and Environment												
13 Collaborate With Others												
14 Self-Instruction												
15 Professional Ethics												

C. RATIONALE FOR THE LIFE-CYCLE APPROACH

How does this approach meet the proposal outlined in B.1.?

1. It offers a framework for orienting teaching to the health needs of the people.

The decision to use the so-called life-cycle approach to the teaching of family health was influenced first of all by the recent movements in medical and nursing education worldwide, toward more relevance in health training programmes. For the first time in modern history, medical,nursing and midwifery schools have taken up the issues of equal access to medical care, distribution of health manpower, and cost-benefit evaluations of health programmes. They have assumed responsibility, not just for academic treatment of these issues but for seeking solutions.

In the United States the number of medical students remained relatively stationary between 1945 and 1965. The number of medical schools increased only slightly during these years. The study of medicine as late as the early 1960s was a largely academic pursuit with practice confined to the wards and clinics, mostly the wards of large university teaching hospitals. Nearly 70 % of medical school graduates decided to specialize. Community practice, public health, and preventive medicine took decidedly low positions in the hierarchy of specialities. The ideal of the average medical student of the post-war era and until 1965 was the professor with a long white coat with one foot in the laboratory and the other in the ward.

Nursing education during this period was still largely hospital-centered. However, several things had already happened to nursing service and education before and during this time. Nursing had moved out into the community and became a highly respected branch of the core profession, long before comparable status was achieved in medicine.University education was initiated due to the demands of nurses working in the community, for more knowledge of administration, epidemiology, school health and sanitation. From this beginning the university system took on the additional responsibility of educating nurses to be teachers and hospital administrators.

The situation in the United Kingdom during this period was much the same (Mechanic: 1968:325-364). The nationalization of the Health Services in 1948 had done little to alter the ever widening gap between the general practitioner who praticed in the community without hospital privileges and the hospital

privileges and the hospital consultant who centered his attention on acute, catastrophic illness. In an even greater isolation were the local authorities who managed preventive, midwifery, and other peripheral services.

British nursing education tended to be hospital-based and hospital-focused also. Only recently did they have graduates from a university degree granting programme in nursing.

Medical and nursing education in much of the rest of the world, including Africa and the Peoples Republic of China, had been influenced by the patterns established in the United States and the United Kingdom. Much of what was accomplished from 1945 - 1965 was of enormous benefit. The fault lay in the failure either to make the advances in medicine and nursing accessible to the mass of the population or to lay proper stress on the social and economic aspects of health and disease. Events since 1965 have brought about some needed changes.

The most remarkable change in medical and nursing education has taken place in China. Since the Cultural Revolution of 1968-69 the curricula have been shortened, more time has been given to field training in rural areas in keeping with the national policy, and most importantly the base of recruitment (Horn: 1969:124-146) has been considerably broadened. With a firm commitment to serve the rural areas as a priority, to integrate theory and practice, and to infuse the health delivery system with political ideology, working and living with the peasant and worker populations has been deemed as important as theoretical knowledge of medicine (Sidel and Sidel: 1973).

Of the African countries to embark in similar policies Tanzania and Mali have made the most notable progress, but awareness of the Chinese example influences policy-making in many other African countries.

During the latter part of the nineteenth century and into the early twentieth there was a rising concern for preventable illnesses and deaths. Pioneers in medical research, public health and social welfare made some of their most dramatic contributions during this period of time. The whole public health movement concerned itself with organization for the control of epidemics, the enforcement of sanitary regulations, and a variety of services for mothers and children. Leaders emerged in the United States and Europe; yet it was still true that medical aspects of public health and the practice of medicine were separate entities. It was a rise of social consciousness among students in the mid 1960s that particularly led to many action-programmes directed to underserved segments of the population in the United States. Government policy

changes meanwhile released hitherto unavailable funds to medical schools to launch community health action programs as vehicles of service and education. Departments of community medicine arose, followed by departments of family practice and federal funds began to determine recruitment policies and distribution of physicians. Nursing schools have been encouraged to develop "family nurse practitioner" programs in order to meet the increasing needs and demands of the people. Schools for nurse-midwifery education have increased in number and size. Demands for nurse-midwifery services exceed the supply of qualified graduates.

In the United Kingdom there has been a similar movement to create departments of social and preventive medicine or community medicine and to try to direct students to community practice and stem the tide of emigration of British physicians. One proposal which seems to have found favor is to develop the community practitioner as an age group specialist: for children, for women of child-bearing age, for adult males 20-65, and for the elderly. Educational programmes would center on the health needs of particular age groups, which tend to be rather homogenous.

The life-cycle idea is first and foremost, a response to the need for a people-oriented approach to training health personnel. Because it focuses on families and what happens to them as they pass through the events and processes of life and offers students an opportunity to look at health and illness in the people's perspective, it bears a distinct advantage over a subject-oriented or an organ system-oriented approach. It thus helps to meet the fourth need expressed in II.A.: to train health workers capable of service to families.

2. It makes a serious attempt at orienting care to cultural values. Any medical or nursing education programme must in the future try to integrate traditional cultural values into the curriculum. Much of the medical, nursing and midwifery care in African countries is still carried on by shamans, traditional healers, and village midwives. Only an estimated 15-20% of the rural population ever use modern medical facilities and 70-80 % of the African population are rural. As a minimum, students should be permitted to value and understand their own cultural background.

Most cultural belief systems attempt to interpret to people the events and processes of life, and practices are developed to help people cope with them. What are these events and processes? Conception, pregnancy, birth, breast-feeding, weaning, growth, maturation, psycho-motor development, puberty,

circumcision, adolescence, marriage, parenthood, disease, old age, and death are important ones for most ethnic groups. These events and processes are the same ones chosen by the life-cycle approach to reach family health to medical and nursing students.

In summary, there are two main reasons for choosing the life-cycle approach:

1. Its focus on people and how they experience health and disease in families and communities
2. Its natural orientation toward organizing the teaching of family health around the events and processes in the life-cycle that considers traditional beliefs and practices

Thus, needs 3. and 4. in II.A. can be met. But what of the other needs? It is hypothesized, but remains to be verified, that the life-cycle approach can meet them, too, namely:

Need 1: Coverage of the entirety of the subject of family health
It is reasoned that a conception to old age approach cannot fail to cover every important point.

Need 2: A focus on what is important
The events and processes chosen are those deemed important by the cultures i. African peoples. They can serve adequately as nodal points around which to concentrate teaching emphases.

Need 5. Integration of various specialities
The treatment of the events and processes of life almost without exception requires the efforts of more than one speciality area. For example, birth is not the exclusive province of obstetrics, nor is growth only a concern of paediatrics, when these phenomena are seen in their family context.

Need 6: Emphasis on the interrelatedness of fertility regulation, nutrition, and control of infection
This need should be met as the teaching focuses on the family and what is happening to the people rather than the disease and what is happening to the organism or the tumor. In the arena of caring for families these three big concerns will have a decided interplay.

All of this reasoning, however, requires validation. The next section will discuss a first attempt at validating these suppositions: the design of a topical outline.

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I. INTRODUCTION

The aim of this book is to help the instructor and the curriculum planner in a variety of settings to formulate a programme for the teaching of family health. Various institutional and other constraints will determine the kind of setting in which this volume will be used. These constraints will also determine the commitments which institutions, departments and individual instructors can make to change toward the family and community focus in their teaching.

At the level of an individual course, the change called for will be in the content and teaching methods. Information from the chapters to follow will be useful in making that change.

At a more complex level, a department chairman or a nursing school director may need the cooperation of several faculty members to change their teaching programme. Use of the suggestions in this book may require a philosophic as well as a methodologic commitment.

At the institutional level, family health can be taught only by an integrated approach, requiring the cooperation of several sections or departments. The degree of necessary commitment to both a change of philosophy and of methods of teaching will obviously be the greatest in this setting.

Whatever his/her setting, the curriculum planner who is interested in the teaching of family health should find this Topical Outline of interest.

II. TYPES OF INFORMATION SUPPLIED

The information included is of four different types:

A. THE DEVELOPMENT OF THE LIFE-CYCLE APPROACH - CHAPTER 2

The concepts leading to the development of this approach

B. AN OUTLINE IN DETAIL OF EACH OF THE TWELVE MODULES IN CHAPTER 4 OF THE TOPICAL OUTLINE

Topics A, B and L cover background material on community and family; C through I correspond to stages in the family life-cycle from conception to old age; J and K represent entities that affect family and community life at different stages of the life-cycle. Each topic is organized into a teaching module which consists of:

1. A RATIONALE which points out the relevance of the content for the nursing or midwifery students and delineates the scope of information covered;

2. A list of OVERALL BROAD LEARNING OBJECTIVES: both cognitive, (information acquisition) and behavioral (skills development).

3. A list of SPECIFIC OBJECTIVES, which are grouped by sections corresponding to aspects of the overall topic of the module. There are several sections for each module, e.g.:

a. Cultural aspects - where the belief and practice systems related to the subject are discussed.
b. Aspects of normal structure and function whether of the community, the family at a particular stage of the life-cycle, or an individual.
c. Deviations from normal - the important problems of a health, social or psychological nature occurring at a stage of the life-cycle.

d. Assessment measures useful for the problems occurring at a stage of the life-cycle.

e. Nursing and midwifery intervention - the types of responsibilities appropriate to the problems raised under the topic.

4. A detailed outline of ORGANIZATION OF CONTENT for each section of each module, in effect the scope of what should be taught under each topic in the outline.

5. A BIBLIOGRAPHY, useful for planning course content, is to be found at the end of each module. The list includes self-instructional units from the AHTIP library and books judged helpful by AHTIP staff and African nursing and midwifery educators.

C. CRITERIA FOR SELECTING TEACHING METHODS - CHAPTER 5

Criteria for selecting teaching methods are presented, with guidelines as to how to choose from among multiple approaches to subject matter, objectives, student levels, and available resources.

D. DIFFERENT WAYS OF EVALUATING STUDENT LEARNING - CHAPTER 6

Different ways of evaluating student learning and how to select them appropriately are shown.

III. HOW TO USE THE INFORMATION

The objectives of curriculum planning in an individual institution will determine how information will be used. Planning objectives may include one or more of the following:

A. TO DESIGN A COURSE, e.g. a course in labour and delivery.

B. TO PLAN OR CHANGE THE PROGRAMME OF A DEPARTMENT, e.g. obstetrical and gynaecological nursing or midwifery.

C. TO BUILD AN INSTITUTION-WIDE CURRICULUM, e.g. a nursing curriculum focused on the family as the unit of practice and the community as the setting.

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A. THE DESIGN OF A COURSE

In the first example, the curriculum planner is a course instructor who wants to improve his/her teaching of labour and delivery, refocusing the birth event in the family life-cycle.

The instructor will first turn to Module D. entitled "Pregnancy, Birth and Puerperium" and read the rationale and the overall objectives, paying especially close attention to those parts dealing with labour and delivery. He would compare these overall objectives with his own if he has developed them. If not, he would take the relevant objectives from the module and adapt them to his own course, perhaps later adding others of his own. Then he would turn to the specific objectives and go through the same process.

Once he was comfortable with both the overall and specific objectives, he would proceed to the organization of content, reviewing each of the sections for items dealing with labour and delivery. The instructor would compare the resulting outline with his own, make the necessary modifications and develop detailed notes on those sections not adequately covered. In doing so, he may make use of the references found at the end of the module. He may want to order some of the self-instructional units. Before deciding on self-instruction, he should also refer to the discussion of various teaching methods in Chapter 5. He may wish to supplement lecture and self-instruction with group discussion, clinical experience, slide-tape presentations, etc.

As for the books and other references, he may want to purchase some or borrow others from the library of his institution, depending on their availability and usefulness.

Finally, he would turn to Chapter 6, where the evaluation of student learning is discussed. Using the criteria developed there for various evaluation methods, he would choose those that seem most appropriate for his particular circumstances.

B. PLANNING A SCHOOL-WIDE PROGRAMME

In this example, a school of nursing or midwifery seeks to use the Topical Outline to improve the teaching programme in obstetrics and gynaecology. An approach similar to that of the first example would be useful. First, the nursing director or the curriculum committee would review the rationales and overall objectives for each module which appears relevant to their programme. Modules A, B, C, D, E, G, H and K all contain material relevant to obstetrics and gynaecology. The rationales and overall objectives of these eight modules could be compared with those of the existing curriculum and necessary modification would be made to arrive at general agreement. For example, the existing programme may not include any teaching of community or family aspects, so that the material in modules A and B would have to be added. On the other hand, the programme on pregnancy, birth and the puerperium may be more complete than module D and would need no modification. From modules C. "Conception and Infertility", E. "Lactation and Weaning", G. "Puberty and Adolescence", H. "The Adult", and K. "Family Planning" the committee may want to select certain parts to supplement existing teaching.

When agreement has been reached on rationales and overall objectives, the committee would then review the specific objectives and organization of content of each module section by section. They may wish to ask the rest of the faculty to review their proposal. During the review, the objectives and content would again be compared with existing courses and modifications made in the programme to correct deficiencies and to expand inadequately covered subjects.

After these modifications had been made, lecture notes could be developed, self-instructional units written, clinical experiences planned

and learning sequences designed using the references and guidelines contained in this book (see end of each module in Chapter 4 and Chapters 5 and 6).

C. OTHER APPROACHES TO BUILDING A FAMILY HEALTH CURRICULUM IN A NURSING OR MIDWIFERY SCHOOL

The faculty would need to react with the Topical Outline as a whole before dealing with individual modules. It would be necessary to come to terms with not only the material covered in Chapter 4, but the philosophical bases discussed in Chapter 2, since this latter determines the way in which the outline is organized.

If agreement can be reached, then the next step is to determine how the content in the modules might be taught. It may be that a series of seminars on family health held monthly throughout the year will provide the best format. A coordinator would need to be appointed. Individual course instructors would make their contributions as appropriate. This approach would be a modest attempt at change toward a more family-focused teaching programme. Adding planned clinical experiences, case conferences, field activities, projects, and papers in which tutors join in collaborative efforts would advance further the process of change.

Whatever the position or point of view of the curriculum planner reading this volume, some of the information in the ensuing chapters should be useful to him. Whether it be objectives, content, references, teaching methods, evaluation techniques, combinations of these or all of them, the hope is that this Topical Outline will find its way into multiple curriculum and course planning activities in African schools of nursing and midwifery.

CHAPTER 4:

TEACHING MODULES FOR FAMILY HEALTH: THE TOPICAL OUTLINE

Elizabeth M. Edmands

MODULE A:
NATURE OF THE COMMUNITY

I. RATIONALE

In order to teach nursing and midwifery students about the health of families, it is important to realize that all families belong to some kind of a community. These communities may vary in size from a small hamlet to a large metropolitan city, or may even be considered in the context of an entire nation. How individual families function and the resources available to them will often depend on the size and nature of the community in which they live.

It is, therefore, important for students to know what factors in the community are most likely to influence the health of individual families and how to assess their impact. Among the more obvious factors are:

1. Safe water supplies
2. Waste disposal
3. Food supplies (quantity and quality)
4. Access to preventive and curative health, including the traditional
5. Transportation systems
6. Educational facilities
7. Employment opportunities
8. Climatic conditions

Other factors which also have a profound effect include:

1. The size and make-up of the population
2. The level and quality of its leadership
3. Cultural beliefs and practices
4. Internal and external political and economic influences
5. Topography of the land
6. Formal and informal communication systems
7. Laws by which the people are governed

For most students in the health professions (nursing and midwifery as well as medical), a logical approach to determining the health needs of a community is to gather data in a similar manner to that used in history taking and examination of a patient, in order to develop a working diagnosis.

It is important, however, to point out that even in the care of an individual patient the health professional is dependent upon the patient's desire to be cared for, willingness to supply information, assent to the diagnostic and treatment plan, and cooperation in the care plan. A community is no different. At the very outset the health worker must explain the rationale for his or her presence in the community, gain the acceptance of a network of community leaders, and reach agreement with the community leadership on objectives as well as a tentative plan of action. When the health problems of the community are identified, they can be ranked by priority and decisions made about appropriate action.

II. OVERALL OBJECTIVES

At the completion of this module, students should be able to:

1. Determine what information is needed to assess a community.
2. Select and use appropriate tools to collect information (or use available data).
3. Evaluate data and determine health need priorities of the community.
4. With others, plan and coordinate activities.

Section I: Assessment of the Community

Specific Objectives:

1. Define a community and list characteristics which are common to any community.
2. For a given community, determine what data are needed to understand the composition and nature of the population.
3. Describe the interrelationships of factors that determine the nature of the community.
4. Explore the relationship of factors as they affect the health of the community.

Organization of Content

A. A working definition of a community

1. Circumscribed area
2. Groups of people
3. Common goods and practices
4. Some form of laws
5. Some form of leadership

B. Demographic data

1. Size of population
2. Breakdown by
   a. Age
   b. Sex
   c. Marital status and number of families
   d. Ethnic groups
   e. Social class
   f. Religion
3. Birth and death rates
4. Infant mortality rate
5. Growth rate
6. Migration rate
7. Dependency ratio - number of dependents per breadwinner
8. Life expectancy

Section I: Assessment of the Community
Organization of Content - cont...

C. Environmental aspects of the community

1. Land space
   a. Amount
   b. Urban vs. rural
   c. Ownership (land tenure)

2. Land quality
   a. Fertile or arid
   b. How utilized - crops
   c. Adequacy of food supplies

3. Drinking water
   a. Sources
   b. Safety
   c. Adequacy

4. Waste disposal
   a. Kinds
   b. Safety
   c. Adequacy

5. Climate
   a. Temperature
   b. Seasonal variation
   c. Rainfall (drought, flooding)

6. Transportation and communication
   a. Roads - quality, seasonality
   b. Telephone
   c. Radio (TV)
   d. Other means of transportation
   e. Other means of communication

7. Economic
   a. Industry
   b. Agriculture
   c. Employment vs. unemployment
   d. Employment for women
   e. Average cash income and range

8. Housing
   a. Kinds
   b. Adequacy

Section I: Assessment of the Community
Organization of Content - cont...

D. Resources for health and social welfare

1. Hospitals and/or health centers

   a. Location
   b. Size
   c. Services offered
   d. Organizational system
   e. Adequacy to meet community needs
   f. Financial support

2. Agricultural and environmental services

3. Religious structure (or services)

4. Educational (schools)

5. Social and recreational resources

6. Manpower for these services

E. Customs - heritage

1. History of the community

   a. New or established
   b. Origin of various families

2. Established customs, beliefs or taboos

   a. Puberty - rites, sexual attitudes and behavior
   b. Marital - roles, relationships, types of marriages
   c. Traditional fertility regulation
   d. Child bearing and rearing
   e. Meaning of children - including social value
   f. Family customs or habits - including value systems
   g. Clan or tribal loyalties
   h. Food habits, taboos, etc.

3. Traditional "medical" practices

   a. Beliefs
   b. Manpower - "medicine man", "healers" etc.
   c. Practice based on magic, spells, voodoo, herbs, etc.
   d. Coordination (or cooperation) with modern scientific medicine

F. Health problems in the community

1. Leading causes of death

2. Leading causes of morbidity

Section I: Assessment of the Community
Organization of Content - cont...

3. Nutritional status

4. Vectors

5. Varying susceptibility to change (by leaders or the people)

6. Lack of effective communication

   a. Between health and social welfare agencies
   b. Between these agencies and the people

G. Leadership

1. Identification and selection

2. Nature of leadership

   a. Networks of leadership
   b. Decision making
   c. Communication
   d. Delegation of responsibilities

3. Community response

   a. Cooperation vs. opposition

4. Political influences

   a. National
   b. Regional and local

H. The Community

1. Interrelationship of above factors

2. Exploration of how all the preceding factors affect health of the community

3. Uniqueness of each community

Section II: Methods of Collecting Data About a Community

Specific Objectives:

1. Using the content presented in Section I, select items for assessment that are pertinent to the area of concern or interest.
2. Determine what data are already collected and discuss plans for further investigation.
3. With guidance, select and use available data or appropriate tools to obtain information.

Organization of Content

A. Survey methods

1. Review - previously collected data, if any

2. Identification of objectives in gathering information

3. Selection of design for data collection

   a. Questionnaire
   b. Interview
   c. Observation
   d. Combination

4. Determination of sample size - random, clusters, or systematic

   a. Feasibility
   b. Cost
   c. Time

5. Selection of survey personnel

   a. Number - self only (?)
   b. Criteria
   c. Estimate of time involved
   d. Volunteers or paid workers

B. Problems in data collection

1. Accuracy of the instrument

2. Appropriateness of the instrument

3. Misunderstanding of questions by survey personnel or by respondent

4. Faulty transmission of data

5. Purpose of inquiry not always fully explained or understood

6. Too much or too little data requested

7. Miscalculation in estimated cost

Section II: Methods of Collecting Data About a Community
Organization of Content - cont...

C. Training of survey personnel

1. Planning
2. Conducting
3. Approach
4. Role playing
5. Variety of interviewing techniques
6. Confidentiality (in some types of surveys)
7. Recording
8. How findings will be used

D. Supervision and management of data collection

1. Completeness
2. Estimate of accuracy (reasonableness)
3. Time schedule

Section III: Evaluation of Data and Determination of Health Need Priorities

Specific Objectives:

1. Determine what data to evaluate and how to do it.
2. From data collected, determine what seems to be the priorities in the health needs of the community.

Organization of Content

A. Organization of collected data

B. Synthesis of information

C. Analysis of data

   1. Statistical measurements

   2. Consistency of data

   3. Relevance of findings to community needs and resources

D. Determining with community leaders the priorities in health needs

   1. Implications of findings in setting priorities

   2. Preception of community leaders

   3. Coordinating perceived needs with survey findings

      a. Similarities
      b. Differences
      c. Compromise

   4. Matching priorities to resources available

      a. Economic
      b. Manpower
      c. Leadership support
      d. Technology

Section IV: The Planning of Health Activities Based on Community Assessment

Specific Objectives:

1. Develop a plan to bring about change in one or more health activities in the community.
2. If the plan involves health workers other than nurses (or midwives), describe how to plan and coordinate with them

Organization of Content

A. Planning

1. Setting of objectives based on priorities as determined in Section III
2. Re-examine the reality of resources
   a. Human
   b. Material
3. Constant sharing of ideas of community leaders and health personnel
   a. Feasibility of plan
   b. Practicality of plan
   c. Organization
4. Other factors in decision making
   a. Policy
   b. Financial support
   c. Can leaders get support of significant others in community
   d. A sponsoring agency of indicated
5. The nature of the change
   a. Gradual
   b. Integration of new service into on-going program or
   c. A new service/program
6. Personnel
   a. Selection
   b. Coordination of activities
   c. Training for a new service

B. Implementation and evaluation

1. Although most of the content on implementation and evaluation will be presented in Module L, "The Interaction Between the Health Worker and the Community", it is relevant to outline plans at this stage of development.

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MODULE B:

THE FAMILY AS A UNIT

I. RATIONALE

The family, the basic unit of society, is held in high esteem in all countries of the world. Throughout all of history the family has been the central unit to which all institutions and groups relate - the church, labour and even culture itself. It is certainly true in Africa where there are many types of families, but chiefly the extended unilineal type. It is important that nursing and midwifery students understand some of the basic cultural and sociologic concepts of family structure and function in order to care for, counsel, and support the family in fulfilling its responsibilities. Without this understanding, efforts of intervention for health may be ignored or misunderstood.

This module is basic to all other components of this curriculum. In the study of illness and health during the progressive stages of the individual's life-cycle, it will be evident that the family is the context for the aetiology, course of treatment, and outcome of many physical and psychological conditions. In this module, a framework has been developed to examine the family in the context of cultural and social influences, structure and function.

II. OVERALL OBJECTIVES

At the completion of this module students will be able to:

1. Define the various meanings of the word "family."
2. Describe the cultural and social influences that determines the nature of families.
3. Describe family structure and its relevance to its function.
4. Discuss appropriate nursing and/or midwifery intervention in relation to the health of the family.

Section I. Definition and cultural/social determinants of the nature of families

Specific Objectives:

1. Define the term "family" and give examples of the various types in the local community.

2. Describe the problems of families that affect its structure.

3. Discuss the prevalent beliefs and attitudes that influence the individual roles of family members.

4. Describe how attitudes and customs in the community determine the position and status of families.

Organization of Content

A. Common definition of the family unit

1. Mother and father

2. Children

3. Significant others

   a. Blood relatives
   b. Relatives by marriage

B. Concept of classification of families

1. Nuclear vs. extended

2. By type of marriage

3. By lines of authority and inheritence

   a. Matrilineal
   b. Patrilineal

4. Polygamous

C. Problems affecting the structure

1. Death of one or both parents

2. Separation (divorce)

3. Desertion of one parent

4. Childless couples (infertility)

5. Temporary disruption caused by environmental factors

   a. Catastrophe - flooding, fire, drought, famine
   b. Illness of one parent (physical or mental)
   c. Unemployment
   d. Migration

Section I: Definition and cultural/social determinants of the nature of families
Organization of Content - cont...

D. Cultural attitudes toward roles of family members

1. Traditional

2. Forces of change

   a. Factors involved
   b. Nature of change

3. Role of the adult male

   a. Traditional
   b. Current

4. Role of the adult female

   a. Traditional
   b. Current

5. Changing role of parents as family life cycle progresses

6. Evolving roles of children (by age and development)

7. Role of grandparents and other relatives - see Module I -Sections II + IV

8. Role of single adults

   a. separated
   b. widowed
   c. never married

E. The status of families

1. Position in the community

2. Determinants - background, attitudes and customs

3. Mobility or fixed status

4. Social class, prestige, wealth, occupation

5. Health, heredity

6. Intellect, education

7. Politics

8. Religion

Section II: Family structure and its relevance to function

Specific Objectives:

1. Describe factors influencing family structure.
2. Discuss the basic needs of families.
3. Describe the tasks of a family unit as they relate to function.

Organization of Content

A. Structure of the family

1. Individual members
2. Roles of individuals
   a. Nature of leadership, authority, and family decision-making
   b. Nature of compliance
3. Role behavior and interpersonal relationships with other family members

B. Factors influencing structure of the family

1. Biological
   a. Heredity
   b. Congenital or acquired defects
   c. Intellectual capacity
   d. Nutritional status
   e. Reproductive capacity
2. Cultural (described in Section I)
3. Psychosocial
   a. Coping ability
   b. Acceptance by peers or other neighboring families
4. Educational
   a. Accessibility
   b. Quantity - levels
   c. Quality
   d. Family attitude toward educational achievement
   e. Attitude toward education of females
5. Economic
   a. Employment - availability
   b. Minimum standards - housing, food, clothing
   c. Employment of women and children
   d. Fair wage and labor laws

Section II: Family structure and its relevance to function
Organization of Content - cont...

C. Basic needs of families

1. Survival

2. Continuity

a. Biological
b. Values, traditions
c. Philosophy

3. Growth

D. Tasks involved to meet basic needs

1. Reproduction

a. Planning number of children
b. Child-spacing

2. Physical maintenance

a. Food
b. Clothing
c. Shelter
d. Medical care
e. Recreation

3. Socialization of offspring

a. Sexual identity
b. Values
c. Language
d. Security and acceptance (love)
e. Acceptable social behavior
f. Orientation to adult roles - work, family responsibilities

4. Resources and responsibilities

a. Allocation of authority
b. Decisions regarding income and spending
c. Designation of household (or community) tasks
d. Decisions regarding family life events - marriages, naming ceremonies, allocation of land and belongings, care for illness, etc.

5. Communication and relationships

a. Between individual family members
b. Between family and community
c. Between families in same clan.

Section II: Family structure and its relevance to function
Organization of Content - cont...

6. Maintenance of order

   a. Through conforming to societal or cultural requirements or norms
   b. By respecting taboos
   c. By supporting the laws

7. Maintenance of family ties

   a. Morale and motivation
      . Acceptance
      . Encouragement
      . Affection
   b. Loyalties
      . Ceremonies
      . Rituals
      . Festivals
   c. Support during crises

8. Acceptance of change

   a. Incorporation of new family members
      . Birth
      . Marriage
   b. Releasing family members
      . Work
      . Marriage
   c. Coping mechanisms for stress

Section III: Intervention by Nurses or Midwives

Specific Objectives:

1. Determine kinds of family data needed to approach a health problem.
2. Interview and observe a family to obtain data.
3. Analyze family resources to determine a nursing care plan.
4. Counsel families on health related problems.

Organization of Content

A. Collection of data

1. Family history
2. Presenting problem
3. Family and community resources
4. Medical records

B. History taking

1. Approaches and techniques
2. Use of information

C. Observation in home, clinic or hospital

1. Interaction of family members
2. Identifying family decision maker
3. Attitudes toward health problems
4. Impressions of resources, strengths, liabilities

D. Formulating the nursing care plan

1. Synthesis of history, observations and presenting health problems, needs and diagnosis
2. Resources
   a. Family
   b. Community
3. Setting objectives for intervention
4. Formulating guidelines of approach
5. The actual plan

Section III: Intervention by Nurses or Midwives
Organization of Content - cont...

6. Points where intervention can be evaluated

E. The nature of health-related problems in the family (physical, mental and social) which are appropriate for intervention

1. Pregnancy
   a. Maternal health
   b. Health of child
   c. Family

2. Child care

3. Growth and development
   a. Deviations from normal - growth failure, mental deficiency, behavior problems
   b. Significance

4. Cost and/or lack of resources for medical care

5. Nutritional education
   a. Basic needs
   b. Food values
   c. Sources
   d. Cost

6. Prevention of illness
   a. Immunizaiton
   b. Environmental hygiene
   c. Personal care
   d. Health instruction

7. Assessment of illness of any family member
   a. Nature of symptoms
   b. Pain
   c. Disability
   d. Resources for care - traditional vs. modern
   e. Contagion

8. Stress (and/or mental illness)
   a. Neurosis
   b. Psychosis
   c. Addictions - alcohol, drugs, etc.
   d. Marital problems
   e. Coping ability of individuals and families

9. Family planning (see Module K - Family Planning)
   a. Element of choice
   b. Education and counseling
   c. Service resources

Section III. Intervention by Nurses or Midwives
Organization of Content - cont...

10. Infertility (see Module C - Conception and Infertility)
    a. Knowledge
    b. Beliefs and attitudes
    c. History
    d. Resources available for investigation
    e. Counseling

F. Counseling techniques

1. Approach and timing

2. Privacy and confidentiality

3. Detection of areas of sensitivity

4. Problem-solving

5. Family focus and responsibilities

6. Use of other resources
    a. Coordination of efforts
        . Medical
        . Educational
        . Social
        . Agricultural
    b. Consultation
    c. Referral
    d. Traditional healers
    e. Authority figure in family

7. The nature of communication
    a. Verbal
    b. Body language
    c. Terminology
    d. Interpretation

8. Evaluation of progress

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MODULE C:

CONCEPTION AND INFERTILITY

I. RATIONALE

In most societies, the ability of the woman to conceive is considered an essential achievement. When this event takes place, the woman has proved that she is fertile and, therefore, deserving of all the social attributes of womanhood.

Conception, the union of the ovum and sperm, marks the beginning of a complex series of changes in the physiology and psychology of the woman. In order to understand how conception occurs, the student must have knowledge and understanding of the following:

1. Anatomy and physiology of the reproductive systems (male and female).
2. The menstrual cycle, particularly the significance and timing of ovulation.
3. Maturation of the human organism - spermatogenesis and oogenesis.
4. Sexual intercourse.

These components will be integrated to form the basis of nursing and midwifery teaching and counseling about maternity care, contraceptive methods and infertility.

Infertility and sterility are terms used to describe the inability of a couple to produce a child. This inability is particularly tragic for the African woman, for traditionally her adult life has been centered around the production and nurture of children. In addition, many beliefs, superstitions, and rituals have focused on the female responsibility to reproduce and until recently there has been little recognition that the male factors contribute to about a third of the causes of infertility.

Medical science has developed many new ways to diagnose and treat infertility. However, some of the procedures are highly sophisticated and not readily available to those who need them. It is also known that there is a psychological component to infertility which produces stress in the individual and in the couple. Wise counseling by physicians, nurses and midwives should help to release this tension and in some cases where there are no medical or mechanical barriers, conception may occur.

II. OVERALL OBJECTIVES

At the completion of this module, the student should be able to:

1. Discuss social and cultural attitudes toward conception and infertility.
2. Describe the anatomy and physiology of the male and female reproductive systems.
3. Describe the process of conception.
4. Describe the incidence and causes of infertility
5. State the kinds of procedures performed for diagnosis and treatment of infertility.
6. Describe the role of the nurse and/or midwife in care and counselling of the infertile couple, including follow-up.
7. Demonstrate competence in counseling the female partner of an infertile union or preferably the couple together.

Section I: Social and Cultural Attitudes and Practices Toward Conception and Infertility

Specific Objectives:

1. Describe the attitudes and practices in most African societies, surrounding the reproductive capacity of women.
2. Compare these attitudes with those found in the local community.

Organization of Content

A. Cultural background

1. Role of woman in the family, in the community
   a. Traditional (urban and rural)
   b. Modern (urban and rural)
   c. Transitional
2. Importance of reproduction
   a. Social
   b. Familial
   c. Individual status (particularly female)
   d. Survival of species, tribe, family

B. Formation of attitudes toward reproductive ability of women

1. Belief system supporting attitude
2. Basic needs
   a. Proof of womanhood
   b. Place in society
   c. Role fulfillment
   d. Care of children
3. Influences
   a. Religion
   b. Education
   c. Economic status
   d. Type of marriage
   e. Family pressures
4. Process of change
   a. Effect of industrialization
   b. Mobility
   c. Education
   d. Standards of living

C. Practices

1. Fertility rites

Section I: Social and Cultural Attitudes and Practices Toward Conception and Infertility

Organization of Content - cont...

C. 2. Action based on beliefs or factors affecting conception

a. Taboos
b. Foods
c. Ritual
d. Circumcision (male and female)

3. Premarital conception as proof of fecundity

4. Effect of polygamy or monogamy on sexual exposure

5. Religious aspects - blessing of marriage to produce children

Section II: Anatomy and Physiology of Male and Female Reproductive Systems

Specific Objectives:

1. Describe the anatomy and physiology of the female reproductive system including the menstrual cycle and ovulation.
2. Describe the anatomy and physiology of the male reproductive system.

Organization of Content

A. Organs involved (female)

1. Identification
2. Description
3. Function
4. Interrelationships

B. Maturation (also see Module G - Puberty)

1. Stages
2. Hormones and their influence
3. The menstrual cycle
4. Readiness for sexual performance and reproduction (oogenesis)
5. Abnormalities

C. Organs involved (male)

1. Identification
2. Description
3. Function
4. Interrelationships

D. Maturation (also see Module G - Puberty)

1. Stages
2. Hormones and their influence
3. Readiness for sexual performance and reproduction (spermatogenesis)
4. Abnormalities

Section III: Conception

Specific Objectives:

1. Describe the process of gametogenesis
2. Describe fertilization and implantation.
3. Differentiate the three main germ layers of the growing embryo.
4. Identify three components of the fetal environment.
5. Trace size of growing fetus and relate structural development to viability.
6. Describe the signs and symptoms of pregnancy.

Organization of Content

A. Physiology of conception and development of fertilized ovum

1. Gametogenesis

   a. Spermatozoon

      . Spermatogenesis - formation - minute - head, neck, tail
      . Mature before discharge from tubules in testis
      . Undergoes meiotic process
      . Ready for fertilization
      . Chromosomes

   b. Ovum

      . Oogenesis - large, round, vescicular
      . Rests in ovary before discharge to Fallopian tube (usually one a month)
      . Process of meiosis - maturity
      . Ready for fertilization
      . Transport through Fallopian tubes
      . Chromosomes

2. Fertilization

   a. Time - at ovulation
   b. Union of sperm and ovum
   c. Retention in Fallopian tube about 3 days
   e. In uterine cavity about 4 days before implantation

3. Implantation

   a. Imbedding of fertilized ovum
   b. Deep into lining epithelium of uterus--decidua
   c. Now called trophoblast (or chorion)

4. Growing embryo

   a. Differentiate into three main germ layers

      . Ectoderm - from which the following structures arise: skin, hair, nails, sebaceous glands, epithelium of nasal and oral passages, tooth enamel and the nervous system

Section III: Conception
Organization of Content - cont...

A. 4. a. . Mesoderm - derive muscles, bone cartilage, dentin of teeth, ligaments, tendons, kidneys, ureters, ovaries, testes, heart and blood vessels etc.

. Entoderm - derive epithelium and glands of the digestive tract, respiratory tract, bladder, urethra, thyroid and thymus.

b. Environment for growth in pregnant uterus

. Amnion
. Chorion
. Placenta - true placental circulation established approximately 17 days after fertilization
. Hormones - names, site of production and function

5. Size and development of the fetus - see Module D, Section IV

a. Weight and length at each month of pregnancy
b. Viability
c. Structural development
d. Duration of pregnancy - see Module D, Section II

B. Signs and Symptoms of Pregnancy

1. Presumptive signs

a. Menstrual suppression or amenorrhea
b. Nausea, vomiting, "morning sickness" in about half of pregnant women
c. Frequency of micturition
d. Tenderness and fulness of breasts - nipple pigmentation
e. "Quickening"
f. Chadwick's sign - dark blue discoloration of vaginal mucous membrane
g. Pigmentation (skin) and abdominal striae
h. Fatigue - early months

2. Probable signs

a. Enlarged abdomen - appropriate for length of pregnancy
b. Fetal outline - after 6th month
c. Changes in size, shape and consistency of uterus - Hegar's sign
d. Changes in cervix - softening
e. Braxton Hicks contractions
f. Positive pregnancy tests
g. Internal balottement
h. Uterine souffle

3. Positive signs

a. Fetal heart sounds
b. Fetal movements
c. X-ray shows outline of fetus

Section IV: Incidence and Causes of Infertility

Specific Objectives:

1. Define and distinguish between the terms infertility and sterility.
2. State the incidence of infertility.
3. Identify the major causes of infertility.
4. Identify the factors that contribute to infertility.

Organization of Content

A. Definitions

1. Infertility

   a. Primary - no pregnancy has occured
   b. Secondary - pregnancy has occured at one time, but currently no pregnancy or repeated spontaneous abortion.

2. Sterility - incapacity to reproduce

B. Incidence

1. 15 % of all couples experience difficulty in producing a child

   a. Found in all races and nations
   b. Found in all socio-economic groups

2. Medical and environmental factors affecting incidence and causes.

   a. Accessibility of resources for care of infection, malnutrition and abortion

   b. Socio-economic conditions

C. Major causes

1. Cervical factor (20%) - lacerations, malpositions and impenetrable mucus

2. Tubal factor (30-35%) - Salpingitis, malformations and anything else causing obstruction

3. Male factor (30-35%) - any condition preventing the passage of sufficient, mobile, viable sperm

4. Hormonal factor (15%) - any endocrine abnormality in either partner which prevents production of normal ova or sperm.

5. Unknown factors (5-10%)

D. Contributing factors

1. Age of female partner (peak is about 24 years)

Section IV: Incidence and Causes of Infertility
Organization of Content - cont...

D. 2. Age of male partner (peak is about 24-25 years)

3. Frequency and timing of intercourse

4. Length of exposure

a. Normal cohabitation over period of one year (without contraceptives) should produce a pregnancy in monogamous marriage.

b. Polygamous marriage - plural wives - may cut frequency of intercourse

Section V: Procedures Performed for Diagnosis and Treatment of Infertility

Specific Objectives:

1. Explain why the couple should be diagnosed and treated as a unit.
2. Describe components of evaluation and treatment in the male.
3. Describe components of evaluation and treatment in the female.

Organization of Content

A. Importance of diagnosis and treatment of couple as a unit

1. Basic premise of fertility
   a. Viable, normal, mobile sperm
   b. Deposited in female - moves to Fallopian tubes at appropriate time in cycle to unite with ovum
   c. Normal, fertilizable ovum enters Fallopian tube and after fertilization moves to uterus, is implanted in the endometrium where conceptus undergoes development
2. Complexity - psychological as well as physical factors
3. Concept of fertility threshold
   a. In most couples, combinations of factors produce fertile threshold
   b. Usually not one factor involved, but many

B. The evaluation and treatment of the male partner

1. History
2. Examination
3. Laboratory studies
   a. Semen analysis
   b. Standards - seminal fluid
   c. Other lab work as indicated
4. Treatment
   a. General health
   b. Elimination of external factors - heat, radiation, fumes etc.
   c. Surgical treatment of abnormalities may be possible (rare)
   d. Reassurance, instruction about timing of intercourse may be helpful
   e. Medications
   f. In general, treatment of male not encouraging

C. The evaluation and treatment of the female partner

1. History
2. Examination
   a. Complete physical
   b. Thorough pelvic

Section V: Procedures Performed for Diagnosis and Treatment of Infertility
Organization of Content - cont...

C. 3. Laboratory studies

a. Basal body temperature chart
b. Slide penetration test
c. Sims-Huhner test - post coital mucous test

. Spinnbarkeit
. Arborization

d. Endometrial biopsy (test for ovulation)
e. Tubal insufflation (Rubin)
f. Other labwork as indicated and as equipment and manpower available

. Hysterosalpinogram
. Thyroid studies
. Hormonal studies

4. Treatment

a. Basal body temperature
b. Medications

. Oestrogen
. Clomid
. Perganol
. Antibiotics for inflammation

c. Surgical intervention

. Remove barrier to flow of semen
. Lysis of adhesions
. Tuboplasty
. Laparoscopy

d. Reassurance - if indicated
e. Support for individual outcome of tests
f. Artificial insemination - husband or donor
g. In general, treatment of female more encouraging

Section VI: Role of Nurse/Midwife in Care and Counseling of Infertile Couples

Specific Objectives:

1. Describe factors which are basic to understand the meaning of infertility.
2. State factors to be considered in case-finding.
3. Describe the factors in the histories of both partners that will influence intervention.
4. List and describe components of referral, care and support.
5. Interview a couple (or woman) who has not produced a child and report on your conference.
6. Provide care during clinical diagnostic procedure (for female)

Organization of Content

A. Understanding of

1. Woman's role
2. Motherhood
3. Parenthood
4. Meaning of children (social, economic and personal values)
5. Meaning of infertility to male and female

B. Case-finding

1. Likely sources
2. Factors influencing approach
3. Need for privacy (sensitivity of subject)
4. Limits imposed by lack of resources

C. History

1. Factors influencing the nature of intervention
   a. Length of exposure (conabitation)
   b. Couple's knowledge of ovulation and coital techniques
   c. Pressure of family
   d. Resources available
2. General health of each partner
3. Attitudes of each partner
4. Normal cohabitation for a year without contraceptives usually indicates a problem.

Section VI: Role of Nurse/Midwife in Care and Counseling of Infertile Couple
Organization of Content - cont...

D. Initial Gynecology Examination (PAP smear etc.)

E. Referral, Care, Support and Follow-up

1. Resources - kinds, costs, criteria

2. Referral procedures

3. Care of the client (male or female) during clinical diagnostic procedures

   a. Equipment
   b. Preparation
   c. Support

4. Need for sustained support and counseling

   a. Stress factors
   b. Interpretation of findings
   c. Tedious, long procedures

5. Alternatives if no conception

   a. Help couple to avoid blaming each other
   b. Explanation of artificial insemination by husband's semen (AIH) and artificial insemination by donor's semen (AID) - sometimes successful, but not generally available in Africa yet.
   c. Adoption of children

6. Follow-up

   a. Kinds
   b. Appropriate referral

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MODULE 1:

PREGNANCY, BIRTH AND PARENTHOOD

I. RATIONALE

In all countries and in all cultures, pregnancy and birth have significant meaning to individuals, families and communities. The practice of obstetrics in the last half century has emerged as an art and a highly developed medical science. Needless to say scientific skills are not available to all women on an equal basis, nor do all women need sophisticated procedures in order to enjoy a healthy pregnancy and a safe delivery.

The purpose of this module is to outline the social, cultural and emotional aspects of pregnancy and birth, as well as the basic clinical knowledge needed to guide women through the childbirth experience. Knowledge, understanding and the development of nursing and midwifery skills in this basic area of family health are critical parts of the foundation of these two professions.

Obviously, the midwife will need competency in the clinical management of patients far beyond that needed by nursing personnel. The framework will be presented here but the depth of knowledge, and the degree of skills to be taught, will have to be determined by the institution and the specific tutors.

II. OVERALL OBJECTIVES

1. Describe the cultural attitudes, customs and practices as they affect pregnancy and birth, including the role of the traditional birth attendant.
2. Explain the anatomical, physiological, endocrine and emotional changes in a pregnant woman.
3. Describe the components of preventive, medical and supportive care needed by pregnant women, including the educational component.
4. Discuss foetal growth and development at various months of gestation.
5. Explain the various stages of labor and delivery.
6. Describe the care needed by the woman in labor and at the time of delivery.
7. Relate the changes that take place during the puerperium.
8. Describe the care needed by the woman after delivery.
9. Describe the deviations from normal conditions encountered in mother and baby during pregnancy, labor, delivery and puerperium.
10. Give pertinent data regarding the causes and incidence of maternal and newborn morbidity and mortality.

Section 1: Cultural Attitudes and Practices

Specific Objectives:

1. Describe the traditional attitudes and practices of most Afr ı cultures toward childbearing.
2. Describe the characteristics and role of the traditional birth attendant (traditional midwife).
3. Discuss points to be considered by health professionals in training traditional birth attendants.

Organization of Content

A. Attitudes and practices in pregnancy and birth

1. Beginning of life and continuity of family
2. A visible sign of success and achievement
3. For the female
   a. Status
   b. Proof of fertility
   c. Justification for existence
   d. Satisfaction and pride
   e. Promise of fulfillment of lifetime occupation
      . Child bearing
      . Child rearing
   f. Security against divorce
4. For the male
   a. Prestige in community
   b. Proud sign of male virility and potency
5. For both
   a. Continue lineage
   b. Gift of God
   c. Hope of descendent to honor departed
   d. Labour and economic potential
   e. Hope for security in old age
   f. Hope for social power
   g. Importance of male child
6. Restraints on childbearing
   a. Lactating women
   b. Abstinence - prescribed by cultural, religious or social practices
   c. Late marriage - especially for men
   d. Taboos - sexual related
   e. Misinformation about fertile days
   f. Infertility

Section I: Cultural Attitudes and Practices
Organization of Content - cont ...

B. Customs and practices in relation to pregnant women

1. Personal care and hygiene

2. Rituals and behavioral taboos

3. Food

   a. Selection
   b. Taboos

4. Work and exercise

5. Sexual relations

6. Birth attendant

   a. Selection
   b. Availability
   c. Engagement of services

7. Prenatal care

8. Preparation for baby

C. Customs and practices in relation to birth

1. Place of confinement

   a. Home
   b. Exclusion (privacy?)
   c. Maternity homes

2. Beliefs about birth process

   a. Influences and external symbols
   b. Taboos - labor and delivery
   c. Blood loss
   d. Cord
   e. Placenta
   f. Position of child at delivery

3. Attitude toward child

   a. Name
   b. Confinement or isolation
   c. Ceremonies and rituals
   d. Effect of high infant mortality

Section I: Cultural Attitudes and Practices
Organization of Content - cont...

D. Characteristics of traditional birth attendants

1. Usually illiterate

2. Usually aged

3. Daughter of a traditional birth attendant

4. Little or no training

5. Superstitions

   a. Myths
   b. Tales and legends
   c. Spells

6. Status in community

   a. Respect
   b. Wisdom accorded older people

E. Role of the traditional birth attendant (TBA)

1. Varies by background of TBA

2. Varies by access to health professionals

3. Varies by rural/urban setting

4. Management of pregnancy, labour, delivery and puerperium

5. In addition, cares for older children, gets meals, launders - a total process

6. Counsels and instructs new mother in care of self and baby

7. Cultural influences on role

F. Training of traditional birth attendant

1. Authority

2. Approach

3. Planning programme - content

4. Teaching methodology

   a. Simple
   b. Repetitive
   c. Visual

5. Examination

6. Supervision

Section I: Cultural Attitudes and Practices
Organization of Content - cont...

F. 7. Communication and referral to health professionals

8. Family planning

a. Introduction of concept
b. Enlisting support of TBA
c. Referrals

Section II: Normal Pregnancy

Specific Objectives:

1. Discuss the duration of pregnancy and how the expected date of confinement is calculated.
2. Describe the anatomical and physiological changes of normal pregnancy, including endocrine changes.
3. Describe the changes in the various body systems which are caused by pregnancy.
4. Discuss the nutritional needs of a pregnant woman.
5. Discuss the emotional aspects of pregnancy.
6. Describe the common minor discomforts of pregnancy.

Organization of Content

A. Duration of pregnancy

1. Average duration
2. Naegele's Rule - estimate date of delivery
3. Length of time varies
   a. normal variations
   b. irregular ovulation
   c. prolonged pregnancy

B. Anatomical and physiological changes

1. Reproductive system and mammary glands
   a. Uterus
      . Changes in size and shape
      . Fundal height at approximate weeks of gestation
      . Uterine contractility
      . Changes in blood flow
      . Effects of enlarging uterus on other pelvic organs
      . Development of the decidua
   b. Cervix
      . Softening
      . Cyanosis
      . Increase in cervical mucus
   c. Ovaries and Fallopian Tubes
      . Corpus luteum
      . Quiescent or cessation of ovulation
      . Little change in Fallopian tubes
   d. Vagina
      . Violet color in pregnancy (Chadwick's Sign)
      . increased vaginal secretion
      . Change in cells

Section II: Normal Pregnancy
Organization of Content - cont...

B. e. Perineum

- Effects on ligaments and muscles
- Increased vascularity

f. Breasts

- Enlargement
- Pigmentation of areola
- Tingling sensation
- Colostrum
- Glands of Montgomery

g. Pregnancy related structures

- Placenta
  - Development
  - Fetal and maternal circulation
  - Placental hormones
  - Functions
- Amnion and Chorion
- Umbilical cord

C. Endocrine glands

1. Pituitary body - master gland

   a. Secretion of anterior lobe
   b. Secretion of posterior lobe

2. Thyroid

3. Adrenal cortex

D. Changes in the various body systems

1. Cardiovascular system

   a. Heart

   - Change in position
   - Murmurs in pregnancy
   - Cardiac output

   b. Hematologic changes

   - Increase in volume
   - Increase in red blood cells
   - Hematocrit changes

   c. Venous stasis

2. Respiratory system

   a. Upward displacement of diaphragm
   b. Widening of thoracic cage
   c. Pulmonary function

Section II: Normal Pregnancy
Organization of Content - cont...

D. 3. Gastrointestinal system

a. Displacement of stomach and intestines
b. Decrease of motility and tone
c. Muscle relaxation
d. Changes in gums

4. Urinary system

a. Dilatation and elongation of ureters
b. Changes in kidney-glomerular filtration rates
c. Bladder changes

5. Musculoskeletal system

a. Postural changes
b. Gait
c. Mobility of pelvic joints
d. Shift in center of gravity
e. Diastasis of recti muscles

6. Skin (Integumentary System)

a. Striae
b. Chloasma
c. Linea nigra

7. Metabolic changes

a. Weight gain

. Distribution
. Range of average weight gain
. Patterns of weight gain by trimester

b. Water metabolism

c. Protein, carbohydrate and fat metabolism
d. Mineral metabolism

E. Nutritional needs of pregnancy

1. Intake related to pregnancy outcome

a. Prematurity
b. Stillbirths
c. Low birth weight babies
d. Neonatal mortality
e. Weight gain in relation to size of fetus

2. Calories

a. Additional 200-300 cal. per day needed
b. Well balanced diet - meat, vegetables, fruit etc.

Section II: Normal Pregnancy
Organization of Content - cont...

E. 3. Protein

a. Increase of 10 gm per day
b. Provides amino acids and nitrogen
c. Good sources

4. Minerals

a. Calcium
b. Phosphorus
c. Iron
d. Sodium

5. Vitamins

a. Vitamin A
b. Vitamin D
c. Folic acid
d. Other essential vitamins

6. Iron and Vitamin Supplements

F. Emotional aspects of pregnancy

1. Concept of "pregnant couple or family"

2. Change in sexual attitudes

a. Fears
b. Desires
c. Practices

3. The moods of pregnancy

a. Lability
b. Variations by personality
c. Variations by circumstances
d. Ambivalence of being pregnant
e. Relation of psycho-somatic symptoms
f. Self-centeredness

. Protective mechanism
. Concern for own needs

g. Introversion and passivity of the pregnant woman

4. Body image changes

a. Self-image
b. Attitude of husband and family

5. Anxieties related to pregnancy

a. Labor and delivery
b. Concerns about baby

Section II: Normal Pregnancy
Organization of content - cont...

F. 6. Taking on maternal role

a. Mother-child relationship
b. Responsibilities
c. Support systems available

G. Common minor discomforts of pregnancy

1. Definition

2. Gastrointestinal

a. Morning sickness
b. Heartburn
c. Food idiosyncrasis

. Dislikes
. Pica or cravings

d. Constipation
e. Haemorrhoids
f. Ptyalism

3. Musculoskeletal

a. Backache
b. Muscle cramps
c. Fatigue and somnolescence

4. Other common discomforts

a. Frequent urination
b. Dyspnea
c. Edema
d. Varicosities
e. Syncope and dizziness
f. Headache
g. Leukorrhea

Section III: Care of Pregnant Women

Specific Objectives:

1. Discuss the objectives of antenatal care.
2. Describe the components of preventive care.
3. Describe the components of medical care
4. Describe the components of supportive care.
5. Describe the elements of the educational component
6. Interview a prenatal patient to obtain base-line data.
7. Provide nursing care during medical and obstetrical examination.
8. Conduct an educational session for an individual and for a group.

Organization of Content

A. Objectives of antenatal care

1. Prevention
2. Medical care
3. Supportive care
4. Education

B. Prevention

1. Early detection of those in high-risk category
   a. Maternal
   b. Infant
2. Periodic observation of woman's progress
3. Appropriate immunizations
4. Dental care
5. Nutrition counseling
6. Early planning
   a. Antenatal care
   b. Attendant
   c. Place of delivery
7. Extra care needed by early teen-aged patient
8. Motivation in obtaining best care available

Section III: Care of Pregnant Women
Organization of Content - cont...

C. Medical care

1. Establish base-line data
   a. Medical history
   b. Obstetrical history
   c. History of this pregnancy
   d. Family history

2. The medical examination
   a. Height/weight
   b. Blood pressure
   c. Complete physical examination
   d. General appearance

3. Obstetric examination
   a. Breast examination
   b. Palpation and ausculation of the abdomen
   c. Pelvic examination
      . speculum
      . bimanual

4. Laboratory tests
   a. Urinalysis, including test for glucose and albumen
   b. Haemoglobin - Haematocrit
   c. Tests for Rh and blood type
   d. Blood test for syphilis
   e. Papanicolaou smear
   f. Smear for gonorrhea
   g. Pregnancy test if indicated

5. Minimum equipment
   a. For prenatal care
   b. For laboratory procedures

D. Supportive care

1. Establishment of relationships
   a. Physician
   b. Midwife
   c. Nurse
   d. Auxiliaries
   e. Traditional birth attendant

2. The art of interviewing

3. The purpose of interviewing

Section III: Care of Pregnant Women
Organization of Content - cont...

D. 4. Kinds of support needed

a. Knowledge
b. Understanding and caring

. By family
. By professional
. By attendant

c. Availability of assistance
d. Material needs - economic

E. Educational component

1. Points to consider

a. Uniqueness of opportunity
b. Need
c. Group or individual
d. Techniques
e. Planning a teaching program
f. Evaluation

2. General hygiene

a. Rest
b. Exercise
c. Employment
d. Care of skin
e. Care of breasts

. Preparation for breast feeding
. Support

f. Clothing
g. Teeth
h. Bowels
i. Sexual relations
j. Smoking
k. Alcohol and other drugs

3. Nutrition

a. Diet history
b. Analysis of current diet to determine adequacy
c. Estimate of needs
d. Determine foods available
e. Review basic nutritional needs

. For family
. For pregnant women
. For lactating women

f. Relation of nutrition to

. Anaemia
. Weight
. Well-being of mother and infant

Section III: Care of Pregnant Women
Organization of Content - cont.

4. Danger signals

   a. Vaginal bleeding
   b. Abdominal pain
   c. Severe headache
   d. Swelling of hands, feet or face
   e. Visual disturbances
   f. Escape of amniotic fluid

5. Labor and delivery

   a. Signs of labor
   b. Timing - primapara vs. multipara
   c. Process and stages
   d. Contractions - pain
   e. Use of relaxation exercises
   f. The climax of delivery
   g. Expulsion of placenta

6. Immediate post-partum

   a. Control of bleeding
   b. Care of breasts
   c. Care of bladder
   d. Care of perineum

7. The newborn

   a. Description
   b. Vital signs
   c. Preparation for arrival
   d. Immediate care

8. Supplies and equipment

   a. Clothing, bedding, bathing and feeding equipment
   b. Influence by climate, economic factors and tradition
   c. Importance of cleanliness

9. Family planning

   a. Concept of spacing
   b. Basic information
   c. Resources

Section IV: Foetal Growth and Development

Specific Objectives:

1. Describe the size and development of the foetus at various months.
2. (For advanced students:) Trace the development of each body system from conception to birth.

Organization of Content

A. Development of the embryo and fetus
(see Module C Section III, A. 4-5)

B. Size and development by month*)

1. End of first lunar month
   a. Embryo 1/4 inch long
   b. Curved backbone and "tail"
   c. Head prominent - development of lobes of forebrain
   d. Rudiments of eyes, ears and nose
   e. Tube-formed which will become heart
   f. Rudiments of digestive tract
   g. Arm and leg buds present

2. End of second lunar month
   a. Called a foetus
   b. Assumes human form
   c. Head disproportionately large due to brain development
   d. Human face
   e. Arms, legs, fingers, toes
   f. Measures one inch from head to buttocks
   g. Weighs 1/30 of an ounce
   h. External genitalia but cannot yet determine sex

3. End of third lunar month
   a. Length 3 inches
   b. Weight one ounce
   c. Sex can be determined
   d. Ossification of most bones starting to occur
   e. Tooth buds
   f. Rudimentary kidneys
   g. Weak movements beginning
   h. Fingernails and toenails start to form

4. End of the fourth lunar month
   a. Length 6 1/2 inches
   b. Weight four ounces
   c. External genital development well distinguished

5. End of fifth lunar month
   a. Length 10 inches
   b. Weight 8 ounces

*)Most of this material has been extracted from: FITZPATRICK, REEDER and MASTROIANNI "Maternity Nursing", 12th edition, Philadelphia, J.P. Lippincott, 1971, pp 82-86.

Section IV: Foetal Growth and Development
Organization of Content - cont...

B. 5. c. Appearance of fine downy hair-"lanugo".
d. Mother feels fluttering movements - called "quickening"
e. Foetal heart can be heard

6. End of the sixth lunar month

a. Length 12 inches
b. Weight 1 1/2 pounds
c. Resembles baby
d. Skin red - no fat
e. Development of protective covering of skin - "vernix caseosa"

7. End of the seventh lunar month

a. Length - 15 inches
b. Weight - 2 1/2 pounds
c. Survival possible but risky

8. End of eighth lunar month

a. Length - 16 1/2 inches
b. Weight - 4 pounds
c. Appearance resembles "little old man"
d. Under excellent conditions and care survival about 3 out of 4

9. End of ninth lunar month

a. Length - 19 inches
b. Weight - 6 pounds
c. Body more rotund
d. Skin less wrinkled
e. Rapid weight gain

10. Middle of tenth lunar month

a. Length - about 20 inches
b. Weight - 7 - 7 1/2 pounds
c. Skin pink - coated with vernix
d. Fingernails firm and protrude beyond tips of fingers

C. The body systems

1. Cardio-vascular

2. Respiratory

3. Renal

4. Digestive

5. Reproductive

6. Central nervous

Section IV: Foetal Growth and Development
Organization of Content - cont...

D. Teratogenic Disorders

1. Environmental

2. Chromosomal

3. Drug-induced

4. Congenital Abnormalities

[illegible]

Section VI Labour and Delivery

In these particular sections V and VI of Module B, only the minimum outline of content is presented. It is assumed that the nurse specializing in obstetrics or the midwife will need details in greater depth and the development of skills to a greater degree than could be suggested here. Instructors are referred to their textbooks for such details.

Specific Objectives

1. Discuss the premonitary signs of labour
2. Describe the first stage of labour
3. Describe the second stage of labour
4. Describe the third stage of labour
5. Describe the fourth stage of labour

Organization of Content

A. Premonitary signs of labour

1. Lightening (in the primipara)
   a. About 10 - 14 days before delivery
   b. Shift in uterine contents
   c. Settling of foetal head in pelvis (Engagement)

2. False labour
   a. May begin 3 - 4 weeks before delivery
   b. No dilatation of cervix
   c. Braxton-Hicks contractions
   d. Do not increase in intensity, frequency.

3. "Show"
   a. Discharge
   b. Blood-tinged mucous

4. Rupture of membranes
   a. In some women
   b. Should be watched

B. Normal labour

1. Definition

2. Factors effecting labour
   a. Passenger
   b. Passage
   c. Powers
   d. Personality

Section V: Labour and Delivery
Organization of Content - cont...

C. The mechanism of labour and delivery

1. Engagement

2. Descent

3. Flexion

4. Internal Rotation

5. Extension

6. Expulsion

7. Restitution

8. External rotation

D. The first stage of labour

1. Definition

a. Begins with onset of regular rhythmic contractions, ends with full cervical dilatation
b. Average length of time

2. Cause of onset

a. Not really known
b. Number of theories
c. Usually "just right" for mother and baby

3. Description of a contraction

a. Phases
b. Intermittent
c. Involuntary
d. Universally called "pain"
e. Intensity varies

4. Contractions

a. Characteristics of uterine contractions throughout labour
b. Gradual increase in intensity and duration
c. Gradual decrease in intervals

5. Effacement

a. Shortening and obliteration of cervical canal
b. Cervix becomes a circular orifice

Section V: Labour and Delivery
Organization of Content - cont. ...

6. Dilatation of the cervical os

   a. Closed circular muscle becomes progressively dilated to 10 cm or full dilatation
   b. Permits passage of foetus

F. Second stage of labour

1. Definition

   a. From full dilatation to expulsion of the baby
   b. Average length of time

2. Contractions

   a. At 2-3 minute intervals
   b. Lasting 50-70 seconds
   c. Strong intensity

3. Usually membranes rupture

4. Muscles of abdomen and diaphragm begin to function (voluntary powers)

   a. Urge to bear down
   b. Overcome resistance of vagina and perineum
   c. Pressure on perineum and rectum

5. Delivery

   a. Precautions for mother
   b. Precautions for infant

F. The third stage of labour

1. Definition

   a. From birth of baby to expulsion of placenta
   b. Average length of time

2. Placental separation

   a. Mechanism of separation
   b. Signs of separation

3. Placental expulsion

   a. Schultze's mechanism - 80%
   b. Duncan's mechanism - 20%
   c. Average blood loss 250-300 cc

G. The fourth stage of labour

1. Definition

   a. First critial 2 hours after delivery
   b. Stabilization of mother's condition

Section V: Labour and Delivery
Organization of Content - cont...

G. 2. Uterus

a. Continues to contract and relax
b. Size
c. Condition

3. Vagina and perineum

4. Urinary system

5. Abdomen

6. Emotional factors

H. Analgesia and Anesthesia

1. General principles

2. Methods

3. Availability

4. Need

Section VI: Care of the Woman During Labour and Delivery

Specific Objectives:

1. Discuss the objectives of care during labor and delivery.
2. Describe the care needed during the premonitary and first stage of labour.
3. Describe the care needed during the second stage of labour.
4. Describe the care needed during the third stage of labour.
5. Describe the care needed during the fourth stage of labour.
6. Provide the care needed during each of the four stages of labour.

Organization of Content

A. Objectives of care

1. Comfortable, safe experience for mother

2. The delivery of a normal infant

   a. Unharmed by the birth process
   b. Able to breath and function independently at birth

3. Understanding, satisfaction and fulfillment of the parents

B. Care during premonitary and first stage of labor

1. Premonitary signs

   a. Explanation of process
   b. Reassurance
   c. Differentiating signs from true labor

2. First stage of labor

   a. Data obtained or reviewed
   b. Preparation for delivery

      . Bath
      . Clean environment
      . Supplies and equipment for mother and baby

   c. Monitoring of physical parameters

      . Contractions - frequency, intensity, duration
      . Vital signs - temperature, pulse, respiration, blood pressure
      . Bleeding - normalcy as it relates to progression of labour
      . Spontaneous or artificial rupture of membranes

   d. Evaluation of bladder and bowel activity
   e. Monitoring of foetal heart rate
   f. Guidance

      . Activity
      . Fluids
      . Diet

   g. Pain relief
   h. Assessment of emotional status

Section VI: Care of the Woman During Labour and Delivery
Organization of Content - cont...

2. i. Monitoring of transitional phase

- Cervix fully dilated (8-10 cm dilatation)
- Bloody show increases
- Woman may become nauseated with vomiting
- Acute restlessness, apprehension
- Perineum flattens and rectum bulges

j. Supportive care

- Attitudes of personnel
- Interpretation
- Encouragement and reassurance
- Need increases in proportion to length of labour
- Coach on methods of relaxation

k. Comfort measures

- Frequent cleansing
- Removal of wet or soiled pads
- Back rubs
- Effleurage
- Cold cloths to head
- Sips of water or ice if tolerated
- Analgesics as indicated

3. Communication

a. With others involved
b. By accurate recording

C. Care during the second stage of labour

1. Event marked by intensity of activity

2. Continuation of monitoring maternal blood pressure, fetal heart tones and uterine contractions

3. Coaching

a. Guidance in pushing and relaxation
b. Reassurance of progress

4. Comfort measures

a. Cleansing
b. Cold cloths to head
c. Sips of water or ice
d. Appropriate anesthesia as indicated

5. Safety measures

a. Protection during intense activity
b. Should never be left alone

6. Preparation for imminent delivery

Section VI: Care of the Woman During Labour and Delivery
Organization of Content - cont...

7. Contact with "significant others"

   a. Physician
   b. Midwife
   c. Others

D. Immediate care of the newborn

1. Clear air passage

   a. Head down position
   b. Suctioning of mucous

2. Promotion of crying

3. The umbilical cord

   a. Clamp after pulsation ceases
   b. Tying
   c. Cutting
   d. Dressing

4. Apgar scoring system and interpretation

   a. Heart rate
   b. Respiratory effort
   c. Muscle tone
   d. Reflex irritability
   e. Colour

5. Care of the eyes

6. Identification (if hospital delivery)

7. Physical assessment

   a. Systematic, orderly approach
   b. Referral or consultation for immediate problems
   c. Record of findings

E. Care during the third stage of labour

1. Explanation and guidance in expelling placenta

2. Observe blood loss

   a. Nature of bleeding
   b. Estimate amount if possible

3. Blood pressure

Section VI: Care of the Woman During Labour and Delivery
Organization of Content - cont...

4. Pulse
   a. Quality
   b. Rate
   c. Irregularity
5. Inspection of placenta
   a. Maternal side
   b. Foetal side
   c. Amniotic membranes
   d. Umbilical cord
6. Comfort measures
   a. Appropriate or needed bathing only
   b. Clean bedding
   c. Fluids if tolerated
7. Special attention to the anesthetized patient
   a. Vital signs
   b. Protection
   c. Recovery

F. Care during the fourth stage of labour

1. Assessment
   a. Tone and size of fundus
   b. Bladder distention
   c. Bleeding
   d. Perineum
   e. Deviations in pulse, blood pressure and temperature
   f. Pain
2. Continuous monitoring
   a. For one/two hours
   b. To assure normalcy of postpartum status
3. Evaluation
   a. Uterus
   b. Perineum
   c. Urinary output
   d. Abdomen
   e. Emotional condition
   f. Maternal vital signs

Section VI: Care of the Woman During Labour and Delivery
Organization of Content - cont...

4. Comfort measures

   a. Need for quiet and rest
   b. Reassurance
   c. Support if temporarily emotionally upset
   d. Knowledge of contact with husband or family
   e. Encourage dietary intake and fluids
   f. Promote urination
   g. General hygiene
   h. Analgesics as indicated

Section VII: The Puerperium

Specific Objectives:

1. Describe the anatomical changes that take place during the puerperium.
2. Describe the clinical manifestations that are evident during the puerperium.
3. Discuss the phases of developing the maternal role.

Organization of Content

A. Definition

1. Time after fourth stage of labor
2. Up to six weeks postpartum

B. Anatomical changes

1. Involution of the uterus
   a. The process
   b. Progress - time
   c. Involution of placental site
2. Cervical changes
   a. Rapid closure
   b. Differences in external os
3. Lochia
   a. Lochia rubra
   b. Lochia serosa
   c. Lochia alba
   d. Quantity
   e. Cessation
4. The pelvis
   a. Vagina
   b. Ligaments
5. Abdominal wall
   a. Still soft and flabby
   b. Striae remain
   c. Time period to return to normal
6. The breasts
   a. Secretion of colostrum
   b. Breast milk "comes in" between 3rd and 4th day
   c. Congestion or engorgement
   d. See Module E, Section 1

Section VII: The Puerperium
Organization of Content - cont...

7. Other systems

   a. Gastro-intestinal
   b. Urinary
   c. Cardio-vascular

C. Clinical manifestations

1. Temperature

   a. Mild elevation usually normal
   b. May signal complications

2. Pulse

3. After-pains

4. Digestion

5. Loss of weight

6. Urinary

   a. Increased output
   b. Urine content

7. Intestinal

   a. Constipation
   b. Haemorrhoids

8. Blood parameters

   a. Leukocytosis
   b. Haematocrit
   c. Blood volume

9. Skin

   a. Excess perspiration
   b. Elimination of waste products

10. Menstruation

D. Post-partum evaluation

1. At least 4-6 weeks after delivery

2. Early detection of any abnormalities

3. Family planning

E. Developing the maternal role

Section VII: The Puerperium
Organization of Content - cont...

1. Phases*)

   a. "Taking in"

      . Lasts 2-3 days
      . Concerned with own needs (sleep, food)
      . Need to talk about delivery

   b. "Taking-hold"

      . Begins to organize
      . Wants to be "in charge"
      . Underlying fears and anxiety repressed
      . Frustration of less than perfect performance - self and baby

   c. "Letting-go"

      . Accepting baby as a separate person
      . Establish new ways for self, baby and family.

2. Conflicts

   a. Dependence vs. independence
   b. Idealism and reality
   c. Love and resentment of infant
   d. Self-fulfillment and motherhood
   e. Time must be divided
   f. Post-partum blues

*) RUBIN, Reva. "Puerperal Change", Nursing Outlook 9 (12), 753-755, December, 1961.

Section VIII: Care of the Woman During the Puerperium

Specific Objectives:

1. Discuss the objectives of care during the puerperium.
2. Describe the physical care needed
3. Describe the educational needs for mother and baby.
4. Describe the emotional support needed by the mother.
5. Provide the care, teaching, and emotional support needed by family, mother, and baby.

Organization of Content

A. Objectives

1. Return of the mother to her pre-pregnancy physical state
   a. Minimum discomfort
   b. No residual complications
2. Functioning mother-child relationship
   a. Mutually beneficial and enjoyable
   b. Integration into family

B. Physical care needed

1. Early needs
   a. Sleep
   b. Food - usually good appetite
   c. Resources for detection of early symptoms of complications
   d. Help with breast-feeding
2. Later
   a. Resumption of self-care
   b. Adequate diet for self and for lactation
   c. Exercise
3. Care of body
   a. Skin
   b. Breasts and nipples
   c. Perineum
   d. Urination
   e. Bowels and Haemorrhoids
   f. Vital signs
   h. Smoking
   i. Alcohol and drugs
4. Nutrition
   a. Importance of well-balanced diet
      . Proteins
      . Fats
      . Carbohydrates
      . Vitamins
      . Minerals

Section VIII: Care of the Woman During the Puerperium
Organization of Content - cont...

4. b. Increased needs of lactating mother
   c. Use of local foods

5. Early care of baby

   a. Provision for sleep
   b. Feeding
   c. Burping
   d. Bathing
   e. Care of cord
   f. Care of genital area

6. Feelings

   a. Physical basis
   b. Psychological basis
   c. Maturational basis
   d. Understanding reactions

C. Educational needs

1. Planning

   a. Levels of learning
   b. Selection of content
   c. Place and timing
   d. Individual
   e. Groups

      . Size
      . Frequency
      . Discussion

2. General

   a. Review of birth experience
   b. Changes taking place in the puerperium
   c. Benefits of breast-feeding

      . For mother
      . For baby

   d. Bottle feeding (if necessary)

      . How to prepare
      . Simulating breast milk
      . Precautions

         .. Refrigeration
         .. Clean bottles and nipples

      . Holding for feeding

   e. Need for rest

      . Place of exercise
      . Return to work outside home

Section VIII: Care of the Woman During the Puerperium
Organization of Content - cont...

2. f. Exercise
   - . Kinds
   - . Importance

   g. Family Planning (see Module K)
   - . Selection of method
   - . Resumption of sexual relations

D. Emotional Support (also include content in teaching)

1. Recognition by attendants of mothers' psychological changes or mood swings
   - a. Manifestations
   - b. Their normalcy

2. Mother's needs
   - a. To talk of experience
   - b. Reassurance
   - c. Confidence in her own ability
   - d. Knowledge
     - . of self
     - . of baby
   - e. Understanding of mood swings
   - f. Approval
     - . Husband
     - . Family
     - . Attendant

3. Mother's needs in relation to family
   - a. Recognition
   - b. Understanding of process of developement of mother-child relationship
   - c. Sharing
   - d. Supporting

4. Baby's needs
   - a. Immediate gratification
     - . Food
     - . Love
     - . Handling (touch)
   - b. Developing a sense of trust
   - c. Security to take on next growth tasks

Section IX: Deviations from Normal

Specific Objectives:

1. Cite the major factors that contribute to high-risk for the mother during pregnancy.
2. Describe the kinds of high-risk factors in the infant.
3. Describe the complications of pregnancy which are related to the pregnancy itself.
4. Describe the medical conditions in the mother that may be aggrevated by pregnancy.
5. Describe the complications occuring during labor and delivery.
6. Discuss the complications of the puerperium.
7. Provide nursing care to mothers who are experiencing deviations from normal pregnancy.
8. Discuss the causes and incidence of maternal, foetal and neonatal morbidity and mortality.

Organization of Content

A. Major maternal factors in high risk pregnancy

1. Age - <16 and >40 years
2. Grandmultiparity and short intervals between pregnancies
3. Poor lifetime nutrition
4. Medical history of chronic illness
5. Poor obstetrical history
6. Drug abuse
7. Unwanted pregnancy
8. Psychiatric illness or psychological problems

B. Infants at high-risk

1. Premature by gestational age
2. Low birth weight
3. Rh factor - hemolytic disease
4. Respiratory problems
5. Neonatal jaundice
6. Prolonged or difficult labor and delivery

Section IX: Deviations from Normal
Organization of Content - cont...

B. 7. Syphilis

8. Congenital anomalies

9. Infant whose mother was on drugs during pregnancy, including alcohol and smoking

10. Rubella in mother

C. Complications related to pregnancy itself

1. Toxemia

2. Polyhydramnios

3. Rh-factor

4. Hyperemesis gravidarum

5. Threatened and spontaneous abortion

6. Hydatidiform mole

7. Ectopic pregnancy

8. Spontaneous abortion or miscarriage

9. Multiple pregnancy

10. Haemorrhage

11. Abnormalities of genital tract

D. Medical conditions aggravated by pregnancy

1. Cardiac condition

2. Diabetes

3. Hypertension

4. Anemias

5. Renal disorders

6. Tuberculosis

7. Thyroid

8. Infections of the urinary tract

Section IX: Deviations from Normal
Organization of Content - cont...

9. Other infections

   a. Malaria
   b. Syphilis
   c. Bilharziasis
   d. Hookworm
   e. Gonorrhea
   f. Viral hepatitis
   g. Rubella
   h. Herpes virus

E. Complications occurring during labour and delivery

1. Premature labour

2. Dysfunctional labour

   a. Inertia
   b. Precipitate

3. Foetus

   a. Size disproportional to pelvis (Cephalo-pelvic disproportion)
   b. Abnormal position

4. Multiple pregnancy

5. Placenta praevia

6. Abruptio placentae

7. Umbilical cord

8. Cephalo-pelvic disproportion (CPD)

9. Uterine rupture

10. Lacerations of the soft tissue

11. Forceps delivery

12. Caesarean

13. Retained placenta

F. Complications of the puerperium

1. Uterine atony

2. Haemorrhage

Section IX: Deviations from Normal
Organization of Content - cont...

3. Infection

4. Subinvolution

5. Breast problems

6. Bladder stony

7. Thrombo-phlebitis

8. Difficult mother-child relationship

9. Family disruption

10. Postpartum psychosis

G. Care of mother and baby at high risk

1. Prevention

2. Prompt diagnosis

3. Appropriate medical and nursing care

4. Education

5. Emotional support

H. Causes of maternal, foetal and neonatal morbidity and mortality

1. (Obtain local information)

2. Classify by:

   a. Preventable
   b. Non-preventable

I. Incidence of maternal, foetal and neonatal morbidity and mortality

1. (Obtain local information)

2. Compare incidence

   a. To "like communities"
   b. To national statistics
   c. To statistics from other countries

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MODULE E:

LACTATION AND WEANING

I. RATIONALE

The physiological process of lactation permits a woman to nurse her child by breast-feeding during a critical period in his/her life. Weaning is the event which terminates this process. Customs, beliefs, and values, play a significant role in determining the pattern of lactation and weaning in a given society.

The success of both breast-feeding and weaning may determine whether or not the infant survives. If he survives, it may determine what kind of survival it will be; i.e., one of continued growth and well-being or of progressive malnutrition, physical and psychological impairment, and susceptibility to infection. For the mother, too, the process of lactation and the time of weaning will have a bearing on her future physical and emotional well-being. Proper management of the process of lactation and the event of weaning, coupled with child spacing is of capital importance, in assuring reduced infant mortality and morbidity rates and better maternal health.

Nursing and midwifery students need to understand these phenomena as they work individually with families and in their communities. Such understanding is needed to help these future nurses and midwives in their roles as assessors, planners, educators, and promoters in maternal and child health.

II. OVERALL OBJECTIVES

Upon completion of this module, the student will be able to:

1. Discuss the anatomy of the female breast and the physiology of the lactation process.
2. Develop personal awareness of own attitudes, beliefs and values related to lactation and weaning.
3. Recognize cultural, psychological and physical factors related to the process of infant feeding (breast and artificial) and weaning.
4. Recognize and manage both maternal and infant problems related to infant feeding and weaning.
5. Provide counseling and health teaching to women related to lactation, infant feeding, and weaning.

Section I: Anatomy of the Breast and Physiology of Lactation

Specific Objectives:

1. Describe the anatomical structure of the female breast.
2. Explain the process of milk secretion.
3. Identify the hormones which control the process of milk secretion in the human female.
4. List the factors which influence the process of lactation.

Organization of Content

A. Anatomy of the Breast

1. External morphology
   a. Size, location and division
   b. Nipple and different types
2. Internal Structure
   a. Lobes, tubules and acini cells
   b. Ducts
   c. Ampullae

B. Milk Secretion

1. Site of manufacture, mechanism of production and ejection (let-down)
2. Hormonal influences
   a. Preparation of breast during pregnancy - oestrogen, progestin and chorionic somatomammatropin (LST)
   b. The process of milk secretion - prolactin
3. Characteristice of colostrum and breast milk: physical, chemical, immunologic
4. Factors affecting milk production
   a. Vigor and constancy of sucking by infant
   b. Nutrition of mother, including fluid intake
   c. Physical condition of mother (general)
   d. Psychological condition of mother
      . Absence of stress
      . Desire to breast feed
   e. Stimulative or repressive effect of drugs

Section II: Breast-feeding

Specific Objectives:

1. Identify the social and cultural factors; e.g., beliefs, values, etc., which have a bearing on breast-feeding in the community.
2. List the dietary requirements of a lactating woman.
3. Advise a lactating woman on preparation for and management of breast-feeding.
4. Develop simple aids to be used in health teaching of lactating mothers about breast-feeding.
5. Compare the advantages and disadvantages, indications and contraindications of both breast and artificial feeding.
6. Recognize and manage both maternal and infant problems interfering with breast-feeding.
7. Recognize and manage problems of over-feeding and under-feeding in the infant who is breast-fed.
8. Identify and recommend contraceptive methods to be used by lactating women.
9. Identify one's own attitudes toward feeding patterns and verbalize through a group discussion

Organization of Content

A. Social and cultural factors affecting patterns of breast-feeding

1. Religion
2. Industrialization - urban vs. rural society
3. Education
   a. General
   b. Specifically in relation to values of breast-feeding
4. Cultural beliefs and values
5. Taboos
6. Influence of family members and peers
7. Employment of women
8. Publicity and influence of mass media
9. Attitudes of health workers toward breast-feeding
10. Use of local herbs and medicaments

Section II: Breast-feeding
Organization of Content - cont...

B. Advantages of breast-feeding

1. For mother

a. Convenience
b. Economic
c. Nutritional
d. Psychological

. Satisfaction of accomplishment
. Warmth of close relation with baby

e. Physical

. Anovulation - various periods of time-serves as contraceptive
. Reproductive organs involute more rapidly

2. For baby (newborn)

a. Normal response to sucking need
b. Milk appropriate content, consistency
c. Immunological protection for approximately 6 months
d. Protection against allergy
e. Infant bonding
f. Sterility of breast milk
g. Availability

C. Dietary requirements of a lactating woman

1. Need for increasing dietary requirements

2. Dietary allowance for the lactating woman

3. Local foods which have affect on the lactation process (increase, decrease, and milk flow)

D. Managment of breast-feeding

1. Significance of breast care

2. Process of feeding - frequency and duration of feeding, burping, etc.

3. Teaching mothers the art of breast-feeding

E. Maternal health problems interfering with breast-feeding

1. Minor - not an indication to stop but needing remedial assistance

a. General ill health, anaemia
b. Flat, small or large, or sore nipples
c. Inadequate milk flow

Section II: Breast-feeding
Organization of Content - cont...

2. Major

   a. Physical, e.g., tuberculosis, heart failure
   b. Psychological, e.g., neurosis, psychosis

3. Pregnancy

4. Cracked nipples, mastitis and breast abscess, inverted nipples

   a. Mild - remediable
   b. Severe - probably not remediable

F. Infant related problems which interfere with breast-feeding

1. Congenital abnormalities

2. Prematurity

3. Over-feeding and underfeeding

G. Relationship between breast-feeding and family planning

1. Value of avoiding pregnancy to promote breast-feeding for benefit of infant

2. Specific methods of contraception that do not affect breast milk

H. Impact of attitudes of nurses, midwives, doctors, and other health workers on feeding practices

1. On the mother

2. On patterns of infant feeding (breast vs. bottle)

3. On weaning

Section III: Bottle Feeding (Artificial Feeding)

Specific Objectives:

1. Recognize the difference between complementary, supplementary and complete artificial feeding.
2. Discuss the prevalence, type and pattern of bottle feeding in a community and factors affecting it.
3. Identify the advantages and disadvantages, indications and contraindictions of bottle feeding.
4. Prepare bottle feedings following scientific principles.
5. Demonstrate to mothers the procedure for preparing a formula using available resources in the home.
6. Recognize, manage and follow-up problems resulting from improper bottle feeding.

Organization of Content

A. Different types of bottle feeding and the prevalence of each

   1. Supplementary
   2. Complementary
   3. Complete artificial feeding

B. Factors affecting the use of bottle feeding

C. Common nutrients used in bottle feeding

   1. Different types of milk and other mixes
   2. Compare chemical compositions of breast and bottle milk

D. Advantages, disadvantages, indications and contraindications of bottle feeding

E. Preparation of bottle feeding

   1. Principles to follow
   2. Techniques of preparation and sterilization (single feed, feeds for 24 hours)
   3. Storage of feeds
   4. Use of previously prepared feed

Section III: Bottle Feeding (Artificial Feeding)
Organization of Content - cont...

F. Teaching mothers about bottle feeding

1. When to begin

2. What to include in teaching

3. How to approach a single mother and/or group of mothers

4. Value of developing teaching aids in discussing of bottle feeding to mothers

G. Problems associated with bottle feeding

1. Economic problems

2. Health problems of infants

a. Over-feeding
b. Under-feeding
c. Infection (prevention, early detection and management)
d. Allergies (referral and follow-up)
e. Malnutrition
f. Electrolyte disturbance

Section IV: Weaning

Specific Objectives:

1. Discuss the beliefs, customs, and practices relating to weaning.
2. Explain the dietary requirements of the infant during the first year of life and the need and value of each one.
3. Identify the principles to be followed during the weaning process.
3. List in a sequential manner by month or week the food items to be introduced to the baby during the weaning process.
4. Provide instructions to the mother of infants on the process of weaning.
5. Recognize the health hazards which could affect the infant due to improper weaning.
6. Provide necessary nursing management for the prevention and treatment of complications resulting from improper weaning.

Organization of Content

A. Beliefs, customs and practices pertaining to weaning

   1. Indications to start weaning
   2. What foods to be introduced
   3. Methods of weaning

B. Foods

   1. Available foods in the community for infants and their nutrient value
   2. Dietary requirements during the first year of life

C. Guiding principles for promotion of successful weaning

   1. Sound health of the infant
   2. Age of starting
   3. Gradual process
   4. Proper selection of food items

D. Complications of improper weaning. (For each of the following: the prevalence, causes, signs and symptoms, treatment, prevention, health and nursing care)

   1. Nutritional deficiencies
      a. Marasmus
      b. Kwashiorkor
      c. Anaemias

Section IV: Weaning
Organization of Content - cont...

2. Infections

3. Gastrointestinal disorders

4. Psychological trauma

E. Nursing management

1. Physical

2. Educational (mother)

   a. Prevention
   b. Remedial

3. Psychological

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MODULE F:
GROWTH AND DEVELOPMENT
(Birth to Puberty)

I. RATIONALE

The study of child growth and development includes knowledge and observation of its continuity, marked by critical physical and psychological landmarks from birth to puberty. It is essential to understand this process, for it is against this background that the effects of malnutrition, infectious disease and social deprivation can best be measured, and the impact of preventive measures estimated.

Nurses, especially, need this knowledge and understanding, for many of their activities involve assessment and interpretation of the status of child health. In addition, nurses must be skilled in describing the limits of normalcy to parents and guiding them in preventing or correcting impediments to growth and development. This involves helping parents to recognize and meet the individual needs of their children.

II. OVERALL OBJECTIVES

At the completion of this module, students should be able to:

1. Describe the process of growth and development in terms of continuity and significant landmarks (both physical and psychosocial).
2. Describe the major factors affecting growth and development.
3. Indicate diagnostic and assessment tools to aid in determining the progress of growth and development.
4. Plan for the counseling and education of parents whose child(ren) are showing signs of failure to achieve recognized landmarks.

Section I: Normal Growth and Development Patterns

Specific Objectives:

1. Describe the concept of the continuum in the process of child growth and development.
2. Relate the significance of physical and psychosocial landmarks.
3. Identify developmental tasks in relation to critical landmarks.
4. Apply concept of normalcy to growth and development.

Organization of Content

A. Continuum of growth and development

1. Physical

   a. Somatic growth
   b. Motor development

      . gross
      . fine

   c. Immunologic development
   d. Development of senses: sight, hearing

2. Intellectual

   a. Language
   b. Conceptual
   c. Memory functions

3. Emotional and psychological

4. Social

B. Concept of a pattern

1. Relationship of components

2. Constant integration and interdependency

C. Significant landmarks of growth and development in each category above

1. Infancy (0 - 11 months)

2. Toddler (12 - 35 months)

3. Pre-school (3 - 5 years)

4. School age (5 - 8 years)

5. Pre-adolescence (9 - 13 or 15 years)

Section I: Normal Growth and Development Patterns
Organization of Content - cont...

D. Development tasks

1. Identity of tasks for each landmark
2. Achievement as preparation for next task
3. Maturity - mastery of each component and integration of whole person

E. Deviations from normal

1. Mild to severe
2. Significance of deviation
3. The limits of normalcy - concept of variation
4. Condition static or progressive
5. Condition correctable or fixed

Section II: Major Factors Affecting Growth and Development

Specific Objectives:

1. Relate the role of heredity in determining individual patterns of growth and development.
2. Describe how nutrition supports or impedes growth and development.
3. Describe the effect of disease on growth.
4. Describe the need for stimulation.

Organization of Content

A. Genetics or heredity

1. Uniquness of the individual
2. Biological make-up
3. Potentialities - predictions
4. Interrelation with environment

B. Nutrition

1. Requirements by age and developmental task
2. Needs
   a. Calories
   b. Proteins
   c. Carbohydrates
   d. Fats
   e. Vitamins and minerals
   f. Fluids
3. Evaluation of nutritional status
   a. Tests, haemoglobin
   b. Measurements, especially weight and arm circumference
4. Effects of deprivation (see Module J - Section II)
   a. Acute
   b. Chronic
   c. Relation to time of deprivation
5. Food preferences and taboos

C. Disease (see Module J - Section II)

1. Infection
2. Relation of disease and nutrition

Section II: Major Factors Affecting Growth and Development
Organization of Content - cont...

C. 3. Relation of disease to intellectual, emotional and social development

a. Severity
b. Timing

4. Crippling effects of chronic or repeated acute illness

D. Stimulation

1. Constant universal need

2. Components

a. Physical
b. Intellectual
c. Emotional
d. Social

3. Manifestations

a. Healthy body
b. Curiosity and eagerness to learn
c. Love and affection
d. Security and belonging
e. Re-assurance and encouragement
f. Parental and peer approval
g. Satisfaction with accomplishment

4. Effects of deprivation

a. Failure to thrive (physical)
b. Withdrawal
c. Failure to accomplish tasks of development
d. Poor language development
e. Dissatisfaction and unhappiness

Section III: Diagnostic and Assessment Tools to Measure Growth and Development

Specific Objectives:

1. Describe available tests for diagnosing and assessing growth and development.
2. Select and perform (under guidance) appropriate assessment measures.
3. For a selected age, develop a check-list of components for assessment.

Organization of Content

A. Observation

1. General appearance
   a. Body habitus
   b. Affect
   c. Obvious signs of disease or disability
   d. Level of activity
2. Gait and coordination
3. Skin and hair
   a. Texture
   b. Color
4. Facial expression
   a. Alertness
   b. Apathy
5. Maternal-child interaction
6. Reaction of child to environment

B. History

1. General
   a. Medical
   b. Social
   c. Family medical
2. Specific episode or condition
   a. What is wrong?
   b. How long?
   c. Any treatment?
3. Condition of
   a. Parents
   b. Other children
   c. Other family members

Section III: Diagnostic and Assessment Tools to Measure Growth and Development
Organization of Content - cont...

C. Physical examination

1. Appropriate for age
2. Partial or complete, as appropriate

D. Laboratory tests

1. Urinalysis
2. Haemoglobin
3. Tuberculin
4. Stool
5. Thick smear for parasites
6. Others, as indicated

E. Screening tests

1. Height and weight
2. Vision
3. Hearing and speech
4. Developmental (e.g. Denver)
5. Dental

F. Recording

1. Observations
2. History
3. Physical findings
4. Test findings

G. Correlation of findings

1. Interpretation
2. Usefulness

Section IV: Counseling and Education of Parent and Children - Nursing Intervention

Specific Objectives:

1. Identify what children need to promote normal growth and development.
2. Indicate protective measures that will prevent impediments to growth.
3. Plan with and counsel a parent.
4. Plan with and counsel an older child.

Organizaiton of Content

A. The needs of children to promote normal growth and development

1. Good nutrition
2. Functional hearing, sight and ambulation
3. Protection
   a. Accidents
   b. Illness
   c. Freedom from anxiety
4. Parental love and stimulation
   a. Praise
   b. Acceptance and encouragement
   c. Limits
5. Safe environment
   a. Home
   b. Play
   c. School

B. Protective Measures

1. Adequate Diet
2. Immunizations
3. Early physical and mental assessment of individual child
4. Medical care
   a. Accessible
   b. Available
   c. Compassionate
   d. Competent
5. Elimination of environmental hazards
6. Early assessment of problem areas with prompt intervention

Section IV: Counseling and Education of Parent and Children - Nursing Intervention

Organization of Content - cont...

C. Techniques of nursing intervention

1. Utilization of available screening tools
2. Evaluation of findings
3. Developing a plan of action
4. Emphasis on helping parent and child understand reason for action
5. Involving family members in setting priorities and deciding course of action.
6. Attempt to remove barriers to desired action
7. Motivation for self-development or self-reliance
8. Confer with other available personnel on problem areas
   a. Medical
   b. Social
   c. Psychology
   d. Education
   e. Community leaders
   f. Religious
9. Interpret and correlate suggestions or activities
10. Refer child with marked developmental deviations to appropriate resources for help.
11. Constantly support and reinforce parental action

D. Use of and coordination with Community Resources

1. Health centers (or hospitals)
2. Clinics
3. Nutrition rehabilitation centers
4. Educational institutions
5. Recreational facilities
6. Other

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MODULE G:

PUBERTY AND ADOLESCENCE

I. RATIONALE

Puberty is the point of development at which the biological changes of pubescence reach a climax marked by indicators of sexual maturity. Adolescence is the entire period starting approximately two years prior to puberty and ending when the individual has reached full physical, mental, emotional, and social maturity - approximately ages 11 through 20 years.

Adolescence is a time of rapid growth. In modern times it is usually regarded as a period of stress and turmoil, for social maturity does not always keep pace with physical growth and development. However, in many cultures and religious groups there is considerable ceremony attached to certain events that are marked by physical changes or chronological maturity.

Adolescents as a group have had difficulty in fitting into the practice of medicine. They are not children and not yet adults. They have some pressing medical and social needs which are often neglected or ignored. Because of their growth spurt, they have special nutritional needs. In general they are a healthy group, for they have survived the hazards of childhood and are not old enough to have acquired chronic debilitating disease. During adolescence, sexual maturity is taking place, therefore, there is the ever-present possibility that pregnancy and the accompanying responsibilities of parenthood can occur. Pregnancy in adolescence is in the high risk category for the mother as well as the infant.

The delivery of the health and social aspects of care takes on a new dimension in this interim called adolescence. In addition to basic services, there is a tremendous need for tolerance, understanding, guidance, and education. During this time these young people are particularly interested in counseling about career planning, body changes, some aspects of health and hygiene, venereal disease, marriage and family planning.

Well-prepared student nurses or recent graduates can do an excellent job of counseling adolescents. They are not too far removed from the peer group. Yet they have had time to gain the perspective knowledge and skills that are mandatory in the counseling situation.

II. OVERALL OBJECTIVES

At the completion of this module, students should be able to:

1. Define basic terminology.
2. Describe the steps from pubescence to sexual maturity (physical, emotional and social.)
3. Describe the traditional and current attitudes of the culture and society as well as the characteristics of adolescent life in the local community.
4. Correlate the major needs of adolescents with the changes that are taking place in their bodies and their social environment.
5. Designate and explore areas of interest to adolescents where the nurse can provide counseling.
6. Provide appropriate counseling to adolescents and/or their parents.

Section I: Definitions of terms and the steps leading to maturity

Specific Objectives:

1. Define the terms pubescence, puberty and adolescence.
2. Describe the physical changes that take place from pubescence to maturity.
3. Describe the emotional changes and social demands that develop from pubescence to maturity.

Organization of Content

A. Pubescence

1. Period of approximately two years preceding puberty
2. Beginning of growth

B. Puberty

1. Point of development
2. Changes reach a climax
3. Indicators of sexual maturity

C. Adolescence

1. The entire period
2. Approximately 6-9 years

D. Physical changes

1. Influences
   a. Heredity
   b. Nutritional status
   c. Hormonal changes and interactions
   d. General state of health
2. Growth spurt
   a. Weight
   b. Height
      - Centered on extremities - arms, legs, neck
      - Unevenness of growth may cause temporary motor incoordination
      - Intensity may cause fatigue and loss of energy

Section I: Definitions of terms and the steps leading to maturity
Organization of Content - cont ...

c. Girls

. Broadening of hips
. Increase of subcutaneous fat
. Appearance of breast buds - usually one of first outward signs (see 6a below)

d. Boys

. Broadening of shoulders
. Development of muscles and bone

3. Growth of body hair

a. Pubic and axillary (boys and girls)
b. Facial and chest in boys
c. Extremities

4. Skin

a. Courser, with larger pores
b. Sebaceous glands produce an oily secretion
c. Perspiration altered - increase in amount and odor

5. Changes in pulse rate and basic metabolic rate (BMR)

6. Breast changes

a. Girls - areolas elevated, conical, larger in diameter, increase in fat, increasingly mounded, pigmentation of nipple
b. Boys - temporary - may vary from slight to significant enlargement

7. Genitalia

a. Girls - slight external enlargement but menstruation evidence of internal changes
b. Boys - enlargement first of penis, then testes, and scrotum - pendulous - change in nature of erection - nocturnal emissions

8. Menstruation

a. Age of onset - variations
b. Cyclic nature
c. Phases
d. Interval between onset of menstruation and ovulation
e. Characteristics

. Bleeding
. Cramping - dysmenorrhea
. Pre-menstrual tension

f. Interaction of hormonal changes

. Affect emotional development
. May cause temporary malaise and/or depression

Section I: Definitions of terms and the steps leading to maturity
Organization of Content - cont ...

g. Pathology

- Dysfunctional bleeding
- Prolonged anovulation
- Imperforate hymen
- Scarring from clitorectomy

9. Voice changes

a. Girls - deeper and fuller - but a slight gradual process
b. Boys - change of voice - marked - due to enlargement of larynx - fluctuations characteristic

10. Asynchrony - split growth

a. Typical of pubescent physical development
b. Organs and sub-systems grow at separate rates
c. At puberty - end up in balance

11. Deviations in rate of maturing

a. Wide individual variations
b. Predictive signs foretell time of puberty and approximate size

- parental history
- birth weight
- size at age 2
- nutrition
- bone ossification

c. Girls usually mature earlier
d. Late maturity in boys source of considerable anxiety

E. Emotional changes and social demands

1. Period of transition (reorganization of personality)

a. Neither adult nor child
b. Fluctuating and ambivalent feelings
c. Dominant feeling - "being out of step"

2. External awkwardness

a. adjustment to new size
b. adaptation to rapidly changing body

3. Search for new identity

a. "Who am I?"
b. "What is expected of me?"
c. "What do I want?"
d. "What will I become?"
e. Search for role model

Section I: Definitions of terms and the steps leading to maturity
Organization of Content - cont ...

4. Demands for achievement
   a. Parents, teachers, religious leaders, peers
   b. Expectations vs. reality
   c. Compliance vs. rebellion

5. Development of interest in opposite sex
   a. Task of heterosexual development
   b. Worry about sexual attractiveness and performance ability
   c. Internal feelings (stirrings)
      . strangeness
      . lack of understanding
   d. Curiosity vs. modesty
   e. Cultural standards and taboos
   f. Differences in boy and girl perspectives

6. Development of new interpersonal relationships
   a. Psychosocial
   b. Instability - love/hate relation with self, reflected in relationship to others
   c. Learning to handle idealism as well as hostilities
   d. Search for "sincerity" and dependability in others
   e. Need for friends - peers and adults

7. Concern about health related problems
   a. Normality of new body image
   b. Apprehension about minor symptoms
   c. Temporary obesity
   d. Psychosomatic symptoms
   e. Illness and death
      . Self
      . Parents
      . Others
   f. Depression - inability to cope
   g. Ambivalence of feelings about dependency on parents
      . Need to be protected and loved
      . Isolation and loneliness
      . Constant fluctuation
   h. Veneral disease
      . Cause
      . Cure
   i. Masturbation
      . Prevalence
      . Normalcy
   j. Excellent time to teach preventive health concepts and practice

Section I: Definitions of terms and the steps leading to maturity
Organization of Content - cont ...

8. Concern about preparation for career and marriage
   a. Ability to support self and family
   b. Career-rewarding interest and remuneration
   c. Marriage responsibilities
   d. Child-bearing and child-rearing responsibilities

Section II: Traditional and current attitudes surrounding adolescent life in community

Specific Objectives:

1. Identify and traditional attitudes or rites in relation to puberty, and preparation for marriage.
2. Determine the current attitudes in the community.
3. Describe the resources in the community to meet adolescent needs.

Organization of Content

A. Traditional beliefs

1. Place of adolescent in a specific culture
2. Puberty rites
3. Responsibilities - premarital, marital
4. Taboos
5. Criteria governing choice of marital partner

B. Current attitudes

1. Sources of information
   a. Teachers
   b. Religious leaders
   c. Community leaders
   d. Parents
   e. Adolescent groups
2. Dependency
3. Orientation to
   a. Education
   b. Occupations
   c. Working women
4. Sexual activity
   a. Pre-marital activity
   b. Pre-marital pregnancy
   c. Venereal disesease
   d. Family planning
   e. Sexual deviations
   f. Infertility
5. Age of marriage
   a. Bride price or bride wealth
   b. Responsibility to family

Section II: Traditional and current attitudes surrounding adolescent life in the community

Organization of Content - cont ...

6. Current taboos

C. Community resources to meet adolescent needs

1. Schools
2. Religious groups
3. Hospital, health centers
4. Extended families - clans, tribes, etc.
5. Work opportunities
6. Recreational opportunities
7. Mobility - transportation
8. Communication

Section III: Major Needs of Adolescents

Specific Objectives:

1. Describe the nutritional needs of adolescents.
2. Explore the various educational needs.
3. Describe the broad aspects of health needs.
4. Describe the need for understanding and acceptance by parents, adults, and peers.

Organization of Content

A. Nutritional needs

1. Accommodate to growth spurt
2. Accommodate to increased activities - sports, manual labor
3. Regular - adequate in quantity and quality
4. Protein, fat, carbohydrates
5. Vitamins and minerals
6. Special needs of adolescent pregnancy

B. Educational needs

1. Literacy - Adult life demands ability to read and write
   a. Ability to get a job
   b. Ability to understand structure and functioning of modern communities
   c. Aid to independence
2. Level of education
   a. Higher level - higher standard of living
   b. Value of knowledge and skills
   c. Satisfaction and stimulation
3. General education
   a. Orientation to responsible citizenship
   b. Status - personal as well as community
4. Good schools
5. Well-prepared teachers
6. Vocational or job-oriented preparation

Section III: Major Needs of Adolescents
Organization of Content - cont ...

7. University education for preparation of community leaders and professional personnel

8. Sex education

9. Family-life education

   a. Preparation for marriage
   b. Economic aspects of marriage
   c. Human reproduction
   d. Responsibilities of parenthood
   e. Child-spacing and family planning

10. Health education (See Health needs "C" below)

11. Community programs

   a. Agriculture
   b. Care of livestock
   c. Environmental hygiene
   d. Development of local crafts

C. Health Needs

1. Knowledge of preventive measures

   a. Immunization
   b. Safe water
   c. Disposal of wastes
   d. Communicable diseases including syphilis and gonorrhea

2. Basic requirements for good health

   a. Food - quantity and quality
   b. Rest
   c. Cleanliness
   d. Shelter
   e. Love and security
   f. Protection

3. Health services

   a. Adequacy
   b. Suitable and acceptable to adolescents

4. Special services for

   a. Recreation
   b. Psycho-social disorders
   c. Adolescent maternal health program
   d. Family-planning

Section III: Major Needs of Adolescents
Organization of Content - cont ...

D. Need for understanding and approval

1. By parents, adults, and peers

2. Personal interest

   a. Someone to depend upon
   b. Experience in establishing rapport (give and take)

3. Counseling programs

   a. Adolescents only
   b. Parents and/or significant others

4. Resources to make achievements visable - sports, crafts, etc.

Section IV: Nursing Intervention

Specific Objectives:

1. Describe factors that are basic to understanding adolescents' needs.
2. Describe techniques of value in counseling adolescents.
3. List special counseling needs for pregnant adolescent.
4. Interview, record and share an experience in counseling an adolescent.

Organization of Content

A. Review all of content previously listed in this module(G), under Section I, D and E and Section III.

B. Techniques in counseling where objective is to help adolescents solve own problems

1. Non-threatening approach
   a. Select time
   b. Provide privacy
2. Explain reason for questions
3. Confidentiality of information
   a. What is and what is not
   b. Reasons
4. Determine readiness of adolescent
   a. To give information
   b. To receive information
5. Express interest in understanding and supporting
6. Recognize limitations
7. Allow expressions of frustration, hostility and ambivalence
8. Individual and/or group sessions
9. Total effort toward helping adolescent problem solve

C. Intervention in major problems of adolescence

1. School problems
   a. Achievement (possible learning disabilities)
   b. Behavior
   c. Attitude

Section IV: Nursing Intervention
Organization of Content - cont ...

2. Family

   a. Pressures
   b. Responsibilities
   c. Approval
   d. Permission
   e. Assistance to parents
   f. Importance of communication

3. Peers

   a. Critical needs for approval
   b. Involvement in group activities
   c. Boy/girl relationships
   d. Smoking, alcohol, drugs

4. Career opportunities

   a. Preparation needed
   b. Appropriateness for individual
   c. Feasibility

5. Marriage customs

   a. Premarital rites including sexual practices
   b. Parental choice of marital partner
   c. Bride price
   d. Monogomy vs. polygamy

6. Conflicts between dependence and independence

   a. Needs
   b. Reality

D. Counseling needs of pregnant adolescent

1. Acceptance by counselor

2. Determine marital status

   a. Married - attitudes of family members
   b. Unmarried - cultural attitudes and practices in relation to pregnancy and child support

3. Nutrition education

   a. Importance of diet components
   b. Relation to changes of pregnancy
   c. Relation to physical well-being
   d. Relation to growth of baby

Section IV: Nursing Intervention
Organization of Content - cont...

4. Medical care - determining category or risk
   a. Resources - physician, midwife, nurse
   b. Place of delivery
   c. Preparation for labour and delivery
   d. High risk factors
   e. Early detection of abnormalities
   f. Criteria for referral
   g. Supports and costs

5. Prenatal education
   a. Body changes and their meaning
   b. Common discomforts of pregnancy
   c. Importance of medical/midwifery supervision
   d. Personal hygiene
   e. Sexual activity during pregnancy
   f. Signs of labour
   g. Process of delivery
   h. Puerperium
   i. Follow-up care including family planning

6. Preparation for baby
   a. Breast feeding
   b. Discussion of abilities and needs of babies
   c. Total dependence
   d. Clothing - as appropriate for culture and climate
   e. Discussion of local taboos, myths or customs related to the newborn
   f. New responsibility for adolescent mother

7. Unwanted pregnancy (if so indicated)
   a. Interruption to school
   b. Change of way of life
   c. Alternatives to carrying pregnancy to term (probably extremely limited)
   d. Learning to cope
   e. Introduction to contraception

E. Referrals

1. Other health team members

2. Social or welfare

3. Educational

4. Recreational

E. Charting

1. Importance for continuity of care and counseling

Section IV: Nursing Intervention
Organization of Content - cont ...

2. Format
   a. Anecdotal
   b. Check list
3. Observations
4. Discussions
5. Recommendations and/or nursing care plan
6. Follow-up

F. Group sessions

1. Techniques
   a. Discussion
   b. Role-playing
   c. Adult leader
   d. Adolescent leadership
2. Timing and place
3. Size of group
4. Importance of "food and talk" sessions for adolescents
5. One time or series
6. Orientation
   a. Crisis
   b. Education
   c. Both
7. Pre-planning and group involvement
8. Evaluation

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MODULE H:

THE ADULT

I. RATIONALE

After many years of growth and development, the human organism reaches physical and psychological maturity at the approximate age of 21 years. Characteristics of this mature adult are dependent on all that has gone before. However, it is also recognized that in many cultures, courtship, marriage and childbearing have already begun for the female. In general the male is 4-5 years older than his female partner.

The years from 21 to 44 in African countries might also be called the "productive years." It is during this time that families are formed, children are reared, occupations are developed, and the major responsibility for caring for and supporting self and dependents is dominant.

In order to maintain healthy families, this age group must be kept active and mobile. It is from this maintenance level that communities can call upon their citizens to promote community development. Most of the morbidity and mortality in this age group comes from conditions which are preventable. For example, accidents, childbirth complications, excess weight gain, dental problems and venereal disease are all conditions in which early detection and treatment can determine the severe complications which may lead to incapacitation and death.

The implications for nursing and midwifery care are not significantly different from those for other age groups. Yet, there is heavy emphasis on prevention of illness, promotion of health and education. Contacts with the people in this age group will come chiefly through their activity and function as caretaker of a child or older person. It is in this relation that they may be more interested and amenable to discussion of their own health.

II. OVERALL OBJECTIVES

At the completion of this module, students should be able to:

1. Describe the major responsibilities of the adult during the productive years.
2. Enumerate and discuss the cultural attitudes and expectations in relation to this age group.
3. Describe the needs of adults in this group.
4. Discuss the problems including illnesses that are common to this group.
5. Identify ways in which nursing intervention may care for, educate and support these adults.

Section I: The Productive Years

Specific Objectives:

1. Define maturity and factors that influence its development
2. Explain why the years 21-44 are considered the "productive years" in most African cultures.
3. Discuss the kinds of responsibilities normally encountered by individuals in this age group.

Organization of Content

A. Maturity

1. Definition - A state of full development
   a. Physical
   b. Intellectual
   c. Emotional
2. Variations in age of achievement
3. Variations in degree of achievement
4. Influences
   a. The physical and mental health of the adu't body
   b. Opportunity for education
      . Type
      . Quality
      . Achievement
   c. Parental Guidance in Youth
   d. Quality of previous parent - child relationship
   e. Role models - in family or community
   f. Environmental factors - climate, hardships, availability of food
   g. Affluence or poverty
5. Ability to assume responsibility for own actions
   a. Making value judgments
   b. Guiding others
   c. Ability to accept mistakes as well as successes
6. See Module G, Section I

B. Factors affecting

a. Adolescent experience - preparation for productive years
b. Life expectancy averages 45 years in Africa (see Module I, Section I)

Section I: The Productive Years
Organization of Content - cont...

2. Characteristics

   a. Responsibilities - many kinds occuring at the same time
   b. Intensity of living
   c. Accomplishments
   d. Hazards

      . occupational
      . obstetrical

C. Kinds of responsibilities

   a. Family - three or more generations
   b. Children - bearing and rearing
   c. Older parents
   d. Civic (community)
   e. Occupational and financial
   f. Food production
   g. Food "preparation"
   h. Prevention of illness and accidents
   i. Health care
   j. Housing
   k. Clothing
   l. Education
   m. Family mores and customs
   n. Adherence to religious observance and practices

Section II: Cultural Attitudes and Practices

Specific Objectives:

1. Describe the variety of patterns of courtship in the country.
2. Describe the variety of wedding ceremonies or marriage contracts.
3. Discuss attitudes toward women, pregnancy, infertility and family planning.
4. Describe the female and male parental roles in the nurture of children.
5. Discuss dependence of older parents.
6. Describe traditional and modern attitudes and practices relating to illness.

Organization of Content

A. Courtship

1. Patterns
   a. Customs
   b. Taboos
2. Criteria for mate selection
3. Premarital pregnancy as proof of fertility
4. Attitudes toward virginity
5. Ceremonies
6. Bride price or bride wealth
   a. Traditional articles and their significance
      . Cattle as an example
      . Modern substitutes
   b. Contract
7. Differences by
   a. Country
   b. Region
   c. Rural-urban
   d. Tribe or clan
   e. Family

B. Wedding Ceremonies or Marriage Contracts

1. Influences
   a. Tribe or clan
   b. Custom
   c. Religion

Section II: Cultural Attitudes and Practices
Organization of Content - cont...

d. Expediency - time factor
e. Family
f. Legal aspects
g. Urban/rural
h. Economic status

2. Kinds

a. Religious ceremony
b. Civil ceremony
c. Tribal ceremony
d. No ceremony - cohabitation
e. Mutual agreement
f. Polygamy

3. Attitudes and practices related to marriage

a. Double standard of sexual behavior
b. Infertility
c. Promiscuity or prostitution
d. Venereal disease
e. Abortion
f. Determining family size
g. Serious illness or death of marital partner

C. Traditional vs. Current Attitudes

1. Toward women

a. Position in family
b. Subservience

. Supremacy of male
. Control
. Relationships to others

c. Matrilineal vs. patrilineal

. Kinds of power
. Determinants of pattern

d. Divorce
e. Education
f. Work outside home (for pay)
g. Influences

. Tribal
. Custom
. Religion
. Government decree

2. Toward pregnancy

a. Expectations
b. Fulfillment
c. See Module D, Section I

Section II: Cultural Attitudes and Practices
Organization of Content - cont...

3. Toward infertility
   a. Female usually blamed
   b. Consequences for female
      . Isolation
      . Desertion - divorce
      . No position in society
      . Implication of punishment for sins
   c. General ignorance or reluctance to acknowledge male factor
   d. See Module C, Sections IV and VI

4. Toward family planning
   a. Desire and potential for large families
   b. Concept of fewer children not easily accepted
   c. Changes taking place
      . Most in urban areas
      . Among educated adults
   d. See Module K, Section II

D. Adult Roles in the Nurture of Children
   a. Female
      . Child bearing
      . Suckling
      . Feeding
      . Daily care and "mothering"
      . Care in illness
   b. Male
      . Provider - food, housing, education
      . "Fathering" - according to custom
      . Authority figure
      . Guidance in decision making - economic, educational
   c. Both
      . Role models
      . Protectors
      . Imparting of values, standards and religious concepts
      . Love and pride
      . Decisions regarding education and marital partners of children

E. Dependence of Older Parents

1. Expectations
   a. Parents
   b. Children
   c. Grandchildren

2. Roles - see Module I, Section II

Section II: Cultural Attitudes and Practices
Organization of Content - cont...

F. Illness

1. Traditional beliefs and practices

   a. Aetiology
   b. Home or tribal remedies
   c. Roles of traditional healers

2. Modern concepts of illness

   a. Prevention
   b. Aetiology
   c. Treatment
   d. Care
   e. Use of medical facilities
   f. Role of health education

3. Death

   a. Religious aspects
   b. Funeral or burial ceremonies
   c. Beliefs about causation

      . Evil eye
      . Punishment
      . Casting spells

Section III: Needs of Adults

Specific Objectives:

1. Describe the biological and psychological needs of the adult.
2. Discuss the kinds of activities that promote social and peer relationships.
3. Discuss the relationship of work and remuneration to family functioning.
4. Describe the kinds of environmental essentials needed for health.

Organization of Content

A. Biological and psychological needs

1. Nutritional
   - a. Adequate in quantity and quality
   - b. Variations in needs by male and female
   - c. Variations in needs by occupation
   - d. Special needs of pregnant and lactating women

2. Physical health
   - a. Early detection of illness
   - b. Prevention of accidents and handicaps
   - c. Appropriate immunizations
   - d. Access to medical and dental care
   - e. Assurance of care and counseling for a safe child bearing experience
   - f. Education in relation to the prevention of degenerative diseases
   - g. See Module J, Sections III, IV and V

3. Psychological
   - a. Means to handle stress
   - b. Ability to cope
   - c. Concepts of how to be a parent
   - d. Positive feedback in relation to tasks
   - e. Avoidance of drugs and alcohol (addiction)
   - f. Access to counseling and support - health, social, religious

B. Activities that promote social and peer relationships

1. Occupation

2. Community organizations to promote:
   - a. Health
   - b. Social action
   - c. Education
   - d. Agriculture
   - e. Political movements

Section III: Needs of Adults
Organization of Content - cont...

f. Religious functions
g. Parent groups - discussion

3. Supervision

4. Family or clan gatherings

C. Work and remuneration in relation to family functioning

1. Work

a. Availability and continuity
b. Kinds
c. Suitability
d. Satisfaction

2. Remuneration

a. Appropriate and adequate
b. Money or goods

3. Support of family

a. Responsibility
b. Single source - husband
c. Multiple sources - including wife and other family members

4. Effect of unemployment

a. Chronic
b. Seasonal
c. Planning needed

5. Supplemental income

a. Cash crops
b. Two jobs

D. Environmental essentials

1. Housing

. Safe
. Adequate
. Protection

2. Water

. Safety
. Adequacy

3. Waste disposal

. Sanitary conditions
. Prevention of contamination of soil
. Protect food and water supply

Section III: Needs of Adults
Organization of Content - cont...

4. Food supplies
   - Home gardens
   - Markets
   - Protection from spoilage and pests
5. Clothing
   - Protection
   - Status symbol

Section IV: Problems Encountered by Adults

Specific Objectives:

1. List the major illnesses and accidents that affect this age group
2. Discuss the problems commonly related to marital disruption
3. Discuss the problems frequently encountered in the care of children

Organization of Content

A. Illnesses and accidents

1. See Module J, Sections III, IV and V
2. Other disease or conditions of local prevalence
3. General health status of this age group in local community

B. Problems related to marital disruption

1. Interpersonal relationships
2. Family interference
3. Financial and inadequate support
4. Mixed tribal or religious background
5. Chronic illness
6. Infertility
7. Contention among wives in polygamous marriages
8. Prostitution
9. Venereal disease
10. Alcoholism or drug addiction
11. Sexual incompatibility
12. Anti-social behavior and mental illness
13. Separation or desertion
14. Death of one partner

Section IV: Problems Encountered by Adults
Organization of Content - cont...

C. Problems encountered in the care of children

1. Inadequate food supplies
2. Inability to breast feed
3. Acute and chronic illness of child
4. Handicapped child
   - Physical
   - Mentally retarded
5. Failure of child to thrive and develop
6. Learning disabilities
7. Hyperactivity or lethargy
8. Naming customs
9. Non-conforming behavior
10. Dependence vs. independence
11. Educational opportunities
12. Available medical care
    - Accessibility
    - Cost
    - Quality
13. Economic aspects of child-rearing
14. Teaching basic values, customs, heritage
15. Handling emotional problems
16. Decisions regarding selection of marital partner
    - Traditional vs. modern
    - Bride wealth

Section V: Nursing Intervention

Specific Objectives:

1. Define the basic elements to be considered in assessing the health of an individual adult.
2. Describe the kinds of nursing care and counseling commonly needed by the female adult.
3. Describe the kinds of nursing care and counseling commonly needed by the male adult.
4. Itemize points of emphasis in a planned health education program for adults of this age group.
5. Plan and conduct a series of at least three health education classes for adults
6. Describe nursing and midwifery roles in relation to service and education of this group.

Organization of Content

A. Assessing health of individual adults

1. Observation
2. Chief complaint (if any)
   a. Symptoms
   b. Duration
   c. Severity of symptoms, pain or disability
   d. Remedies already tried
3. History
   a. Individual
   b. Family
4. Screening techniques within nursing competence and appropriateness
   a. Temperature taking
   b. Blood pressure
   c. Assessment of nutritional status
   d. External palpation
   e. Inspection of bleeding sites, if any
   f. Estimate of emotional status
   g. Estimate of coping ability
   h. Laboratory tests as authorized
   i. Other diagnostic measures as appropriate
5. Screening techniques within midwifery competence and appropriateness
   a. Stages of pregnancy, delivery, puerperium
   b. See Module D, Sections II, V, VII and IX

Section V: Nursing Intervention
Organization of Content - cont...

6. Decisions

   a. Needed care within realm of nursing or midwifery
   b. First aid
   c. Consultation needed
   d. Direct referral to medical resources

B. Nursing care of female adult

1. Prevention

   a. Early case-finding
   b. Promotion of good nutrition
   c. Immunization as indicated
   d. Health education

2. Care of the acute and chronically ill

   a. Nursing as appropriate for illness
   b. In hospital or home
   c. Prevention of complications
   d. Teaching others
   e. Emotional support

3. Care of the pregnant woman

   a. Pregnancy
   b. Labor
   c. Delivery
   d. Post-partum
   e. See Module D, Section III

4. Counseling needs

   a. Listening
   b. Teaching problem-solving techniques
   c. Support and reassurance
   d. Understanding
   e. Referral, if indicated

5. Follow-up as indicated

C. Nursing care of male adult

1. Prevention

   a. Same as B-1 above
   b. Protection from on-the-job injuries

2. Care of the acute and chronically ill

   a. Same as in B-2 above
   b. Rehabilitation of accident cases and those with long-term illness

Section V: Nursing Intervention
Organization of Content - cont...

3. Teaching family members
   a. "Nursing" care
   b. Nutrition

4. Counseling needs
   a. Same as in B-4

5. Follow-up as indicated

D. Planned health education program

1. Procedures
   a. Determine needs and interest
   b. Select site
   c. Leadership from group if possible
   d. Determine methods and techniques
   e. Plan orientation session
   f. Plan series of sessions
   g. Invite participation
   h. Build in evaluation methods

2. Probable topics for presentation and discussion
   a. Health and nutrition
   b. Health and the environment
   c. Health and early case-finding
   d. Preventive measures - immunization
   e. Contagious diseases
   f. Dental care
   g. Handicapped children
   h. Accident prevention
   i. Child rearing
   j. Normal growth and development
   k. Behavior problems
   l. Concept of "parenting"
   m. Parents as role models
   n. Parents as teachers - hygiene, nutrition, sex education, family values and traditions, etc.
   o. Problems of adolescents
   p. Premarital and marital counseling
   q. Childbirth
   r. Fetal growth
   s. Care of newborn
   t. Breastfeeding
   u. Family planning

Section V: Nursing Intervention
Organization of Content - cont...

E. Nursing and midwifery roles

1. Place of work
   a. Hospital
   b. Clinics
   c. Health centers
   d. Community

2. Tasks
   a. By need
   b. By competence
   c. By appropriateness
   d. By policy

3. Concept of combining service and education
   a. Rich potential in this age group
   b. Opportunities
   c. Values

4. Dependent and independent activities
   a. Relationships and communications
   b. Coordination
   c. Management
   d. Supervision of auxiliaries

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MODULE I:
OLD AGE
(45 years and over)

I. RATIONALE

Life expectancy at birth has undergone a radical change upward in the past 25 years. This change first became noticeable in the highly industrialized countries, where the developments in medical science provided immunizations and many other aspects of preventive health care. Now the effect of these achievements are also becoming evident in many of the developing countries. In particular these preventive aspects have enabled more children to survive the first five years of life, there is better nutrition, there are better medical services - especially obstetric and paediatric - and more people have been educated to seek these services.

In general, in African society, elderly people are accorded deep respect for their wisdom and their longevity.

In 1976 in Africa, the average life expectancy at birth was 45, with a range of 38 to 66 in the various countries. This does not mean that there are no people who live beyond these stated years. It means there are few. In all probability life expectancy at age 5 or even at age 20 would give a clearer picture of the potential for those who survive the hazards of birth, and early and late childhood. These figures are difficult to obtain but in some parts of Africa statistics may be available from which more practical data can be extracted.

In relation to health services, there will be an ever increasing number of people (aged 45 and over) who will be needing services. This need will eventually affect health services for other age groups, for medical and nursing care will have to stretch to accommodate the needs of all people.

Physicians and nurses have an excellent base on which to build their knowledge and skills of how to handle the health problems of the older groups of people. In the next two decades, the probability of excessive numbers of very elderly people is quite remote. In all probability the early aged (45 - 55 years) will constitute the bulk of the older population. For this reason, health resources can concentrate on preventive and educational aspects of care. It is important, therefore, for nursing to recognize that it has a major responsibility for the promotion of health in older people

II. OVERALL OBJECTIVES

At the completion of this module, students should be able to:

1. State the average life expectancy for Africa and for their own country.
2. Describe the reasons for changes in the past 25 years.
3. Describe traditional attitudes toward older people in most African societies.
4. Describe the aging process and the physical and psychological changes of aging.
5. Describe the needs and problems of the older age groups - including common diseases.
6. Define the nursing roles in preventive, curative and long-term care of the older person.

Section I: Life Expectancy

Specific Objectives:

1. State the average life expectancy at birth for the continent of Africa
2. Compare data from students' own country with that of Africa in general and neighbouring countries.
3. Describe some of the specific reasons why life expectancy has increased throughout the world and in Africa.

Organization of Content

A. The terminology "life expectancy at birth".

1. Meaning
2. Significance as a measurement

B. Presentation of available data

1. World
2. Africa
3. Country of residence
4. Neighbouring countries

C. Reasons for increase in life expectancy during past 25 years

1. Medical science
   a. Preventive measures
   b. Immunization
   c. New knowledge of disease
   d. Improved diagnostic tools
   e. Research
2. Health services
   a. More hospitals, health centers, dispensaries
   b. Preventive programs
   c. More health personnel
   d. Better education of health personnel
   e. Improvement most evident in maternal and child health services
3. Nutrition
   a. Improved agriculture
      . Planting
      . Fertilizers
   b. Knowledge of food values

Section I: Life Expectancy
Organization of Content - cont...

3. c. Supplemental food programs

   . Individuals
   . Families
   . Communities

   d. Distribution of food

4. Education

   a. Less illiteracy (selected countries)
   b. Improved communication
   c. Health teaching

      . Schools
      . Health Centers

5. Transportation

   a. Roads
   b. Vehicles
   c. Public vs. private
   d. Increased availability of health resources

Section II: Traditional Attitudes

Specific Objectives:

1. Describe traditional attitudes of most African societies toward older persons.
2. Describe roles assigned to them.
3. Discuss potential changes in attitude and role in present-day society.
4. Describe the local beliefs and practices surrounding the death of a family member.

Organization of Content

A. Traditional attitudes toward aged

1. Respect for
   a. Survival
   b. Experiences
   c. Wisdom
2. Authority
   a. Earned place in family, community
   b. Equating of longevity and wisdom
3. Pride and affection
   a. Achievement of family members
   b. Love and warmth of family relations
4. Tolerance
   a. Accepting of limitations
   b. Deserving of help and support

B. Roles assigned to older persons

1. Males
   a. Decision makers
   b. Traditional judges in village and tribal politics
   c. Guardians of family practices, taboos, folklore
   d. Ceremonial and religious leaders
   e. Advisers of the young
   f. Continued but reduced work load
2. Females
   a. Educators of the young in relation to marriage and family responsibility
   b. "Wise mother" role in relation to family, pregnancy, child-birth and child rearing
   c. Participation, supervision and direction of household tasks

Section II: Traditional Attitudes
Organization of Content - cont...

2. d. Protector of young children

. Love
. Approval
. Discipline

e. Continued but reduced workload

C. Potential change

1. Increase in number of older persons

2. Increase in reverse dependency

3. Trends toward urbanization

a. Quickening pace
b. More nuclear families
c. Less living space
d. Cost of living

4. Modern concept of prolonged education postpones marriage and beginning of family life

5. Roles of older person become ill-defined

6. In all of above changes, the older person may become a burden.

D. Concepts of death

1. Influenced by

a. Tradition
b. Religion
c. Blending of old and new beliefs
d. Fatalism

2. Meaning of death

a. Belief in after life
b. Continuation of the "soul" with descendents
c. Practical aspects of division of property
d. Passing on of authority

3. Family practices

a. Ceremonies
b. Role of family members
c. Burial vs. cremation

4. Role of mourning and other ceremonies

a. Acceptance
b. Release
c. Acknowledgement of reality
d. Grieving
e. Paying respect to deceased and family

Section III: Physical and Psychological Changes of Aging

Specific Objectives:

1. Describe the aging process and factors that influence it.
2. Describe the physical changes which normally occur in the older person.
3. Describe the psychological changes.

Organization of Content

A. The process and its continuity

1. Process has no sharp beginning, but is gradual
2. Individual differences
3. Male/female differences
4. Maturation
5. The rate of change and/or deterioration may be uneven in same individual
   a. Physical may precede mental
   b. Mental may precede physical
6. Theories of aging
7. Influences
   a. General health
   b. Nutritional status
   c. Severe chronic illness
   d. Ambulation
   e. Ability to care for self (Activities of daily living - ADL)
   f. Attitudes
      . Self
      . Family
      . Society
   g. Stimulation
   h. Love and belonging

B. Physical changes (by system)

1. Cardio-vascular
2. Respiratory (including nose, and throat)
3. Sensory changes
   a. Auditory
   b. Sight
4. Dental (including periodontal)

Section III: Physical and Psychological Changes of Aging
Organization of Content - cont...

B. 5. Muscular-skeletal

6. Gastro-intestinal

7. Genito-urinary

8. Reproductive

9. Endocrine

10. Nervous

11. Skin

C. Psychological changes

1. Feelings about change

a. Environmental
b. Social

2. Gradual disengagement

a. Retirement
b. Diminished physical and mental abilities

3. Less confidence in self

a. Feelings of uselessness
b. Memory loss
c. Body image
d. Sexuality

4. Desire to maintain dignity and respect of self

5. Relationships with family and society

a. May be more critical
b. May be more tolerant

Section IV: Needs and Problems

Specific Objectives:

1. Relate some of the general health and social needs of older people.
2. Describe the degenerative diseases of the aged and their complications.
3. Describe the neoplastic diseases and their complications.
4. Describe the most commonly occurring accidents in this age group.
5. Describe the physical and psychological aspects of the menopause.
6. Describe the more prominent psychiatric disorders of the aged.

Organization of Content

A. Needs of older people

1. Nutritional
   - a. Balanced diet
   - b. Reduced caloric intake
2. Medical and/or nursing supervision
   - a. Early detection of abnormalities
   - b. Prevention of handicapping conditions
   - c. For severe illness - remedial, supportive or long-term care
   - d. For non-disabled - health education and emotional support
3. Socio-economic
   - a. Independence (financial and social)
   - b. Dependence without stigma
   - c. Defined role in family/community
   - d. Adequate housing
   - e. Means of obtaining medical or health care
     - . Money
     - . Transportation
     - . Availability
4. Mental-intellectual
   - a. Stimulation
   - b. Participation in decisions
     - . Self
     - . Family
     - . Community
   - c. Companionship and communication
     - . Peers
     - . Children
     - . Grandchildren
   - d. Responsibility

Section IV: Needs and Problems
Organization of Content - cont...

B. Degenerative diseases - symptoms, diagnosis, treatment, prognosis, and complications (see Module I, Sections III, IV and V)

1. Arteriosclerosis
2. Osteoarthritis
3. Hypertension
4. Cardio-vascular disease
5. Renal disease
6. Diabetes mellitus - late outset
7. Syphilis - tertiary
8. Gonorrhea - late
9. Prostatic disease
10. Skin problems
11. Hearing loss
12. Diminished sight or blindness

C. Neoplastic diseases - symptoms, diagnosis, treatment, prognosis, and complications

1. Chronic leukemia
2. Birrkitt's lymphoma
3. Primary hepatoma
4. Carcinoma of stomach
5. Carcinoma of bladder
6. Carcinoma of large intestine
7. Carcinoma of cervix
8. Carcinoma of endometrium
9. Carcinoma of breast
10. Carcinoma of skin (cysts, moles)

Section IV: Needs and Problems
Organization of Content - cont...

D. Common accidents - aetiology, diagnosis, treatment, prognosis, and complications

1. Burns

2. Falls - fractures

3. Traffic(automobile)

E. Menopause - age, symptoms, treatment and complications

1. Stages of menopause

a. Loss of fertility
b. Irregular or absent menses
c. Circulatory instability
d. Anatomical atrophy

2. Loss of estrogen may cause physical signs

a. Hot flashes
b. Arthritis - osteo
c. Artheriosclerosis
d. Vaginal dryness

3. Psychological aspects

a. Irritability - agitation
b. Damage to self-image
c. Depression
d. Change in sexual desire

F. Psychiatric disorders - symptoms, diagnosis, treatment, prognosis and complications

1. Psychoses

a. Functional disorders
b. Organic disorders

2. Depression

a. Mild
b. Severe - leading to suicide

3. Chronic anxiety

4. Senile dementia

a. Memory loss
b. Disorientation

5. Reversible brain syndrome

Section IV: Needs and Problems
Organization of Content - cont...

F. 6. Alcoholism - chronic

7. Drug addiction

Section V: Role of Nursing in Preventive, Curative and Long-term Care of the Older Person

Specific Objectives:

1. Describe the special components and techniques of taking a medical/social history from an older person.
2. Discuss physical and health education aspects of nursing intervention in preventive care.
3. Describe the physical, psychological, rehabilitation , and follow-up needs for curative care.
4. Describe long-term care and the nursing role.
5. Demonstrate simple nursing care of a chronically ill patient to the caretaker in the home.

Organization of Content

A. History and observation

1. Basically includes elements of history-taking in any age group
2. Seek out "chief complaints"
   a. Direct and indirect questioning
   b. Observation
3. Question in detail responses of pain, discomfort, bleeding, disfunction and anxiety
   a. Length of time symptoms present
   b. Degree of severity
   c. Patient's reaction
4. Question especially
   a. Nutrition and food preparation
   b. Current abilities
   c. Patient's problems
   d. Identity of closest family members (person responsible)
   e. Housing
5. Techniques
   a. Use person's language or use an interpreter
   b. Consider cultural influences
   c. Approach - warm, unhurried
   d. Emphasis - desire to help
   e. May need to get information from others
   f. Exercise patience when data is not coherent
   g. Gently probe for accuracy

B. Preventive care

1. Physical
   a. Early case-finding
   b. Evaluation of assets and handicaps

Section V: Role of Nursing in Preventive, Curative and Long-term Care of the Older Person

Organization of Content - cont...

1. c. Rehabilitation
   d. Good nutrition

2. Health education

   a. Group discussions

      . Peers
      . Family

   b. Individual Counseling
   c. Content

      . Nutrition
      . Food preparation
      . Accident prevention
      . Early reporting of symptoms
      . Alcohol consumptio[illegible]
      . Drugs - use and [illegible] tions
      . Importance of ph[illegible] ad mental activity

C. Curative Care

1. Physical needs

   a. Early diagnosis
   b. Referral to available resources
   c. Actual nursing care

      . Appropriate for illness or injury
      . Need to teach others

   d. Medications
   e. Special diagnostic procedures and treatment

2. Psychological needs

   a. Ease of pain and discomfort
   b. Understanding [illegible] condition
   c. Re-assurance
   d. Family involve[illegible]

3. Follow-up

   a. When
   b. Where
   c. By whom
   d. Why

D. Long-term care

1. Location

   a. Majority in home
   b. May need occasional hospitalization for acute medical condition

Section V: Role of Nursing in Preventive, Curative and Long-term Care of the Older Person

Organization of Content - cont...

D. 2. Care-takers

a. Usually family member
b. occasionally neighbours

3. Identifying patient's needs

a. Ambulation or bed-fast
b. Food and fluid
c. Skin care
d. Urination and defecation
e. Medications

. Analgesics
. Sedatives
. Cardiac drugs
. Diuretics
. Antibiotics
. Anti-hypertensive drugs
. Chemotherapeutic drugs
. Laxatives

f. Activities (as appropriate)
g. Companionship
h. Family
i. Religious aspects
j. Financial aspects

4. Nursing intervention

a. Teaching and demonstration of physical care to patient and family

. Home visits
. Group meetings
. Health centers

b. Education (of others)

. Process of aging
. Needs of aged
. Understanding of assets and limitations
. Simple nursing care

c. Referral to social or other community services
d. Communication and interpretation

. Patient
. Family
. Medical resources

e. Comfort and support at time of death

. Patient
. Family

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MODULE J:
COMMON DISEASES AND ACCIDENTS AFFECTING FAMILY HEALTH

I. RATIONALE

As the family life cycle turns through normal events and processes from conception to old age, its course is shaped by the numerous stresses and strains of disease and injury. It is impossible to predict when disease or accident will occur in a given family. These events have been grouped together in this module, the unifying theme being their impact on the family unit. That impact may be economic, nutritional or social. Whether a disease or accident occurs principally during childhood or adulthood, it will be discussed here.

First of all, certain concepts and definitions will be discussed: definitions of family and of family health will be reviewed; then a concept of how the impact of disease or injury on the family can be measured will be developed. The conceptual framework will also include the influence of environmental factors.

In the second section, specific diseases and accidents will be outlined. Every African ethnic group possesses a system of beliefs and practices by which it attempts to explain the aetiology of diseases and how to cope with them. Many of the conditions to be discussed below are known to traditional healers. These cultural attitudes will be discussed first of all.

The range of perspectives needed by nursing and midwifery personnel will be brought to bear on each condition:

1. Aetiology
2. Epidemiology - including social and economic impact
3. Pathogenesis
4. Diagnosis
5. Treatment, including nursing care and follow-up
6. Complications
7. Prevention

In all some thirty to thirty-five conditions will be covered. The individual instructor, however, should feel free to add or delete conditions according to his or her local circumstances. They are grouped into four sections.

1. Those whose impact on family health is largely through the children.
2. Those which affect family health mainly through women.
3. Those concentrated in adult males.
4. Those which affect family members irrespective of sex or age.

With this approach nurses and midwives should be equipped to consider each illness or injury encountered not only in the technical sense of diagnosis and treatment, but in terms of the impact of the condition on family equilibrium and the influence of family factors on the cause of the disease. Then they should be able to anticipate these effects in practice and other effective and appropriate counseling, referral, and follow-up services.

II. OVERALL OBJECTIVES

At the completion of this module students should be able to:

1. Define the family and a concept of family health.
2. Describe the various ways in which illness or injury effect family health.
3. Describe the influence of environmental factors on disease or injury.
4. Describe the aetiology, epidemiology, pathogenesis and complications of the major conditions affecting family health.
5. Participate in a diagnosis and treatment plan for selected conditions.
6. Develop a nursing care plan and carry out the nursing care and follow-up for selected conditions.
7. Implement preventive measures for selected conditions as appropriate.

Section I: Concepts and Definitions

Specific Objectives:

1. Define the various types of family structure and organisation.
2. Define a working concept for family health.
3. Describe the economic impact of illness or injury on the family.
4. Discuss the impact of illness on the nutrition of a family.
5. Discuss the social impact of illness on family health.
6. Discuss the influence of environmental conditions on the impact of illness on family health.

Organization of Content

A. Family structure and organization (review - see Module B)

1. Types

   a. Nuclear or extended
   b. Monogamy or polygamy
   c. Single parents families
   d. Matrilineal or patrilineal
   e. Patrilocal or matrilocal

2. Roles of the family

   a. Support

      . Physical - material
      . Psychological
      . Spiritual

   b. Socialisation of members
   c. Reproduction - implications for continuity

B. Family health - elements of a concept

1. Equilibrium

   a. Biologic
   b. Social
   c. Economic

2. Factors affecting

   a. Environment

      . Climatic e.g. drought, flood
      . Biologic e.g. waste disposal, water, disease vectors
      . Socio-economic e.g. migration, unemployment, urbanization, divorce

   b. Size: number of children and adults
   c. Educational level of family members
   d. Accessibility and quality of medical care and other health services

Section I: Concepts and Definitions
Organization of Content - cont...

C. Economic impact of disease or injury on family health

1. Drain on family financial resources

a. Medical and dental care costs
b. Hospital costs
c. Costs of drugs and appliances
d. Transportation costs

2. Reduced income

a. Disability of income earner
b. Death of income earner

D. Nutritional impact

1. Reduced food supply

a. Disability or death of food producer
b. Disability or death of food purchaser

2. Food preparation

a. Effect of disorganization within family unit
b. Illness of the food preparer (usually the mother)

E. Social impact

1. Emotional support

a. Short-term loss due to family disruption caused by acute illness
b. Long-term loss due to chronic disease or debilitating injury of key family members

2. Security

a. Chronic illness or death of children
b. Parental anxiety - current and future
c. Concerns

. Family continuity
. Support by children of parents in old age
. Prestige
. Prosperity

F. Environmental factors

1. Climatic influences

a. Relation of drought to protein calorie malnutrition (PCM)
b. Relation of flood conditions to malaria

Section I: Concepts and Definitions
Organization of Content - cont...

F. 2. Migration and urbanization

a. Relation to the social system of the community and family
b. Effect of disruption of family system by occupational injuries, chronic illnesses

3. Physical and biological factors such as housing, water supply, waste disposal, vector infestation, e.g.

a. Effect of overcrowding on tuberculosis
b. Relation of inadequate waste disposal on the impact of bilharziasis

Section II: Diseases and Accidents of Childhood

Specific Objectives:

1. Name the major infections, inherited diseases and accidents of childhood having an impact on family health.
2. Discuss the aetiology, epidemiology, pathogenesis and complications of each one.
3. Participate in the assessment of selected cases as available.
4. Describe and implement preventive measures aimed at each condition.

Organization of Content

A. Catalogue of childhood conditions

1. Infections

   a. Diarrhea and dysentery e.g. salmonella
   b. Acute respiratory infections e.g. strohlococcus and streptococcus

      . Pharyngitis
      . Otitis
      . Pneunomia

   c. Measles
   d. Pernicious "cerebral" malaria
   e. Pertussis
   f. Hook worm infection
   g. Round worm infection
   h. Typhoid fever
   i. Tuberculosis
   j. Leprosy
   k. Meningitis and encephalitis
   l. Urinary tract infection
   m. Trachoma and other eye infections
   n. Smallpox
   o. Chicken pox
   p. Impetigo and pyoderma
   q. Poliomyelitis
   r. Rheumatic fever
   s. Glomerulonephritis

2. Haematologic Disorders

   a. Haemolytic anaemia
   b. Leukemia
   c. Lymphoma

3. Inherited disease

   a. Sickle cell anaemia
   b. Glucose-6-phosphate dehydrogenase deficiency

4. Perinatally related diseases

   a. Cerebral palsy
   b. Congenital infections, e.g. syphilis

Section II: Diseases and Accidents of Childhood
Organization of Content - cont...

4. c. Birth injuries
   d. Growth retardation

5. Mental illness

   a. Childhood psychosis
   b. Emotional instability

6. Handicapping conditions

   a. Sense organs

      . Blindness
      . Deafness

   b. Gait and physical disfunction
   c. Mental deficiencies
   d. Learning disabilities

7. Congenital abnormalities

   a. Spina bifida
   b. Heart abnormalities
   c. Other

8. Nutritional problems

   a. Growth failure
   b. Protein calorie malnutrition - kwashiorkor
   c. Protein calorie malnutrition - marasmic type
   d. Dehydration
   e. Iron deficiency anaemia

9. Accidents

   a. Burns
   b. Eye injuries
   c. Head injuries
   d. Falls from heights
   e. Fractures
   f. Transportation accidents
   g. Ingestions

B. Prevalent cultural beliefs and practices related to selected diseases and injuries

   1. Beliefs about aetiology

   2. Methods of diagnosis

   3. Treatment and prevention

Section II: Diseases and Accidents of Childhood
Organization of Content - cont...

C. Aetiology of each of the above

1. Primary cause where possible

2. Contributing factors, principally environmental (see Section I,F.)

D. Epidemiology (selected conditions)

1. Mode of transmission

2. Natural history of the condition

3. Associated nutritional, economic and social effects of the condition on family health

E. Pathogenesis of selected conditions, i.e. how symptoms are produced

F. Complications for the child and/or the family

1. Physical/nutritional

2. Psychological or social

3. Economic

G. Diagnosis of selected conditions

1. Case-finding methodology

2. History

3. Physical signs

4. Laboratory and X-ray signs

5. Elements of the definitive diagnosis where possible

H. Preventive measures, e.g.

1. Primary: immunisation for measles

2. Secondary: tuberculin testing

3. Tertiary: prompt treatment of severe fractures

Section III: Diseases of Adult Women

Specific Objectives:

1. Name the diseases which have their impact on family health largely through their occurrence in women.
2. Discuss the aetiology, epidemiology, pathogenesis and complications of each one.
3. Participate in the assessment of a case of each one.
4. Describe and implement preventive measures aimed at each condition.

Organization of Content - cont...

A. Catalogue of diseases occurring chiefly in women

1. Infections
   - a. Pelvic inflammatory diseases
   - b. Mastitis
   - c. Pelvic tuberculosis
   - d. Urinary tract infections
   - e. Acute and chronic pyelonephritis
   - f. Sexually transmitted diseases
   - g. Endomeuriosis
   - h. Endometritis

2. Malignancies
   - a. Breast
   - b. Dysplasia
   - c. Reproductive system
     - . Cervical
     - . Uterine
     - . Ovarian
     - . Vaginal
     - . Fallopian Tubes

3. Benign tumor
   - a. Uterine fibroids
   - b. Cystic breast masses
   - c. Polyps

4. Cardio-vascular
   - a. Hypertension
   - b. Thrombo-phlebitis

5. Nutritional problems
   - a. Iron deficiency anaemia
   - b. Obesity
   - c. Malnutrition

Section III: Diseases of Adult Women
Organization of Content - cont...

B. Prevalent cultural beliefs and practices

1. Beliefs about aetiology

2. Traditional methods of diagnosis

3. Traditional treatment and prevention

C. Aetiology of conditions listed in A.

1. Primary cause where possible

2. Contributing factors, principally environmental (see Section I,F.)

D. Epidemiology

1. Mode of transmission

2. Natural history of the condition

3. Associated nutritional, economic, and social effects of the condition on family health

E. Complications for the woman (and/or the family)

F. Complications for the child and/or the family

1. Physical-nutritional

2. Psychological or social

3. Economic

G. Diagnosis or assessment of selected conditions

1. Case-finding methodology

2. History

3. Physical signs

4. Laboratory and X-ray signs

5. Elements of the definitive diagnosis where possible

H. Preventive measures

1. Primary: e.g. nutrition education for iron deficiency anaemia

2. Secondary: e.g. screening and prompt treatment of urinary tract infections

3. Tertiary: e.g. surgical removal of cervical carcinoma

Section IV: Diseases and Accidents of Adult Males

Specific Objectives:

1. Name the diseases and accidents which exert their impact on family health primarily through their occurrence in adult males.
2. Discuss the aetiology, epidemiology, pathogenesis, and complications of selected cases.
3. Participate in the diagnosis or assessment of selected cases.
4. Describe and implement preventive measures aimed at these conditions.

Organization of Content

A. Catalogue of diseases and accidents occurring primarily in adult males

1. Infections
   - a. Amoebiasis
   - b. Onchocerciasis
   - c. Sexually transmitted diseases
2. Cardio-vascular diseases
   - a. Hypertension
   - b. Cerebral vascular accident
3. Malignancy
   - a. Primary hepatoma
   - b. Prostate
4. Behavioral conditions
   - a. Alcoholism
   - b. Drugs
5. Accidents
   - a. Eye injuries
   - b. Head injuries
   - c. Transportation accidents - as chauffeurs, lorry drivers
   - d. Snakebite
   - e. Other occupational hazards
     - . Agriculture: insecticides, herbicides
     - . Mining: crushing injuries
     - . Factory work: crushing injuries, toxins
     - . Road construction: heat prostration, crushing injuries
     - . Other construction: falls, crushing injuries

B. Prevalent cultural beliefs and practices related to selected conditions

1. Beliefs about aetiology
2. Methods of diagnosis
3. Treatment and prevention

Section IV: Diseases and Accidents of Adult Males
Organization of Content - cont...

C. Aetiology of each of the above

1. Primary cause where possible

2. Contributing factors principally environmental (see Section I,F.)

D. Epidemiology

1. Mode of transmission

2. Natural history of the condition

3. Associated nutritional, economic, and social effects of the condition on family health

E. Complications for the man

1. Loss of earning capacity

2. Loss of prestige of being the wage earner

3. Physical pain and incapacity

4. Dependence on others

5. Discouragement and depression

F. Complications for the child and/or the family

1. Physical - nutritional

2. Psychological or social

3. Economic

G. Diagnosis or assessment of selected conditions

1. Case finding methodology

2. History

3. Physical signs

4. Laboratory and X-ray signs

5. Elements of the definitive diagnosis where possible

H. Preventive measures

1. Primary: e.g. safety measures for occupational hazards

Section IV: Diseases and Accidents in Adult Males
Organization of Content - cont...

H. 2. Seconday: e.g. screening for hypertension

3. Tertiary: e.g. prompt treatment for head injuries

Section V: Diseases and Accidents Occurring in all Age Groups

Specific Objectives:

1. Name the diseases and accidents which have their impact on family health through their occurrence in family members irrespective of age.
2. Discuss the aetiology, epidemiology, pathogenesis, and complications of selected conditions.
3. Participate in the diagnosis or assessment of selected cases.
4. Describe and implement preventive measures aimed at selected conditions.

Organization of Content

A. Catalogue of diseases occurring in all age groups of the family

1. Infections
   a. Malaria
   b. Bilharziasis
   c. Trypanosomiasis
   d. Tuberculosis
   e. Bancrofti filarsiasis
   f. Schistosomiasis
   g. Typhoid fever
   h. Infectious hepatitis
   i. Syphilis
   j. Gonorrhea
   k. Cholera
   l. Leprosy
   m. Relapsing fever
   n. Trachoma
   o. Others

2. Inherited diseases
   a. Diabetes mellitus
   b. Down syndrome

3. Cardio-vascular/renal diseases
   a. Chronic renal disease
   b. Hypertension

4. Nutrition problems
   a. Pellagra
   b. Anaemia
   c. Skin conditions

5. Accidents
   a. Burns
   b. Fractures

Section V: Diseases and Accidents Occurring in All Age Groups
Organization of Content - cont...

A. 6. Mental Illness

a. Psychosis
b. Disfunction

7. Handicaps

a. Blindness
b. Deafness
c. Disfunction of extremities

8. Malignancies

a. Neoplasms
b. Leukemias

B. Prevalent cultural beliefs and practices related to selected diseases and injuries

1. Beliefs about aetiology

2. Methods of diagnosis

3. Treatment and prevention

C. Aetiology of each of the above

1. Primary cause where possible

2. Contributing factors principally environmental (see Section I.F.)

D. Epidemiology

1. Mode of transmission

2. Natural history of the condition

E. Complications for the individual

F. Complications for the child and/or the family

1. Physical - nutritional

2. Psychological or social

3. Economic

G. iagnosis or assessment of selected conditions

1. Case finding methodology

2. History

Section V: Diseases and Accidents Occurring in all Age Groups
Organization of Content - cont...

G. 3. Physical signs

4. Laboratory and X-ray signs

5. Elements of the definitive diagnosis where possible

H. Preventive measures

1. Primary: e.g. BCG immunization for tuberculosis

2. Secondary: e.g. screening for syphilis by doing blood tests

3. Tertiary: e.g. treating trypanosomiasis in the first stage

Section VI: Nursing Intervention

Sepcific Objectives:

1. Describe the basic elements of simple assessment of the individual patient.
2. Review the principles of nursing care of acute and chronic diseases and accidents.
3. Discuss the needs for emotional support and counseling.
4. Discuss the educational components of nursing care, including the need for follow-up.
5. Make a nursing plan and give care to patients with acute chronic illnesses.
6. Plan and lead an educational session instructing a group of mothers on home nursing care.

Organization of Content

A. Assessing the health needs of individuals
(see Module H, Section V. A.1-6 - Assessing health of individual adults.)

1. Above principles apply equally to children
2. Parents or mother chief source of information

B. Nursing care

1. Early case-finding
2. Care as appropriate for illness
   a. Hospital
   b. Clinic or health center
   c. Home
3. Nutrition guidance
4. Comfort measures
5. Prevention of complications
   a. Through observation
   b. Through knowledge
   c. Through skilled nursing care
6. Teaching of others
7. Recording
8. Communication with medical and nursing authorities
   a. For direction
   b. For exchange of vital information
   c. For consultation
   d. For support

Section VI: Nursing Intervention
Organization of Content - cont...

C. Needs for emotional support and counseling

1. Anxiety generated by illness or accident

2. Coping ability - individual and family

a. Organization
b. Resources
c. Need for constructive activity

3. Concerns

a. Prognosis
b. Disability or pain
c. Loss of earning power
d. Effect on family

4. Reassurance

5. Understanding

D. Educational components

1. Teaching as part of all nursing care

a. Opportunities
b. Importance

2. Settings

a. Individual contacts
b. Family contacts
c. Group contacts
d. Classrooms, meetings, clinics etc.

3. Planning

a. What to teach - content
b. Level of understanding
c. Goals and purposes
d. Teaching aids

. Films
. Slides
. Pamphlets
. Posters
. Demonstrations

4. Content in relation to diseases and accidents

a. Known causes
b. Preventive measures

. Early case-finding
. Immunization

Section VI: Nursing Intervention
Organization of Content - cont...

4. b. . Elimination of accident hazards
   . Good nutrition
   . Safe water
   . Clean environment

c. Care of the ill or injured

   . Medications
   . Food
   . Bedside care
   . Ambulatory care
   . Rehabilitation
   . Stimulation

d. Need for follow-up

   . Specific to illness or accident
   . Importance and benefits
   . Resources and referral
   . Short-term vs. long-term

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MODULE K:

FAMILY PLANNING

I. RATIONALE

Marriage and family life involve a variety of customs based on social, religious and economic factors. Traditionally, many people have considered children as "gifts of God." This concept is still true, for children bring joy, love and enrichment to people's lives and security for old age. Today more than ever, married couples are concerned about how they can ensure that their children will survive and how they, as parents, can adequately fulfill their responsibilities to God for their children's welfare. Many couples are realizing that they are able to make decisions affecting their children: the number they will have and the frequency of child-bearing.

The concept of family planning is based on the rights of individuals and couples to determine what their family should be. The benefits of family planning include those related to health, social, and economic well-being.

The desire for children is nearly universal. However, accompanying this desire is the hope that each child will have a chance to grow to adulthood with enough to eat, freedom from chronic illness, and the opportunity to receive enough education to make him or her a contributing member of the family and society. By spacing the interval of child-bearing by a minimum of two years and a maximum of five years, the mother has time to recover her strength and the infant is more likely to have adequate nutrition and the individual stimulation needed for optimum growth and development.

Medical personnel, nurses, and midwives are intimately involved with families through preventive, curative and educational services. They care about what happens to families. For this reason, they need to be adequately informed about the relationship of child-spacing to family health, and skilled in counseling and delivering the services that are needed.

Methods of postponing or preventing conception have been known since ancient times, practiced by royal tribes and peasants alike. Many of these ancient methods consisted of efforts to prevent the "fluid of the man" from entering the "womb of the woman" or in modern terminology, to provide a barrier so that the sperm could not meet to unite with the ovum. Other methods and beliefs had to do with magic potions imbibed or rituals performed around the time of coitus.

Today some of these principles are still used in the design of modern contraceptives or in the recognition of a fertile period in the menstrual cycle. Traditionally in some cultures there is separation of the man and woman for certain periods of time -- such as during the period of lactation following child birth. This is child spacing for the benefit of each member of the family.

Modern contraceptives may be classified in three distinct ways:

1. Behavioral methods
2. Mechanical and chemical methods
3. Systemic methods

In addition, therapeutic abortion may be considered as one aspect of child spacing, and sterilization may be a part of family planning when a couple decides that their family is complete. Infertility (see Module C) is of major concern to those who want children and is also considered a component of family planning. All of these components are important to nursing and midwifery education, for they will be part of the services to people in clinical settings as well as in the community.

II. OVERALL OBJECTIVES

At the completion of this module students should be able to:

1. Define family planning and explain historical development of the concept.

2. Describe the health and socio-economic benefits of family planning.

3. Describe the responsibilities of nursing/midwifery personnel in counseling for family planning.

4. List criteria for assessing the appropriateness of a family planning method.

5. Describe the behavioral, mechanical and systemic methods of contraception.

6. Describe the nursing/midwifery care needed by patients with various types of abortion.

7. Describe sterilization procedures for female and male and points of nursing/midwifery intervention.

8. When appropriate, evaluate a non-pregnant pelvis and prescribe, fit or insert an appropriate contraceptive.

Section I: Introduction to Family Planning

Specific Objectives:

1. Define family planning concepts and describe their historical development.
2. Describe how government policies are determined and their impact on services.
3. Describe how services are organized at different governmental levels.
4. Describe manpower resources needed for family planning services and education.
5. Discuss the role of non-governmental organizations.

Organization of Content

A. Definition and the development of concept of family planning

1. Concept of freedom to choose
   - a. Number of children
   - b. Frequency of child-bearing (spacing)
2. Assistance for those experiencing difficulty in conceiving
   - a. Infertility
   - b. Sterility
   - c. Alternatives to child bearing

B. The historical background

1. From antiquity
2. Scientific advances in last 25 years
   - a. Knowledge
   - b. Techniques
3. Personalities and their contributions
4. Resources for research and dispersal of knowledge
   - a. Local
   - b. National
   - c. International
5. Development of national and local policies

C. Philosophy and Objectives

1. Overall
2. Differences by country

Section I: Introduction to Family Planning
Organization of Content - cont...

D. Role of government in family planning

1. Policies

a. How development takes place
b. Influences

. Tradition
. Religion
. Resources
. Politics
. Attitudes and understanding of policy-makers

2. Organization of services

a. National
b. Regional
c. Local

3. Financial support

E. Role of non-government organizations (international, national, etc.)

1. Educational

a. Health and welfare organizations
b. Universities
c. Professional schools
d. Public schools
e. Newspaper and journal articles

2. Research

a. Medical
b. Social
c. Economic

3. Service

a. Implement new programs
b. Supply contraceptives
c. Coordination with other services
d. Some staffing

F. Manpower for services and education

1. Categories

2. Selection

3. Training or preparations

4. Utilization

Section II: Benefits of Family Planning

Specific Objectives:

1. Identify at least 5 health benefits of family planning.
2. Identify at least 5 socio-economic benefits of family planning.

Organization of Content

A. Health and socio-economic benefits of family planning

1. To individuals
2. To families
3. To communities

B. Health benefits

1. Decrease in mortality
   a. Maternal
   b. Perinatal
   c. Childhood
2. Decrease in complications of pregnancy and delivery
   a. Prevention of grand multiparity
   b. Prevention of pregnancy in times of illness or family stress
3. Concept of spacing
   a. Maternal replenishment
   b. Care and breast feeding of infant
4. Concept of age of minimum reproductive risk
5. Prevention of genetic diseases
6. Prevention of communicable diseases
   a. Morbidity
   b. Mortality
7. Improvment of nutritional status
   a. Prevention of kwashiorkor, marasmus, and growth failure by prolonging breast feeding
   b. Appropriate and sufficient food for growth and development
   c. Prevention of low birth weight for gestational age
8. Improvement of mental health and family adjustment

Section II: Benefits of Family Planning
Organization of Content - cont...

C. Socio-economic benefits

1. Decrease in unwanted pregnancies, therefore fewer illegal abortions

2. Improvment in financial potential for families

3. Improvement in educational potential for children

4. Improvment in intellectual development in children (more individual stimulation)

5. Improvement in work opportunities for

   a. Heads of families
   b. Women

6. Less drain on community resources

7. Improved nutrition and quality of life

   a. Caloric and protein intake
   b. Supply and distribution
   c. Quality of food
   d. More land area per person

Section III: Criteria for Assessing Appropriateness of a Contraceptive Method

Specific Objectives:

1. Describe criteria for assessing the appropriateness of a family planning method.

Organization of Content

A. Availability

B. Mode of action

C. Indications and contra-indications

D. Suitability for couple

E. Side-effects or complications

F. Effectiveness (reliability)

G. Cost

H. Technical aspects

I. Specific guidance and counseling needed for the method

Section IV: Behavioural Methods

Note: In the teaching and discussion of the family planning methods that follow (Section V through IX) in addition to the specific techniques, demonstrations or practice of a particular method, the outline of the preceding Section (IV) should be followed

Specific Objectives:

1. Describe behavioral methods.
2. Assess behavioral methods using suggested criteria.
3. Counsel clients on behavioral methods as appropriate.

Organization of Content

A. Rhythm and Basal Body Temperature

1. Review of phases and timing of menstrual cycle
   a. Concept of the "safe period"
   b. Individual variations
2. Ovulation
   a. Methods of detecting
   b. Length of time in relation to fertilization

B. Withdrawal

1. Definition
2. Difficulties
   a. Mechanical
   b. Individual

C. Traditional local pratices

1. Beliefs and taboos concerning sexual activity and conception
2. Abstinence
3. Lactation
4. Separation of mother and child from family (usually specified period of time)
5. Polygamy

Section V: Mechanical and Chemical Methods

Specific Objectives:

1. Describe available mechanical and chemical methods.
2. Assess mechanical and chemical methods using suggested criteria.
3. Teach or apply mechanical and chemical methods where appropriate.

Organization of Content

A. Condom

1. Male contraceptive
2. Kinds
3. Also provides some V.D. protection

B. Diaphragm

1. Material - sizes
2. Requires fitting by professional - teach student when appropriate
3. Insertion and length of time in place
4. Removal, cleansing,and care

C. Foams, jellies, tablets and suppositories

1. Method of application
2. Length of time effective
3. Allergic reactions

D. IUD

1. Kinds
2. Insertion and/or removal by professional - teach student when appropriate
3. Coitus can be spontaneous

Section VI: Systemic Methods

Specific Objectives:

1. Describe available systemic methods.
2. Assess systemic methods by using suggested criteria.
3. Recommend systemic methods where appropriate.

Organization of Content

A. Oral Contraceptives (Kinds)

1. Combined
2. Sequential
3. Low-level supplement

B. Injections and silastic capsules

1. Techniques of treatment and/or insertion
2. Timing

C. General considerations

1. Controversy on distribution
   a. Should they be M.D. prescribed?
   b. Should they be para-medical prescribed?
   c. Should over-the-counter sales be permitted commercially?
2. Long-term studies
   a. Retrospective
   b. Prospective
   c. Findings and implications
3. Follow-up
   a. Routine
   b. Resources for emergency medical care

Section VII: Nursing and Midwifery Care and Counseling in Family Planning

Specific Objectives:

1. State where and how case-finding for family planning should be done.
2. Do family planning case-finding and report on the experience.
3. Describe the nursing care needed during the first visit to family planning clinic.
4. Interview, take history and care for a client during her first clinic visit.
5. Conduct a group session for "first-time" clients.
6. Name the four laboratory procedures usually done in a family planning clinic.
7. Describe return visit responsibilities .
8. Make an actual referral of a client to an outside resource, under supervision of physician or instructor.
9. Discuss sensitive areas confronting nurses and midwives in caring for the family planning client.

Organization of Content

A. Case-finding

1. Where
2. How to approach
   a. Individuals (differences)
   b. Groups
3. Motivation
   a. Assisting clients to understand concepts
   b. Addressing health, social and economic benefits
4. Interviewing
   a. Factors in selection of appropriate information
      . Readiness to learn
      . Educational level
      . Degree of critical need
      . Potential health or socio-economic problems
      . Previous knowledge
      . Resources and methods available
   b. Timing and privacy for discussion
   c. Opportunity for questions from clients
      . Appreciation of potentially sensitive areas
      . Rapport in nurse/client relationship

Section VII: Nursing and Midwifery Care and Counseling in Family Planning
Organization of Content - cont...

B. Nursing and midwifery concerns during first clinic visit

1. Importance of first contact

   a. Warm
   b. Meaningful

2. The clinic interview

   a. Determine reason for coming
   b. Discussion of basic values
   c. Evaluate knowledge

      . Reproductive anatomy and physiology
      . Menstrual cycle including ovulation
      . Process of fertilization
      . Contraceptive methods

   d. History

      . General medical
      . Obstetrical (and/or gynaecological)
      . Living children

   e. Determine attitudes

      . Spouse
      . Significant others (family, peers)

   f. Explanation of clinic prodecures

      . Laboratory
      . Physical examination including pelvic area
      . Choice of contraceptives
      . Follow-up

3. The group interview
   (In many situations nearly all of the above can be done in group sessions)

   a. Advantages

      . Time-saving for staff
      . Clients get answers to questions without revealing lack of knowledge
      . Peer group with same needs

   b. Disadvatages

      . May miss pertinent individual problems and questions
      . May overlook shy or frightened clients needing special attention

4. Laboratory tests (usual)

   a. Urinalysis
   b. Blood for haematocrit

Section VII: Nursing and Midwifery Care and Counseling in Family Planning
Organization of Content - cont...

B. 4. c. Papanicolaou smear
d. Smear for gonococcus

5. Physical examination including pelvic

a. By physician, midwife or specially prepared nurse
b. Nursing support
c. General physical

. Heart
. Lungs
. Breast
. Varicosities
. Other based on history

d. Pelvic

. Early detection of pregnancy
. Evidence of inflammation, discharge, lesions
. Evidence of neoplasms

e. Evaluation

6. Selection of contraceptive

a. Availability
b. Client's choice if medically appropriate
c. Explanation of use
d. Supply

7. Plan for follow-up

a. Usual intervals
b. Resources for emergency care

C. Return visit responsibilities

1. Schedule

2. Often seen only by nurse or midwife

3. Problems - if any

a. Discussion
b. Physical assessment
c. Physician referral if indicated

4. Continuation or change

5. Occasional need for home visit

a. Lost to follow-up
b. Critical need

6. Renewal of supplies

7. Need for sustained support

Section VII: Nursing and Midwifery Care and Counseling in Family Planning
Organization of Content - cont...

D. Referral to outside resources

1. What is available?

   a Consultation
   b. Other clinics
   c. Welfare agency

2. Methods of referral

   a. Physician initiated
   b. Nurse-midwife initiated
   c. Actual mechanics of referral

3. Communication of need to client

4. Communication between resources

   a. Telephone
   b. Papers
   c. Transfer of information

5. Costs

6. Transportation

E. Sensitive areas

1. Decisions

   a. Nurse informs, client makes informed decision
   b. Avoid coercion
   c. Client problems - her own desire and attitudes of others

2. Impartial care (problems in some countries)

   a. Care of unwed mother
   b. Care of abortion or sterilization patients

3. Attitudes of nurse/midwives in relation to family planning, infertility, abortion, and sterilization

4. Infertility counseling as a component of family planning (see Module C)

Section VIII: Abortion

Specific Objectives:

1. Describe national abortion policy and how determined.
2. Classify the types of abortion
3. Identify socio-cultural factors that influence the practice of abortion
4. Assess methods and techniques by suggested criteria.
5. Describe care of an abortion patient.
6. Give nursing care and guidance to an abortion patient.

Organization of Content

A. National Policy

1. Why a policy?
2. Who determines?
3. How are decisions made?
4. Policy statement of local country

B. Classification of abortion

1. Spontaneous
2. Illegal
3. Therapeutic (medical reasons)
4. Legal -- on demand -- no restrictions

C. Legal and therapeutic considerations

1. Emergency measure
2. Method by time of gestation

D. Social, cultural factors

1. Attitudes (pro-con)
2. Religious positions
3. Historical background
4. Legality - government policy

E. Methods

1. Dilatation and curettage

Section VIII: Abortion
Organization of Content - cont...

2. Aspiration by vacuum

3. Hysterotomy

4. Hysterectomy (rare)

5. Saline induction - intra-amniotic injections

6. Prostaglandins

7. Abortifacients - drugs

8. Traditional beliefs and illegal methods; miscellaneous methods - some effective, many ineffective, dangers and precautions

F. Complications

1. Infection

2. Uterine perforation

3. Haemorrhage

4. Retained tissue

G. Nursing care of the abortion patient

1. Physical

a. Control bleeding
b. Assess pain and provide appropriate relief
c. Assist in management
d. Comfort measures

2. Education

a. Explain what is happening
b. Explain procedures to be followed
c. After abortion provide information

. Personal care
. Contraceptives

3. Supportive and emotional

a. Observe closely
b. Question attitudes and feelings
c. Provide factual data and reassurance where appropriate

Section IX: Sterilization

Specific Objectives:

1. Describe how national policy is formulated and what factors influence it.
2. Identify kinds of sterilization procedures for males and females.
3. Assess sterilization techniques by using suggested criteria, describing pros and cons of each.
4. Describe nursing care of a sterilization patient.
5. Give nursing care to a sterilization patient.

Organization of Content

A. National policy

1. Who determines
2. How decisions made
3. Contributing factors

B. Kinds of sterilizations

1. Female
   a. Tubal ligation (variety of surgical techniques)
   b. Hysterectomy
   c. Radiation (rare)
2. Male: vasectomy

C. Surgical techniques

1. Female - teach available methods
2. Male - vasectomy

D. Psychological reactions

1. Personal
2. Family
3. Community

E. Indications and contra-indications for sterilization

F. Preparation, care, and follow-up of patient

1. General
2. Nursing responsibilities

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MODULE L:

THE HEALTH WORKER

AND THE

COMMUNITY

I. RATIONALE

Health workers in a community come from a variety of backgrounds to bring their knowledge and skills to meet the health needs of the community. The kinds and number of these workers will vary according to the size of the community, as well as the wealth, political influence, location and other community resources. In a large city or political division one might find many categories of health workers.

In smaller communities there are fewer kinds of workers so that a single worker may need to do the work of others as well as his or her own.

The goals and objectives of a community health program are to provide service and education to meet the health needs of the people. These components are constant, although their activities may shift to meet changing conditions within the community:

1. Control of communicable disease including immunization
2. Provision of care for illnesses and accidents
3. Maternal and child health services including family planning
4. Nutrition education and services
5. School health education and services
6. Dental Care
7. Programs to provide safe water, waste disposal, vector control and to prevent air pollution

Health workers may function independently, or as employees of the government, or as representatives of local/national private health agencies. This points out the need for a local health team to coordinate the functions and activities of various types of individuals and programs.

Nurses and midwives are involved in community health practive at many levels. Their roles may shift from assessing to planning, to implementing, to evaluating, to coordinating, to providing service, to educating, to being a resource person.

Realistically in Africa, the nurse or midwife or auxiliary may find him/herself to be the only health representative in many of the rural communities. Therefore, it is important to emphasize to students, in their educational programs, the importance of developing a broad competence and to learn how to organize and involve the community in their own efforts toward health promotion. Students should become aware of national and regional rural development goals, to enable them to contribute from the health standpoint.

II. OVERALL OBJECTIVES

At the completion of this module, students should be able to:

1. Identify various categories of health workers.
2. Describe the goals and objectives of community health programs.
3. Describe the component parts of health service and education programs in a community.
4. Describe the role of nursing/midwifery in community programs.
5. Participate in the planning and execution of a community health service.

Setion I: Various Categories of Health Workers

Specific Objectives:

1. Identify the broad categories of health workers.
2. Determine the categories of health workers in a given community, their background, skills and activities.
3. Interview representatives of two categories of health workers (other than nursing/midwifery) and focus on determining their goals.

Organization of Content

A. Categories of health workers

1. Physicians
2. Nurses - all levels
3. Midwives - all levels
4. Aides or auxiliaries (dressers)
5. Dentists
6. Social workers - all levels
7. Pharmacists
8. Health educators
9. Technicians
10. Sanitation workers
11. Statisticians
12. Lay leaders and workers
13. Volunteers
14. Traditional birth attendants or healers

B. Background

1. Professional schools
2. Training programs
3. On-the-job training
4. Levels of education
5. Levels of performance

Section I: Various Categories of Health Workers
Organization of Content - cont...

C. Skills

1. Health or medically oriented

2. Technically oriented

3. Administrative - management

4. Custodial

5. Therapeutic care

6. Rehabilitative care

7. Educational (preventive)

D. Activities

1. Health services

   a. Hospital
   b. Health center
   c. Dispensary
   d. Community

2. Education

   a. Health institutions
   b. Schools
   c. Community groups

3. Social Welfare

   a. Kinds of service available
   b. Eligibility
   c. Funding

4. Supportive services in community

   a. Education re: water, waste disposal, crops, etc.
   b. Investigation of problem areas
   c. Advice or consultation
   d. Planning and maintenance of basic services
   e. Extension services - agriculture and sanitation
   f. Religious groups
   g. Maintenance of order

5. Statistical

   a. Assessment
   b. Evaluation

Section I: Various Categories of Health Workers
Organization of Content - cont...

6. Lay workers and volunteers

   a. Education
   b. Promotion and support
   c. Special interest groups

      . Handicapped children
      . Heart disease
      . Cancer

Section II: Community Health Programs - Goals, Objectives and Component Parts

Specific Objectives:

1. Identify goals and objectives of health programs in the community.
2. Describe the component parts of health service and education programs.
3. Determine the components of a program in your community.
4. Using data on "Assessment of the community" (Module I-Section I), identify areas of need in a community for which no services are provided.

Organization of Content

A. Goals and objectives of health programs in the community

1. To meet health needs of the people
   a. As perceived by health workers
   b. As perceived by the people of the community
2. Provision of Services
   a. Preventive
   b. Diagnostic
   c. Therapeutic
   d. Restorative
3. Resources (availability)
   a. Hospitals
   b. Health Centers
   c. Dispensaries
   d. Supplies
   e. Manpower
   f. Finances
4. Provision of education
   a. Goals or purpose
      . For factual and informational data
      . For emphasis on preventive aspects of health and the environment
      . To promote action by the community and its leaders
   b. Location
      . In schools
      . In health-related facilities
      . In community groups
      . In the home (where indicated)

B. Component parts of a community health program

1. Control of communicable disease
   a. Case finding
   b. Diagnosis and treatment as needed

Section II: Community Health Programs - Goals, Objectives and Component Parts
Organization of Content - cont...

1. c. Nursing care
   d. Teaching and activating preventive aspects
   e. Immunization

2. Care of illnesses and accidents

   a. Case-finding
   b. Diagnosis and treatment as needed
   c. Nursing care
   d. Acute vs. chronic care
   e. Complications
   f. Care and support for the handicapped (physical, mental and social)
   g. Rehabilitation

3. Maternal and child health services including family planning

   a. Prenatal services
   b. Delivery
   c. Post-partum
   d. Family planning - education and service
   e. Child health services
   f. Crippled and handicapped children services

4. Nutrition

   a. Assessment (early case-finding)
   b. Education
   c. Supplemental feeding including iron and vitamins
   d. Advise on crops and their production
   e. Prevention of malnutrition
   f. Rehabilitation

5. School Health

   a. Screening programs
   b. Medical services
   c. Counseling services
   d. Psychological services
   e. Social welfare
   f. Educational - prevention
   g. Educational - Personal and environmental health

6. Adult health education and services

   a. Nutrition
   b. Disease prevention
   c. Parenting - child care
   d. Family planning - education and services

Section II: Community Health Programs - Goals, Objectives and Component Parts
Organization of Content - cont...

7. Environmental programs

   a. Safe water - wells, storage, protection, sterilization, etc.
   b. Waste disposal - principles, latrine building and maintenance
   c. Vector and rodent control - insecticides, netting, trash, etc.
   d. Housing
   e. Schools - safety, hygiene, design
   f. Hospitals - safety, hygiene, efficiency, design
   g. Other public buildings
   h. Prevention of damage from floods, fire
   i. Storage and protection of food supplies
   j. Prevention of air pollution

Section III: Nursing/Midwifery Activities and Contributions to Community Health Programs

Specific Objectives:

1. List the categories of nursing/midwifery personnel that may be found in the community.
2. Describe the various roles these personnel may assume.

Organization of Content

A. Categories of nursing/midwifery personnel (terminology may vary by country)

1. Registered level
   a. Nurses
   b. Midwives
   c. Public Health nurses
   d. Tutors
   e. Administrators - head nurses, matrons, supervisors
   f. Private practice
2. Enrolled level
   a. Nurses
   b. Midwives
   c. Administrators (see e above)
   d. Community nurses (in some countries)
3. Aides - auxiliaries
4. Traditional birth attendants and healers
5. Dressers
6. Other classifications

B. Various roles

1. Care of the sick
2. Promotor of health care, physical and psychological
   a. Prenatal
   b. Child health
   c. Screening programs
   d. Counselor - in school health, health centers, family planning centers and home visits
3. Community organizer
   a. Assessment of needs
   b. Assessment of resources
   c. Identification of community leaders
   d. Assessment of priorities (with leaders)
   e. Group organization - community involvement
   f. Definition of program objectives

Section III: Nursing/Midwifery Activities and Contributions to Community Health Programs

Organization of Content - cont...

B. 3. g. Determination of manpower needs
   h. Training program (if needed)
   i. Coordination of efforts with other health, social, educational workers
   j. Implementation and support of program
   k. Promotion of community leadership and independence
   l. Exploration of costs and funding
   m. Evaluation of efforts

4. The broad role of the educator

   a. General
   b. Integration of education and nursing service
   c. Development of teaching skills
   d. Adaptation of teaching skills

5. Areas of need and nursing competence in education

   a. Mother and child care
   b. Nutrition - basic needs and prevention of malnutrition
   c. Family planning - child spacing
   d. Human reproduction
   e. Nursing skills
   f. Child growht and development
   g. Stimulation of learning
   h. Parental observation and assessment
   i. Prevention of accidents
   j. Environmental hazards
   k. Other (by individual competence)

6. The nurse/midwife as community leader

   a. Influences - community respect for knowledge and performance
   b. Source of information
   c. Interpreter of medical diagnosis and technology
   d. Adviser
   e. Source of referral
   f. Nurse/midwife's respect for individual - compassion, understanding, concern

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CHAPTER 5:

INSTRUCTIONAL STRATEGIES

Frank T. Stritter

An instructional strategy can be very simply defined as a plan of learning activities designed to enable students to achieve a particular educational goal.

I. FACTORS INFLUENCING THE EFFECTIVENESS OF INSTRUCTION

Two important considerations influence the instructor's use of strategies for his/her instructional responsibilities. The first consideration is a workable set of programme/course goals or objectives defined as indications of what the students are expected to know, to do, or to feel as a result of instruction. Goals are general, often expressed in broad or abstract terms, and apply to an entire programme or course. An example of a goal is, "Students will develop an awareness of the needs of the elderly in relation to biological, sociological and psychological changes in the process of aging." An objective is more specific and might relate to a smaller segment of the instruction. An example might be, "Students will be able to describe the stages of psychological development in late life and be able to indicate the stage of a particular patient." The instructor can use goals and objectives as a guide in preparing a meaningful and consistent program and in selecting and organizing appropriate strategies.

A second important consideration influencing choice and use of strategies is an understanding of how people learn. A series of factors or variables should be considered regardless of the particular instructional strategy that one chooses. The more that one can attend to each factor in the development of instruction, the more he/she can be assured that optimal conditions for learning have been provided. Significant factors, described with specific

illustrations taken from the teaching of care for the aged, are the following:

A. MEANINGFULNESS

Students tend to learn more if they know why they are studying a particular topic, subject or skill - that is, what meaning it has for them. By carefully outlining the relative importance of the subject matter, its relation to what has been studied previously and to what will be studied in the future and its possible utility in the student's future, the meaningfulness of the subject can be enhanced.

> "It is recognized by practitioners in rural areas of Africa that many of the symptoms suffered by the elderly are either caused by or exacerbated by emotional factors. Understanding the psychological aspects of aging now will enable you to better deal with the care of elderly persons."

B. EXPECTATIONS

Students tend to learn better if they know what is expected of them, than if they do not know. Teachers should therefore inform students what they should be able to do as a result of the instruction and how well they should be able to do it. It is not necessary to be overly specific, but students do benefit from a guide for organizing their learning.

> "You should be able to illustrate the impact of 1) loss of self-image, 2) loss of family support, 3) diminished sexual ability, on the health status of the elderly by citing specific clinical examples, and then generalize your examples to the population of the elderly as much as you can justifiably."

C. PLEASANT CONDITIONS

A comfortable congenial setting is important to learning. If students like what they are doing and are not distracted by unpleasant characteristics in the environment, their learning will be likely to be effective and efficient.

"An introduction to the psychology of aging might be to have the students interview a variety of elderly men and women in their homes in both urban and rural settings and then to present and discuss the findings in a series of student conferences in the student lounge."

D. ACTIVE PRACTICE

The instruction should include opportunities for students to use the knowledge and/or skills which they are expected to learn in exercise. Such practice might be in the form of self-test, oral quizzes, simulated or practical exercises and should be provided for all students relatively frequently during the learning sequence. Requiring that students use the information actively - in ways that are consistent with one's objectives - is one of the most important learning principles that a teacher can apply in his/her teaching.

"Illustrate the impact of psychological factors on the health problems of the aged by analyzing the results of one of your interviews. Generalize your findings to the extent justified by the quality of your findings."

E. FEEDBACK

After students participate in practice exercises, they should be able to determine the results of their practice. Only through feedback of this nature can a student try out his understanding of the concepts being taught and correct any misunderstandings or deficiencies, that may be present. Feedback should provide some discussion of the appropriate response and indicate what can be done to achieve a better result.

"You have obviously understood the psychodynamics of the health situation of the widow you interviewed. You should be able to give her good medical care. Your generalizations however, are weak. After all, not all widows are childless as in the case you discussed."

F. REINFORCEMENT

Students should receive some type of reward or incentive for an approriate response or behavior. A positive reinforcement of this nature will be likely to strengthen the behavior that produces it and increase

the probability that it will re-occur. The best reinforcement comes through the task itself, that is when the student is correct and can make that determination. Other forms of reinforcement include attention, recognition, praise and/or confirmation of correct answers from the instructor, free time at the conclusion of a successful performance, time for social interaction with peers, grades and other awards. Whenever possible, be positive.

> "I intend to take the interview schedule you used in the rural setting and use it as an illustration for next year's course."

II. CATEGORIES OF INSTRUCTIONAL STRATEGIES*

Instructional strategies can be divided into two categories, one is instructional formats, which is the activity through which instruction occurs, or the manner in which it is organized. The other is instructional media, which is the manner in which information is communicated to a student. Representative types of media are diagrams or illustrations, printed language in books, self-instructional materials, films, slides or the individual teacher lecturing to the students. The following section will focus on a description of the principal instructional formats, indicate the major uses of each and list representative advantages and disadvantages.

A. LECTURE/DISCUSSION

This approach is most often used with large groups of students where the instructor is the primary source of information and normally communicates to students in a one way manner at a specific time and place, usually a lecture setting. Some students may have an opportunity to participate, but their interaction is generally limited and not planned. Lectures are efficient ways of communicating factual information and students generally find this approach adequate when recall of that information is tested at a later time.

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*) Material in this section is based on a typology developed by Charles P. Friedmann, of the Office of Medical Studies, University of North Carolina, School of Medicine.

In addition, the lecture often serves a modeling function, allowing students the opportunity to observe scholars and professionals in their roles. There are some disadvantages, however.

1. The learning needs of individual students cannot be accommodated easily,
2. The students' role is generally passive, and
3. Students do not generally acquire higher level intellectual abilities and attitudes as well as with some other formats.

Some important points should be remembered when lecturing:

1. The purpose and objectives of the lecture and their importance to learners should be communicated.
2. Any "ground rules" for audience participation should be set.
3. The material and its message should be organized and presented logically and sequentially.
4. Attention should be drawn to or focus upon the main points.
5. Specific examples should be used to illustrate main points.
6. The presentation should be paced so that students can take notes. Consider distributing outlines which will guide note taking.
7. Transitions should be made between different segments of the lecture.
8. Evidence should be cited to support statements, and facts should be separated from opinion.
9. The instructor should work with only one medium at a time.
10. Supplementary resources should be prepared and presented and authorities should be cited when appropriate.
11. The instructor's own viewpoint should be presented along with divergent viewpoints for contrast and comparison.
12. New and/or technical terminology should be clarified.
13. Student questions and comments should be stimulated, responded to and reinforced.
14. Summaries should be made periodically to reinforce important points and to achieve closure on issues.

B. SMALL GROUP INSTRUCTION

This approach promotes extensive peer interaction. It is organized around a specific task and utilizes small groups of less than 13 students.

The sessions are student-centered and controlled, with the instructor serving only as a resource. Studies have shown that groups tend to generate more and better information and that the members are more inclined to accept the results when they have an opportunity to discuss it in a group than if they merely accept it from a teacher or work it out individually. Group members in addition are more likely to apply correct concepts, develop appropriate attitudes, increase their motivation, and develop collaborative skills as a result of participation in small student centered groups.

Student-centered or small group discussion should have a task as its basis, not so specific that it will stifle creativity and student desired directions, but specific enough to provide some direction for the group. To begin the discussion, one might use a common experience followed by a "Why did --?" question, a problem without a specific solution or one that is controversial. For students to learn effectively through student-centered discussions, they should develop certain skills:

1. Clarifying what the group is trying to do,
2. Developing a willingness to talk about one's ideas openly and to listen and respond to the ideas of others,
3. Planning effectively and efficiently so that issues can be formulated and out-of-class assignment can be dete mined before the group breaks up,
4. Reinforcing the ideas of others so that their motivation to participate will be increased rather than decreased,
5. Sensitivity to the feelings of other group members,
6. Evaluating the various aspects and outcomes of the discussion.

C. SEMINARS

Like the previous approach, this one is based on group learning and active student participation, but in contrast each session is led by the instructor. In small group instruction, the instructor acts only as a resource and does not interfere unless asked by the students. In the seminar, the group leader adopts a democratic method of conduct. Policies and decisions are a matter of group discussion, but he facilitates, encourages and assists the process. By selecting the stimulus that sets the group in motion and by outlining the goals and procedural rules, he defines the group task. He establishes a model for behavior of other group members. He is the chief facilitator of communication

and interaction and is prepared to assume the role of expert when he feels it appropriate.

There are several seminar/discussion processes that can be used in a classroom setting:

1. Get-acquainted activities which facilitate group members' getting to know each other before significant discussion is undertaken. Each participant might be responsible for finding out something significant about another participant and then describe him/her to the group.
2. Individuals might work in pairs to undertake specific tasks or to provide each other feedback on the results of a task.
3. Discussions can be started with questions to specific people about problems, opinions, etc., which the leader knows that individuals hold.
4. Different participants and observers can be designated from meeting to meeting so that roles will be distributed and large groups can be broken into a manageable size for discussion.
5. Tasks can be organized so that groups compete against each other for results.
6. Cooperative tasks can be developed in which groups work together to complete a project or produce a product.
7. Paper and pencil exercises or questionnaires can be completed by individuals and then responses compared as a stimulus for discussion.
8. Case studies may be used in which students read background information prior to discussion and then arrive at a solution or recommendation. The group is asked the question - "Now what to do?"
9. In role playing students act out a particular situation or interaction, using clearly defined roles as a discussion stimulus.
10. Games can be used, usually involving two or more persons. Specific information on rules opposing interests or conflict, constraints, goals or expected conslusions may be provided.

D. INDIVIDUALIZED INSTRUCTION

In this approach the individual student works to accomplish specific learning tasks at his own rate. It has several unique characteristics. First, the content is organized into a series of sequential units. Second, each unit has objectives, i.e., statements describing what the learner is expected to know, do or feel as a result of the instruction. Third, each unit includes a learning activity provided in any of a variety of forms which can be pursued individually. Fourth, through a readiness test after each unit,

the student demonstrates that he can perform the objectives of the present unit before he/she can begin to work on the next one. Finally, the whole process has to be accomplished at the student's own individual rate. Students move step by step through each unit of the course or programme, ending only when they have completed all objectives. Contact with the instructor can be much or little, depending on the way instruction is organized. A course organized in this manner is designed to maximize success and reduce failure by permitting some students to finish before and others after the regularly scheduled completion time.

E. EXPERIENTIAL LEARNING

Through this approach a student or group of students learn independently. The instructor usually helps the students formulate problems, find answers and evaluate their own progress. Through an apprenticeship the students assume some portion of the role of a professional and endeavour to determine the "real world" relevance of the material, information or skills that they have been learning in the formal academic portion of the programme. Alternatively, the students may design, initiate or carry out their own projects. Here the students generally have complete responsibility for a project with a finite beginning and ending. For example, the student might carry out a survey and write the report. A final option for the student is to participate in an instructor-led project or team as a participant. He/she participates relatively autonomously, but nevertheless is definitely a junior colleague contributing only to the extent of his knowledge and experience.

III. ONE IMPORTANT POINT TO STRESS

One well-known fact about instruction is that there probably is no one best teaching strategy for all teachers to use with all students in all situations. There are ways for the teacher to make a decision, however. First a teacher may, on the basis of educational philosophy and personal preference, choose the strategy that best suits the needs of his students. Students learn differently; consequently this consideration may well be the most important.

More than one format or approach should be used whenever possible. Finally, a teacher must make a choice, yet be prepared to test and modify the decision. Thus, he must collect information on how well and how much students learn, how well they like it, how costly it is in time and money and how well the instructors like it. Using this information, the instructor can revise his programme to provide a better experience the next time it is offered.

[illegible]

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I. PURPOSES OF EVALUATION

In planning programmes of instruction, evaluation is usually the last step to be considered, if it is considered at all. Evaluation is frequently [illegible] after teaching has been designed and implemented. Yet if it is to achieve its primary goals, it must be planned before the teaching takes place in order to be maximally effective. If the teacher seriously thinks about what students should learn and how they can best learn it, he will have already laid a firm foundation upon which to base useful and productive evaluation efforts. In essence the three basic evaluation questions will have been posed:

1. Did the students learn what they should have learned?
2. How effective was the teaching in helping the students to learn what they should have learned?
3. What changes must be made in the teaching so that students will learn more effectively?

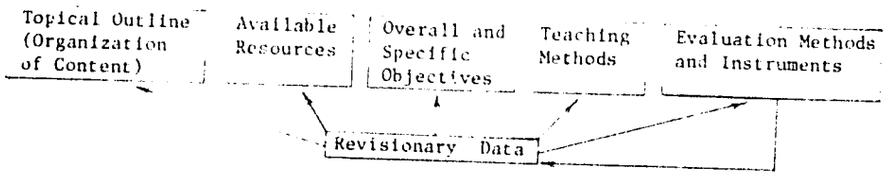
It is the task of evaluation to answer these questions. To do so the evaluation design should have:

1. diagnosed shortcomings in student learning,
2. established which skills and competencies students have acquired,
3. provided a solid base for assigning grades to students, and
4. detected areas of instruction that need revision, as well as those that are already effective in bringing about the desired learning outcomes.

This last point is extremely important since it suggests that much of the responsibility, and consequently, much of the credit or discredit for student learning rests in the hands of the teacher. As the designer, controller, and frequently, deliverer of instruction, the teacher must also be willing to share the consequences of his or her instructional actions. Students are not absolved of their responsibility for learning the material; on the contrary, learning is one of their major roles. But the teacher as the person who is a professionally recognized authority in a given field of learning must identify, define, and teach what is to be learned, and evaluate finally what is learned. If students are not sufficiently motivated to learn the material, the expert teacher cannot fault the students without first asking how he or she, as a teacher, can better motivate them to learn.

Instructional evaluation focuses on the teaching program designed and presented to the students. It is useful to conceptualize an instructional programme as a system for producing student learning. Although the components of instructional systems may differ according to the needs of a particular school, department, course, or teaching programme, there are generalizations which can be made. The Topical Outline for the Teaching of Family Health and its accompanying chapters illustrate the general categories of component parts. Such an instructional system is presented below, featuring the role of evaluation in relation to each component.

Figure 1: THE MAJOR COMPONENTS OF AN INSTRUCTIONAL SYSTEM AND THE ROLE OF EVALUATION IN PROVIDING REVISIONARY INFORMATION FOR IMPROVING THE SYSTEM



In the diagramme, the revisionary information is obtained from the evaluation methods and accompanying instruments that are utilized. Evaluation itself is also one of the other components in this instructional system. Although it generally occurs last in a sequence of components, it serves a controlling function over all of the other components, including itself. Evaluation provides the information necessary to improve each component in the system and to improve the interrelationships among components.

II. EVALUATION BASED UPON OBJECTIVES

A fundamental strategy is to evaluate on the basis of instructional objectives. That is, to start with the behavioral objectives of the instructional programme and determine through appropriately designed evaluation if they were, in fact, attained. These instruments must be so designed as to help the instructor detect which parts of the instructional system need improvement to provide more effective learning. Since the relationships among components of an instructional system are dynamic, a modification in one component will usually affect the other component, too. Thus, the evaluation plan should examine relationships among components while examining the individual components.

The specific instructional objectives are the keys to any instructional system. In measurable terms, they indicate precisely the skills the student must demonstrate. If these skilled behaviors cannot be performed, the student has probably not learned, or at least not very well, and the instructional system in one or more of its components is likely to need revision.

For example, if a number of students are unable to achieve a given instructional objective, one or more problems may be present:

1. Evaluation methods inaccurately measure results
2. Resources are inappropriate or inadequate
3. Teaching methods are ineffective
4. Specific objectives are too difficult to attain - unrealistic
5. Curricular topics are irrelevant to the achievement of objectives

The first problem to consider is the quality of the evaluation methods. Do they provide useful information on student learning and the effectiveness of the instructional programme? Fortunately, this problem can be minimized fairly easily, if instructional objectives are specified, since they indicate observable, measurable skills that students must exhibit. The success of student learning or instructional programmes is based on the performance of the skills specified in the objectives. The challenge for faculty therefore is: a. to specify the conditions under which the behavior must be demonstrated and measured, and b. the degree to which or how well it must be performed.

These questions having been settled, evaluation methods can be devised. Once they provide valid, consistent, and objective information, the remaining components of the instructional system can be assessed and revised accordingly.

III. EVALUATION PROBLEMS, CRITERIA, AND METHODS

Teaching faculty are likely to be the best judges of what evaluation conditions (situation in which students demonstrate learning) and criteria (how well they must perform) are most representative of the professional context in which their students will eventually practice. They should identify these conditions and criteria, therefore, and incorporate them into each performance objective as the faculty see fit.

Out of a general pool of evaluation techniques, those that are appropriate for measuring and teaching certain kinds of student skills can be selected. These techniques are presented in the table below.

EVALUATION OF STUDENTS		
Skill Area	Evaluation Criteria	Evaluation Methods
1. Clinical Procedures	Quality of student performance	Observation checklists, case studies, simulations, rating scales, patient records, patient interviews, student interviews
2. Clinical knowledge of science material	Quality of student performance	Written and oral examinations, problem solving, case studies

EVALUATION OF TEACHING

Skill Area	Evaluation Criteria	Evaluation Methods
1. Motivation of students	Quality of student performance, degree of student effort	All types of examinations, interviews, perception of content relevance
2. Evaluation Methods	Consistency and usefulness of results	Questionnaires or interviews with checklists, rating scales, open-ended items related to specific problem areas, observation forms
3. Teaching Methods	Instructional characteristics, logical consistency with objectives and resources cost-benefit	Interviews with students and colleagues, observation checklists, cost analysis
4. Resources	Cost-benefit of instructional materials, aids or personnel, logical consistency between objectives and teaching methods	Observation forms, cost calculations, document examination
5. Objectives	Degree of student achievement	Test scores, interviews and questionnaires to students or colleagues
6. Topics	Agreement of experts	Professional literature, survey of colleagues

IV. CONTINUOUS EVALUATION

Evaluation of students and instruction should occur continuously from the planning stages, through the teaching itself, and finally, after it has been completed. Just as each of these stages is necessary, so are evaluation data regarding the success of each one. The sooner a component is evaluated, the sooner it can be improved.

The sooner a student's behavior is assessed, the sooner he or she can correct it if necessary. For example, student abilities and interests can be assessed before the curriculum is implemented; resources and constraints

can be identified early. So can teaching and evaluation methods. By the same token, all of these can be monitored throughout the design and implementation of the course and after it has been completed.

V. IMPLICATIONS OF THE EVALUATION STRATEGY

Evaluation by objectives can be an extremely powerful strategy for implementing A Topical Outline for the Teaching of Family Health: A Life-Cycle Approach since it provides continuous valid, consistent and objective data regarding student achievement and instructional effectiveness. The evaluation by objectives strategy is of particular value with respect to the Topical Outline because the objectives have already been defined by a group of health practitioners and educators who are familiar with the kinds of skills needed in the practice of family health care in the African context. The evaluation by objectives strategy gives primary consideration to the professional judgment of each faculty member by drawing on his or her expertise in the specification of the conditions and criteria that should be employed in assessing student competence in important skill areas.

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African Medical and Research Foundation
Wilson Airport
P.O.B. 30125
Nairobi
Kenya

Bureau d'Etudes et de Recherches Pour la Promotion de la Sante
Kingu-Mayumbe
Republique du Zaire
(has materials in French and English)

Carolina Population Center
Educational Materials Program
University of North Carolina
401 University Square
Chapel Hill, N.C. 27514
U.S.A.

Catholic Relief Fund
11 Rue de Cornavin
CH-1201 Geneva
Switzerland

ENI Communication Centre
P.O.B. 2361
Addis Ababa
Ehtiopia

Foundation for Teaching Aids at Low Cost (TALC)
Institute for Child Health
30 Guilford Street
London, WC1N 1EH
England

International Audio-Visual Resource Service
Dorland House
18-20 Lower Regent Street
London, SW1Y 4PW
England

International Planned Parenthood Federation:

Headquarters:
18-20 Lower Regent Street
London, SW1Y 4PW
England

Regional Office:
IPPF
P.O.B. 30234
Nairobi
Kenya

African Regional Council Sub-Office:
IPPF
P.O.B. 7699
Accra North
Ghana

Planned Parenthood Federation of America, Inc.:
The Alan Guttmacher Institute
151 Madison Avenue
New York, N.Y. 10022
U.S.A.

National Food and Nutrition Commission
P.O.B. 2669
Lusaka
Zambia

The Pathfinder Fund
850 Boylston Street
Boston, Massachusetts 02167
U.S.A.

Population Reference Bureau
1755 Massachusetts Avenue N.W.
Washington, D.C. 20036
U.S.A.

Royal Tropical Institute
Department of Tropical Hygiene
63 Mauritskade
Amsterdam
The Netherlands

World Council of Churches
Christian Medical Commission
150 Route de Ferney
CH-1211 Geneva 20
Switzerland

Also:
475 Riverside Drive
New York, N.Y. 10027
U.S.A.

World Health Organization
Distribution and Sales Services
CH-1211 Geneva 27
Switzerland

Population Council
245 Park Avenue
New York, N.Y. 10017
U.S.A