NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF HEALTH SCIENCES

COURSE CODE: PHS 311

COURSE TITLE: CHILD HEALTH

COURSE GUIDE

CHS 311
CHILD HEALTH

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INTRODUCTION

Children represent the future. Ensuring their healthy growth and development ought to be the concern of all societies. Newborn are particularly vulnerable and "children are vulnerable to malnutrition and infectious diseases, many of which can effectively be prevented or treated. Newborn life is fragile almost close to four million children die every year within a month of their birth. Health risks to newborn are minimised by quality care during pregnancy Safe delivery by a skilled birth attendant.

Strong neonatal care: immediate attention to breathing, warmth, hygienic cord and skin care and exclusive breastfeeding.

WHAT YOU WILL LEARN IN THIS COURSE.

This course consists of units and a course guide. This course guide tells you briefly what the course is about, what course materials you will be using and how you can work with these materials. It also advocates some general guidelines for the amount of time you are likely to spent on each unit of the course in order to complete it successfully.

It will also guide you in the area of your Tutor- marked assignment which will be made available in the assignment file.

It is advisable to attend these tutorial sessions. The course will enlighten you on child care and some of the challenges which a child faces and how to go about them.

COURSE AIMS

This course aims to provide you with the care of the child age (under-5 years) and some of the challenges and their solutions.

COURSE OBJECTIVES

The course has a set of objectives. Each unit has specific objectives which are at the beginning of the unit. You should always read the unit at the beginning and the end of your studies to check on your progress. It can also be referred to during the course of your studying the unit. This will enable you to follow the instruction in the unit.

Below are some of the courses by meeting these objectives you will have achieved the aims of the course as a whole. After going through the course, you should be able to:

- assess the condition of the new born
- describe the physiological changes taking place at birth
- identify various ways of child care
- describe the physical growth and various aspect of development of the new born
- assess the health with daily examination of the new born
- identify the breastfeeding and complementary feeding of the child
- monitor food hygiene and safety measures
- give immunisation to the under-5 children
- identify some of the conditions that expose the babies to risk
- explain IMCI (Integrated Management of Childhood Illness)
- tell why IMCI is a better approach
- state what community integrated management of childhood illness (IMCI) is
- enumerate some of the conditions which may expose the child to grave danger
- recognise the right of the child
- tell who a child is and child justice.

WORKING THROUGH THIS COURSE

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

THE COURSE MATERIALS

STUDY UNITS

The study unit in this course is as follows:

Module 1 Physoilogy Care of the New Born

Unit 1 Physiology of the New Born
Unit 2 Care of the New Born

Module 2

Unit 1 Process of Growth in Children 0-5 Years (1)
Unit 2 Process of Growth in Children (11)
Unit 3 Nutrition in Children (1)
Unit 4 Nutrition in Children (11)

Module 3

Unit 1 Assessment of the Health of Children Under 5 (1)
Unit 2 Assessment of Children Under 5 (1)
Unit 3 Immunisation Status of Children 0-5Years(1)
Unit 4 Immunition Status of Children 0-5 (1)

Module 4

Unit 1 Children Who are at Risk
Unit 2 Concept of Integrated Management of Childhood Illness (IMCI)
Unit 3 Community Integrated Management of Childhood Illness (IMCI)
Unit 4 Condition Which May Expose the Child to Grave Danger
Unit 5 Right of the Child

Each unit consists of one or two weeks' work and includes an introduction, objectives, reading materials, exercises, conclusion, summary Tutors- Marked Assignments (TMAs), references and other resources. The unit directs you to work on exercises and tests you on the required reading. In general, these exercises test you on the materials you have just covered or require you to apply it in some way and thereby assist you to evaluate your progress and to reinforce your comprehension of the material. Together with TMAs, these exercises will help you in achieving the stated learning objectives of the individual units and of the course as a whole.

PRESENTATION SCHEDULE

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

ASSESSMENT

There are three aspects to assessment of the course. First is made up of self-assessment exercises, second consists of the tutor-marked assignments and third is the written examination/end of course examination.

You are advised to do the exercises. In tackling the assignments, you are expected to apply information, knowledge and techniques, gathered during the course. The assignments must be submitted to your facilitator

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

TUTOR-MARKED ASSIGNMENT

The TMA is a continuous assessment component of your course. It accounts for 30% of the total score. You will be given four (4) TMAs to answer. Three of these must be answered before you are allowed to sit for the end of course examination. The TMAs would be given to you by your facilitator and returned after you have done the assignment. Assignment questions for the units in this course are contained in the assignment file. You will be able to complete your assignment from the information and material contained in your reading, references and study units. However, it is desirable in all degree level of education to demonstrate that you have read and researched more into your

references which will give you a wider view point and may provide you with a deeper understanding of the subject.

Make sure that each assignment reaches your facilitator on or before the deadline given in the presentation schedule and assignment file. If for any reason you cannot complete your work on time, contact your facilitator before the assignment is due to discuss the possibility of an extension. Extension will not be granted after the due date unless there are exceptional circumstances.

FINAL EXAMINATION AND GRADING

The end of course examination for introduction to Rural Sociology will be for about 3 hours and it has a value of 70% of the total course work. The examination will consist of questions, which will reflect the type of self-testing, practice exercise and tutor-marked assignment problems you have previously encountered. All areas of the course will be assessed.

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

COURSE MARKING SCHEME

Assignment	**Marks**
Assignments 1-4	Four assignments, best three marks of the four count at 10% each -30% of course marks.
End of course examination	70% of overall course marks.
Total	100% of course materials.

FACILITATORS/TUTORS AND TUTORIALS

There are 16 hours of tutorials provided in support of this course. You will be notified of the dates, times and location of these tutorials as well as the name and phone number of your facilitator, as soon as you are allocated a tutorial group.

Your facilitator will mark and comment on your assignments, keep a close watch on your progress and any difficulties you might face and provide assistance to you during the course. You are expected to mail your Tutor Marked Assignment to your facilitator before the schedule date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible.

Do not delay to contact your facilitator by telephone or e-mail if you need assistance.

The following might be circumstances in which you would find assistance necessary, hence you would have to contact your facilitator if:

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

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

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

I wish you success in the course and also hope that this material will be interesting and useful to you.

MAIN COURSE

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MODULE 1 PHYSOILOGY CARE OF THE NEW BORN

Unit 1 Physiology of the New Born
Unit 2 Care of the New Born

UNIT 1 PHYSIOLOGY OF THE NEW BORN

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2.0 Objectives
3.0 Main Content
    3.1 Assessment of the Condition of a Newborn
    3.2 Psychological Changes Taking Place at Birth
    3.3 Adaptation of Extra-uterine Life
4.0 Conclusion
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1.0 INTRODUCTION

The birth process is stressful to the body and therefore demands its adaptation to ensure survival. The condition of the baby at the 1st few minutes (about 5 minutes) can therefore predict the survival rate of the child. As soon as the baby is born, the midwife dries its skin. Assessment of the condition of the baby at 1 and 5 minutes after birth is done using the Apgar score. Major adjustment takes place. This initial adaptation is crucial to the baby's subsequent well-being and should be understood and facilitated by the midwife at the time of birth. There are a number of changes that an infant's body undergoes to allow it to survive outside the womb and adapt to life in a new environment. More than half of the life-born children who do not survive until adolescence die in the 1st week of life and most of these early neonatal deaths may be regarded as representing a failure of the adaptation of extra-uterine life (clement, 1959). Understanding of the physiology of the newborn is therefore very important.

2.0 OBJECTIVES

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

- assess and tell the condition of a newborn
- describe the physiological changes taking place at birth

- discuss adaptation of extra-uterine life
- imitate breathing in the newborn.

3.0 MAIN CONTENT

3.1 Assessment of the Condition of a Newborn

It is the responsibility of the midwife as soon as she takes delivery of the newborn to dry the skin with special attention to the head. This helps to minimise heat loss. At 1 minute and 5 minutes, the condition of the baby is assessed by using "apgar score". Apgar score gives an indication of the baby's ability to adapt to extra-uterine life (Cronje & Grobler 2003).

Assessment at 1 minute indicate the degree of central suppression of baby and it is important for further management of resuscitation. The 5 minutes apgar score gives an indication of the baby's ability to adapt to extra-uterine life (Gronje & Grobler, 2003). The higher the score, the better the outcome for the baby.

Table 1.1 The apgar score is assessed at 1minute and 5 minutes after birth. Medical aid should be sought if the score is less than 7. 'Apgar minus colour' score omits the fifth sign. Medical aid should be sought if score is less than 6.

	Score		
Sign	0	1	2
Heart rate	Absent	Less than 100 b.p.m	More than 100 b.p.m
Respiratory effort	Absent	Slow, irregular	Good or crying
Muscle tone	Limp	Some flexion of limbs	Active
Reflex response to stimulus	None	Minimal grimace	Cough or sneeze
Colour	Blue, pale	Body pink, extremities blue	Completely pink

Adapted from: Myles Textbook for Midwives 2006

The apgar score is assessed as follows:

- A mnemonic
- Appearance
- Pulse (heart rate)
- Grimace (i.e. response to stimuli)
- Active (i.e. tone)
- Respiration

3.2 Physiological Changes Taking Place at Birth

Respiratory system
The normal baby has a shallow, erratic and diaphragmatic breathing pattern, resting respiratory rate of 35-40 breaths per minute, chest and abdomen rising and falling synchronously. Respirations are interspersed with brief 10-15 minutes second periods of apnea.

This is known as periodic breathing. Apart from the initial profound respiratory efforts at birth, no nasal flaring, sterna or sub coastal recession or grunting is present. Pattern of respiration alters during sleeping and walking states. Respiration difficulties can occur because of neurological, metabolic, circulatory or thermoregulatory dysfunction as well as infection, airway obstruction or abnormalities of the respiratory tract itself (Myles 2006).

Babies have a lusty cry, which evokes an immediate response from careers. The cry is normally loud and of medium pitch, unless neurological damage, infection or hypothermia is present, when it may be high pitched or weak. Transient cyanosis may arise in the first few days when the baby is crying and altered pressure gradients increase right-to-left shunts within the heart and great vessels. This is of no clinical significance (Myles 2006).

Lungs and Circulatory System
At birth, the baby's lungs are filled with amniotic fluid and are not inflated. The baby takes the first breath within about 10 seconds after delivery. It sounds like a gasp as the newborn's central nervous system reacts to the sudden change in temperature and environment. Once the umbilical cord is cut and the baby takes the first breath, a number of changes occur in the infant's lungs and circulatory system:

- Increased oxygen in the lungs causes a decrease in blood flow resistance to the lungs.
- Blood flow resistance of the baby's blood vessels also increases.
- Amniotic fluid drains is absorbed from the respiratory system
- The lungs inflate and begin working on their own, moving oxygen into the bloodstream and removing carbon-dioxide by breathing out (exhalation).

Temperature Regulation
A developing baby produces heat about twice as much as an adult. That heat dissipates as blood flows into the mother's circulation via the placenta and is cooled. A small amount of heat is removed through the developing baby skin, the amniotic fluid and the uterine wall.

After delivery, the newborn begins to lose heat. Receptors on the baby's skin send messages to the brain that the baby's body is cold. The baby's body then creates heat by non shivering thermogenosis and by burning stores of brown fat (a type of fat found only in fetuses and newborns).

Liver
In the foetus, the liver acts as a storage site for sugar (glycogen) and iron. When the baby is born, the liver has various functions:

- It produces substances that help the blood to clot.
- It begins breaking down waste products such as excess red blood cells.
- It produces a protein that helps break down bilirubin. If the baby's body does not properly break down bilirubin, it can lead to newborn jaundice.

Urinary System
The developing baby's kidney begins producing urine by 9-12 weeks into the pregnancy. After birth, the newborn will usually urinate within the first 24 hours of life. The kidneys become able to maintain the body's fluid and electrolyte balance.

The rate at which blood filters through the kidney (glomerular filtration rate) increases sharply after birth and in the first 2 weeks of life,still it takes some time for the kidneys to get up to speed. Newborns have less ability to remove excess salt (Sodium), to concentrate or dilute the urine compared to adults. This ability improves over time.

Gastrointestinal Tract
A baby's gastrointestinal system doesn't fully function until after birth. In late pregnancy, the foetus produces a tarry green or black waste substance called Meconium. Meconium is the medical term for the newborn infant's first stools.

Meconium is composed of amniotic fluid, mucous, lanugo (the fine hair that covers the baby's body), bile and cells that have been shed from the skin and intestinal tract. In some cases, the baby passes stools (Meconium) while still inside the uterus.

3.3 Adaptation of Extra-Uterine Life

Pulmonary adaptation
Until the time of birth, the foetus depends upon maternal blood gas exchange via the maternal lung and the placenta. Following the sudden removal of the placenta after delivery, very rapid adaptation takes place to ensure continued survival.

Before birth, the foetal lung is full of fluid which is excreted by the lung itself. During birth, this fluid leaves the alveoli either by being squeezed up the airway and out of the mouth and nose, or by moving across the alveoli walls where it is drained by the lymphatic system (dekock & van der walt 2004)

The stimuli of respiration include mild hypercapnia, hypoxia and acidosis which result from labour, due partially to the intermittent cessation of maternal-placental perfusion with contraction (Myles 2006). Considerable negative intrathoracic pressure of up to 9.8 KPa (100cm water) is excreted as the first breath is taken. The pressure exerted to effect inhalation diminishes with each breath taking until only 5cm water pressure is required to inflate the lungs. This effect is caused by surfactant, which lines the alveoli, lowering the surface tension thus permitting residual air to remain in the alveoli between breaths. Surfactant is a complex of lipoproteins and proteins produced by the alveolar type 2 cells in the lungs and is primarily concerned with the reduction in surface tension at the alveolar surface, thus reducing the work of breathing (Halliday et al 1998, de kock & van der walt 2004)

Cardiovascular Adaptation

Before birth, the foetus relies solely on the placenta for all gas exchanges and excretion of metabolic waste. Following separation of the baby from the placenta at birth its circulatory system makes major adjustments in order to divert deoxygenated blood to the lungs for reoxygenation. This involves several mechanisms which are influenced by the clamping of the umbilical cord and by lowered resistance in the pulmonary vascular bed (Myles 2006)

During fetal life only approximately 10% of the cardiac output is circulated to the lungs through the pulmonary artery. With the expansion of the lungs and lowered pulmonary vascular resistance, virtually all of the cardiac output is sent to the lungs. Oxygenated blood returning to the heart from the lungs increases the pressure within the left atrium. At almost the same time, pressure in the right atrium is lowered because blood ceases to flow through the cord. As a result, a functional closure of the foramen ovale is achieved. During the first days of life this closure is reversible; reopening may occur if pulmonary vascular resistance is high, for example when crying, resulting in transient cyanotic episodes in the baby (Perry 1995, de Kock &van der Walt 2004). The septa usually fuse within the 1st year of life, forming the interatrial septum, though in some individuals perfect anatomical closure may never be achieved.

The ductus arteriosus, which is nearly as wide as the aorta, provides a diversionary route to bypass the lungs of the fetus. Contraction of its

muscular walls occurs almost immediately after birth. This is thought to occur because of sensitivity of the muscle of the ductus arteriosus to increased oxygen tension and reduction in circulating prostaglandin (Heyman 1989). As a result of altered pressure gradients between the aorta and pulmonary artery, a temporary reverse left-to-right shunt through the ductus may persist for a few hours, although there is usually functional closure of the ductus within 8-10 hours of birth. Intermittent patency has been demonstrated in most healthy infants in the first 3 days of life (Lim et al 1992), but complete closure takes several months. Persistence or reopening of the ductus, with associated cyanosis or cyanotic attacks, may occur if pulmonary vascular resistance is high or hypoxia is present. This is a common problem in preterm infants with respiratory distress syndrome. Persistence of the foramen ovale or ductus arteriosus, or both, may be lifesaving in some forms of congenital heart abnormality

The remaining temporary structures of the fetal circulation – the umbilical vein, ductus venosus and hypogastric arteries – close functionality within a few minutes after birth and construction of the cord. Anatomical closure by fibrous tissue occurs within 2-3 months, resulting in the formation of the ligamentum teres, ligamentum venosum and the obliterated hypogastric arteries. The proximal portions of the hypogastric arteries persist as the superior vesical arteries.

4.0 CONCLUSION

A newborn baby's survival is dependent on the condition at birth and its ability to adapt to an extra-uterine environment. This involves adaptation in cardiopulmonary circulation and other physiological adjustments to replace placental function and maintain homeostasis. The midwife therefore must be knowledgeable and skillful on the management and care of the newborn for survival.

5.0 SUMMARY

The birth process is stressful to the baby and therefore demands its adaptation to ensure survival. This unit dealt with the assessment of the condition of the newborn by the use of Apgar score to measure the condition of the newborn in 1 minute and 5 minutes and physiological changes taking place at birth.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is apgar score?
ii. Explain the concept of Apgar score with the aid of a diagram
iii. Discuss physiological changes of the newborn at birth

iv Explain the following terms:
- Tachypnoea
- Homeostasis
- Apnea
- Cyanosis

7.0 REFERENCES/FURTHER READING

Apgar, V. (1953). *A proposal for a new method of evaluation of the newborn infant:* Current research in Anesthesiology and analgesics.

Gronje NS, Gobbler. (CIF 2003). *Obstetrics in South Africa 2nd ed*. Pretoria Van Schaik publishers

www.safemotherhood.org

(Myles 2006). *Textbook for midwives African ed.* U.K. Olservier ltd.

UNIT 2 CARE OF THE NEWBORN

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    3.2 Prevention of Hypothermia
    3.3 Prevention of Infection
    3.4 Skin Care
    3.5 Circumcision
    3.6 Extra Tips for Bathing the Newborns
        3.6.1 Daily Examination
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

In caring for the normal baby, it is the midwife's duty to ensure that the baby is made comfortable, fed and that facilities are available for the parents to help them with the attachment process. It is also important to ensure that the baby is protected from:

- airway obstruction
- hypothermia
- infection
- injury and accident

2.0 OBJECTIVES

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

- recognise the various ways of child care which includes:
    - prevention of airway obstruction
    - prevention of hypothermia
    - prevention of infection
    - prevention of injury and accident
- extra tips for bathing the newborn and some of the daily examinations done on the newborn will be highlighted.

3.0 MAIN CONTENT

3.1 Prevention of Airway Obstruction

Choking can occur during feeding if coordination is poor and also following vomiting or regurgitation of mucus or feed. The recommended sleeping position for the baby is in supine position (on his back) with the head turned to the side, or on its side with the lower arm stretched out in front to prevent the baby from rolling over onto its face and feet at the foot of the cot (de Kock & van der Walt 2004, Foundation for the Study of Infant Deaths 1996, Lener 1993). Suction apparatus should be readily available so that aspiration of the baby's airway can be effected quickly.

3.2 Prevention of Hypothermia

Heat loss through evaporation, radiation, convection or conduction, should be avoided at all times. Where possible the room temperature should be maintained at 32_c^o-34^oC. The baby should be dressed and covered appropriately with sufficient blankets. Babies having difficulty in maintaining a stable body temperature should be nursed in an incubator until stable. In cold environments, extra blankets may be required. Bath water should be warm (37^oC) and wet clothing should be changed as soon as possible. It is essential also to avoid overheating (de Kock & van der Walt 2004, Bacon 1991, Ruter 1992, Thomas 1994). Advice regarding clothing and bedding can only be a guide as babies have marked individual variations in their metabolic rates (Hull et al 1996a). Parents should be advised to take account of environmental temperature when dressing their baby. Swaddling should be loose enough to permit movement of arms and legs, allowing adjustment to posture in response to the need for a change in temperature (Hull et al 1996b).

3.3 Prevention of Infection

The baby's skin is a barrier to infection provided its integrity and pH balance are maintained. Bedsides should be provided with their own equipment. Adequate linen supplies are essential. The number of people handling the baby should be restricted. Members of staff who are liable to be a source of infection should not handle babies, and friends and relatives who have colds or sore throats (especially children) should not visit. Hand washing before and after handling babies is essential. Cross-infection can be a particular problem in hospitals. For this reason rooming-in and explicit instructions to parents regarding the importance of hand washing are recommended. The wearing of a plastic apron that can be wiped down is recommended when handling many babies.

3.4 Skin Care

Promotion of skin integrity is enhanced by avoiding friction against hard fabrics or soiled or wet clothing, and by minimising the length of time the skin is in contact with irritants such as gastric contents, urine and stool. Cleansing of the skin should be carried out gently to prevent damage to the epidermis. Soaps, creams, isopropyl alcohol and other skin care preparations should be used with caution to prevent irritation and disturbance of the skin PH and absorption of topical agents. Baby soaps and other baby-washing solutions are usually pH adjusted. In some centres hexachlorophene-based soap or liquid preparations (maximum concentration 3%) are used for cleansing the baby's skin (excluding the face). It is important to remember that these preparations should be rinsed off the skin, as the risk of absorption of hexachlorophene has to be considered (Michie 1996).

The timing of the first bath is not critical, although it has been suggested that removal of blood and liquor reduces the risk of transmission of HIV and other organisms to staff (Penny-MacGillivray 1996). Bathing should be deferred until the baby's temperature is above 36.5^{o}C. The temperature of the bath water should be 37^{o}C. The hair is washed and dried carefully at the first bath but need not be washed daily. If the baby has been regurgitating mucus, a thin layer of petroleum jelly may be applied to the cheek to prevent soreness. Petroleum jelly applied to the buttocks will prevent meconium adhering to the skin and causing excoriation.

Daily bathing is not essential but the mother should be given sufficient opportunities to bath her baby in order to increase her confidence. 'Topping and tailing' (cleansing the baby's face, skin flexures and napkin area only) may be carried out once or twice a day. It should be noted that the greater heat loss may be incurred during this procedure than when the baby is bathed (Perry 1995).

The baby's eyes do not need to be cleansed unless a discharge is present. Attention should be paid to the washing and drying of skin flexures to prevent excoriation. The buttocks must be washed and dried carefully at every napkin change. Sore buttocks may occur if the stools are loose, if there is protracted delay in changing a soiled napkin or if the skin is traumatised by over-enthusiastic rubbing. Regular use of a barrier cream is recommended by some people (Jethwa 1994) but may interfere with the 'one-way' membrane in disposable nappies.

Cleanliness of the umbilical cord is essential. Hand washing is required before and after handling the cord. No specific cord treatment is required, although a wide variety of preparations have been used to

promote early separation. However, it should be noted that topical applications could interfere with the normal process of colonisation and delay separation. Cleansing with tap water and keeping the cord dry have been shown to promote separation (Barclay et al 1994, Mugford et al 1986, Rush 1990, Salariya & Kowbus 1988, Verber & Pagan 1993). It is advisable to ensure that the cord is not enclosed within the baby's napkin where contamination by urine or faeces may occur. The cord clamp is removed on the third day provided the cord is dry and necrosed.

3.5 Circumcision

Although not commonly practiced in SA neonatal circumcision may be undertaken whilst the baby is in hospital. There is little evidence to support this practice as beneficial; rather it is a traditional cultural custom (Gonik & Barrett 1995). It is recommended that appropriate anaesthesia, dorsal penile nerve block is used for this procedure and that postoperative analgesia is also prescribed (Rabinowitz & Hulbert 1995). After care involves the use of non-adherent dressing, observing for haemorrhage and keeping the area clean and dry.

Vaccination and immunisation: BCG and poliomyelitis vaccination are given before the baby is discharged home unless contraindicated

3.6 Prevention of Injury and Accident

Sensible precautions should be observed by all staff in their own practice and explained to the parents. A baby should not be left unattended unless in a cot to prevent falling. A baby should be moved from place to place in a cot rather than in the arms and the bassinet should be flat not elevated, to prevent accident on uneven floors. If a larger crib is used, the cot sides should be up and secured. The cot design you comply with the standards. Babies do not require a pillow until the age of two years and mothers should be advised that placing a pillow behind the baby's head is unsafe. Similarly, polythene bags or sheeting should be used near a baby and waterproof mattress completely to prevent suffocation of the baby by a loose cover.

The temperature of bath water should be tested prior to immersing the baby to avoid scalding or chilling. The temperature of a bottle feed should also be tested before it is offered to the baby.

If safety pins are used to secure the napkin they should be inserted into the cloth from side to side (not vertical) and with one hand protecting the baby's abdomen to avoid penetration of the skin or genitalia. The baby with long or ragged nails may cause facial scratches. Mittens worn

to prevent this should be made from cotton material sewn in a way to prevent loose threads entwining the fingers and occluding the circulation.

Advice should also be given to mothers about safety in the home. This should address such issues as bed sharing, use of cat-nets, fireguards, cooker guards, stair gates, pram brakes and car seats. 'Smoking', 'Back to Sleep' and 'Feet-to-foot' advice should be reinforced (Foundation for the Study of Infant Deaths 1996).

3.7 Extra Tips for Bathing Newborns

- Have a towel ready to wrap your newborn and keep them warm right after the birth.
- Keep your baby's umbilical cord dry.
- Use warm, not hot water. Place your elbows under the water to check temperature.
- Wash your baby's head last so that their head does not get too cold.
- Bath your baby every 3 days.

3.7.1 Daily Examination

Each day, the baby should be examined by a midwife to evaluate progress and identity problems as they arise. The examination is similar to that undertaken at birth but is now concerned with monitoring daily changes in the baby and detecting any signs of infection.

A newborn baby usually sleeps for most of the time between feeds but should be alert and responsive when awake. Erratic sleep patterns may prove disconcerting to new parents and they should be reassured by the midwife that this can be normal if the baby looks healthy, is alert and is feeding well. Undue lethargy or irritability may indicate cerebral damage or sepsis.

The skin is barometer of the baby's hydration and general well-being. The midwife's knowledge of its normal parameters and minor variations assists in the interpretation of her findings.

The examination begins by noting the baby's posture, colour and respirations. Any cyanosis should be reported to the pediatrician immediately. Jaundice may be noted from the 3rd day and is abnormal if it arises earlier, deepens or persists beyond the 7th day. If a baby remains jaundiced on discharge from hospital the midwife must instruct the parent to report to the nearest clinic or doctor if the baby's stools

become pale or if the urine becomes dark, which may be suggestive of biliary atresia

Palpation of the head permits assessments of the anterior fontanelle (which should be soft and flat), resolution of the caput succedaneum and moulding, and allows identification of any new swellings, for example cephalhaematoma.

The baby's eyes and mouth are inspected for signs of infection. Sticky eyes are cleansed with sterile water after obtaining a swab for culture and sensitivity testing. The mouth should be clean and moist. Adherent white plaques indicate oral thrush infection. Suckling blisters on the baby's lips may be observed, especially after feeding. These do not require any treatment.

It is important for the midwife to note response to handling and noise as she undresses the baby. She can use this time to inspect the identity bands, and have a discussion with the mother about feeding or any other concerns that the latter may have.

The skin, especially in flexures and between the digits, is inspected for rashes, septic spots, excoriation or abrasions. Skin rashes such as erythema toxicum, a red blotchy rash, are of little significance. Sometimes a harlequin colour change may be noted; this is a very rare but dramatic colour change, with midline demarcation of colour. The baby is red on one side of the trunk and pale on the other side. This is caused by vasomotor instability and is of little importance. However, its appearance is startling and can alarm the mother.

The fingertips and toes are examined for ragged nails and paronychia. Septic spots must be differentiated from milia, which do not require treatment. Even a few septic spots must be taken seriously. The paediatrician may prescribe topical applications or systemic antibiotics and consider possible isolation of the baby.

The umbilical cord base is inspected for bleeding, redness, swelling and discharge and the mother is reminded about care. In some areas the baby's temperature is recorded with a low-recording thermometer. This may be taken in the axilla, ear, in the groin or rectally. If the rectal route is used it is essential that the baby's legs and the thermometer are held firmly to prevent sudden movement, which could cause the thermometer to break and perforate the rectum. The midwife should ensure that the bulb of the thermometer is inserted no further than 2.5cm into the rectum. Concern regarding the risk of injury has led to an increased use of alternative methods of measuring babies' temperatures. This concern must be balanced against the need for an accurate estimate of core

temperature when babies are ill (Morley 1992). Midwives should comply with local policy in regard to rectal temperature taking.

The phases of stools are observed in relation to the baby's age and the type of milk ingested. Non-passage of stools or vomiting helps to identify abnormalities of the gastrointestinal tract, inborn errors of metabolism and infection. Constipation may be alleviated by exclusive breast feeding. Loose, watery stools may signify sugar intolerance or infection and may cause sore buttocks. Sore buttocks may be treated by exposure to the air, but care must be taken to avoid chilling the baby. The frequency of passing urine and stools in the preceding 24 hours should be noted.

During feeds the midwife should observe the baby's eagerness or reluctance to feed and the coordination of suckling and swallowing reflexes, as well as noting the frequency with which the baby demands feeds. During feeding, babies clench their fists, tuck them under the chin and wriggle their toes while grasping their mother's fingers. Eye contact also occurs, which enhances communication between mother and baby. Suckling is interspersed with rest periods. Abnormal feeding behaviour may signify cerebral damage, congenital abnormality or illness. Breast engorgement and pseudo menstruation require no treatment but explanation to the mother is essential. No attempt should be made to express engorged breasts.

If the baby is to be weighed, this is done before dressing, and the result compared with his birth weight. A common regimen is weighing every 3rd day. Weight loss is normal in the first few days but more than 10% bodyweight loss is abnormal and requires investigation. Most babies regain their birth weight in 7-10 days, thereafter gaining weight at a rate of 150-200g per week.

All findings at the daily examination are entered in the baby's records and abnormalities reported. Parents can be introduced to the concept of daily examination and gradually assume this responsibility as their confidence increases. This helps to enhance parent-baby interaction.

4.0 CONCLUSION

Care of the newborn is very important. The midwife should therefore apply her knowledge of the physiological and psychological capabilities to ensure that adequate care is given to the newborn. She should also ensure that optimal baby care is planned and provided and should also ensure happy family relationship.

5.0 SUMMARY

In this unit we have been able to see various ways of child care. Extra tips for bathing the newborn and care of the umbilical cord

6.0 TUTOR-MARKED ASSIGNMENT

i. How will you prevent the following condition in the newborn
   i) Airways obstruction
   ii) Hypothermia
   iii) Infection
   iv) Injury and accident
ii. List the tips for bathing the newborn.
iii. (a) Briefly explain how you will care for umbilical cord of the newborn.
   (b) What are the complications that can arise from improper care of the newborn.
iv. How will you assess the head of a newborn.

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MODULE 2

Unit 1 Process of Growth in Children 0-5 Years (1)
Unit 2 Process of Growth in Children (11)
Unit 3 Nutrition in Children (1)
Unit 4 Nutrition in Children (11)

UNIT 1 PROCESS OF GROWTH IN CHILDREN 0-5 YEARS (I)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Physical Growth
    3.2 Motor Development
    3.3 Cognitive Development
        3.3.1 Psychosocial Development
        3.3.2 Adaptive Skill Development
        3.3.3 Red Flags in Psychosocial Development
    3.4 Toddler Development
        3.4.1 Growth Rate and Physical Appearance
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Babies because of their physiological limitations are dependent on carers for continued survival, growth and development. These will progress satisfactorily only if the baby is physiologically and neurologically normal, the needs for nutrition, safety, warmth and comfort and psychological well-being are met.

Abnormality of the baby's body systems, inadequate nutrition or emotional deprivation will compromise the baby's ability to grow and develop to full potential (Moules & Ramsay 1998, Fry 1994). The relatively immature organ functions and the vulnerability to infection and hypothermia demand that care must be designed to meet needs and capabilities.

2.0 OBJECTIVES

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

- describe the physical growth
- identify motor development
- State cognitive development and
- psychological development of children 0-5 years
- recognise affective development.

3.0 MAIN CONTENT

3.1 Physical Growth

Fetal weight gain is greater during the third trimester. There is increase in weight in 2 weeks and doubles by 5 months. This rapid growth continues during the first few months of life after which the growth rate decreases. Height does not double until between 3 & 4 years of age. Head grows during the 5 or 6 months which later increases in size as a result of neuronal cell growth and supporting tissue proliferation. Growth varies depending on the child's genetic and ethnic characteristics.

AGE	HEAD CIRCUMFRENCE	HEIGHT	WEIGHT	DENTITION
Birth	35.0cm (13.8in) + 2cm/mo (0-3 mo) + 1cm/mo (3-6mo) + 0.5cm/mo (6-12mo)	50.8cm (200in)	3.0 to 3.5kg (6.6-7.6 lb) Regains birth weight by 2 wks. Doubles birth by 5mo	Central incisors – 6mo Lateral incisors - 8mo
1 year	47.0cm (18.5in)	76.2cm (30in)	10.0kg (22lb). Triples birth weight by 5mo	First molars - 14 mo Canines – 19mo
2 years	49.0cm (19.3in)	88.9cm (35in)	12-12.5kg (26.4-27.5 lb). Quadruples birth weight	Second molar - 24mo

ADAPTED FROM PEADIATRIC 5 MINUTES 2000 - 2002

3.2 Motor Development

i) Motor milestones: This is ascertained from the development history and observation. This growth/development begins with holding head up, rolling and progresses to sitting and then standing and ambulating.

ii) Fine motor development:
   a) The pincer grasp develops in the first month. In the second year of life the infant learns to use object as tools during play.
   b) Reading becomes more accurate, puts object in mouth for oral exploitation. As the pincher grasp and muscular vision improves, manual exploration replaces oral exploration.

NOTE: Persistent listing to one side at 3 months of age is the earliest indication of neuromotor dysfunction.

3.3 Cognitive Development

- 1st year: Recognises objects and associates them with their functions at the 1st year.
- 2nd year: Labels objects and action and categorises them. Matches objects that are the same and later matches an object to its picture.
- Ability to understand language. Expressive language skills reflect the ability to make thoughts, ideas, and desire known to others.
  Period of speech: 0 - 10 months
  Naming period: 10 – 18 months
  Word combination period: 18 – 24 months

3.3.1 Psychosocial Development

A. Emotional development

Emotions are present in infancy and motivate expression (pain elicits crying). Emotions are mediated through the limbic system.

B. Social development

1. Social milestones begin with bonding, which reflects the feeling of the caregiver for the child. Attachment represents the feeling of the infant for the caregiver, and it develops within a few months.
2. When recognition of an attachment to a caregiver develops, the simple sight of this person will elicit a smile. The infant becomes more discriminating in producing a smile as he begins to differentiate between familiar and unfamiliar faces. The infant learns to use smiling to manipulate the environment and satisfy personal needs.
3. Temperament represents the style of a child's emotional and behavioural response to situations.

3.3.2 Adaptive Skill Development.

Adaptive skills consist of the skills required for independence in feeding, dressing, toileting, and other activities of daily living. Development of adaptive skill is influenced by the infant's social environment, and by motor and cognitive skill attainment.

3.3.3 Red Flags in Psychosocial Development

1. Colic may be an early indication of a "difficult" temperament.
2. Delay in the appearance of a smile suggests an attachment problem, which may be associated with maternal depression. In severe cases, child neglect or abuse may be suspected. A delay in smiling also may be caused by visual or cognitive impairment.
3. Failure to develop social relationships suggests autism when it is accompanied by delayed or deviant language development and stereotypic behaviours.

3.4 Toddler Development

Toddlerhood consists of the years from about 1 to 3 years of age. Affective development is highlighted by the toddler's striving for autonomy and independence, attachment to family, and the development of impulse control. Cognitive development is characterised by the transition from sensorimotor to preoperational thought.

3.4.1 Growth Rate and Physical Appearance

A. After the rapid growth of infancy, the rate of growth slows in the toddler years. After age 2, toddlers gain about 5 lb in weight and 2.5 inches in height each year. Growth often occurs in spurts. Between the ages of 2 and 2.5 years, the child will have reached 50% of his adult height.

B. Growth of the lower extremities often is accompanied by tibia torsion and physiologic bowing of the legs, which usually corrects by age 3 years. The percentage of body fat steadily decreases from 22% at age 1 year to about 15% at age 5 years.

4.0 CONCLUSION

Babies grow and develop normally in a suitable condition. Infancy consists of the period from birth to one year of age. Advances occur in physical growth. In this unit you have been able to know some of the physical growth that occurs in children 0-5 years.

5.0 SUMMARY

In this unit you learnt about physical growth of children under five, motor development and cognitive development. We also discussed psychological development of children 0-5 years and affective development. Some of the problems like colic, delay in appearance of a smile and failure to develop social relationship can be indications of some problems in the child e.g. difficult temperament, material depression austism e.t.c.

6.0 TUTOR-MARKED ASSIGNMENT

List various stages of growth and development in a child under 5years

7.0 REFERENCES/FURTHER READING

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Karen Scruggs MD, Michael Johnson MD, Current Clinical Strategies Publishing

www.ccspublishing.com/ccs. Printed in USA

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UNIT 2 PROCESS OF GROWTH IN CHILDREN (II)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Growth Rate and Pphysical A ppearance
    3.2 Gross Motor Skills
    3.3 Fine Motor Skill
        3.3.1 Affective Development
    3.4 Cognitive Development
    3.5 Language
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In the previous unit we saw some of the growth and development events that occur in the child. We shall further go on to see more process of growth in children 0 – 5 years.

2.0 OBJECTIVES

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

- describe the growth rate and physical appearance
- identify gross and fine motor skills
- describe affective development, language and language skills.

3.0 MAIN CONTENT

3.1 Growth Rate and Physical Appearance

After the rapid growth of infancy, the rate of growth slows in the toddler years. After age 2, toddlers gain about 5 lb in weight and 2.5in in height each year. Growth often occurs in spurts.

Growth of the lower extremities is often accompanied by tibia torsion and physiologic bowing of the legs, which usually corrects by age 3 years. The percentage of body fat steadily decreases from 22% at age 1 to about 15% at age 5.

3.2 Gross Motor Skills

Most children walk without assistance by 18 months. At 2 years the stiff, wide-leg gait of early toddler hood becomes a flexible, steadily walking pattern, with heel-toe progression.

18 months:

- Walking fast, seldom falling
- Running stiffly
- Walking upstairs with one hand held
- Seating self in a small chair
- Climbing into an adult chair
- Hurling a ball

24 months:

- Running well without falling
- Walking up and down chair alone
- Kicking a large ball

36 months

- Walking upstairs by alternating feet
- Walking well on toes
- Pedalling a tricycle
- Jumping from a step
- Hopping two or three times

(Adapted from paediatric 5 minutes. 2000-2002)

3.3 Fine Motor Skill

A. The 18-month-old can make a tower of four blocks. One year later, he can stack eight blocks

Most 18-month-olds will hold the crayon in a fist and scribble spontaneously on paper.

18 Months
• Making a tower of four cubes
• Releasing 10 cubes into a cup
• Scribbling spontaneously
• Imitating a vertically drawn line

24 Months
• Building a seven cube tower
• Aligning two or more cubes to form a train
• Imitating a horizontally drawn line
• Beginning circular strokes
• Inserting a square block into a square hole

36 Months
• Copying a circle
• Copying bridges with cubes
• Building a tower of 9 to 10 blocks
• Drawing a person's head

3.3.1 Affective Development

A. Autonomy and independence. Because of improved motor skills, the transition from infancy to toddler hood is marked increased autonomy and independence. The toddler may refuse to eat unless allowed to feed himself, and the child may no longer be willing to try new foods.

B. Impulse control: Toddlers begin to develop impulse control. The 18-monthold may have minimal impulse control and display several temper tantrums each day. Most 3-year-olds have some degree of self-control.

C. Successful toileting usually occurs toward the end of the third year when the child becomes able to control his sphincter, undress, get onto the potty, and has the willingness to participate. Success with consistent daytime dryness usually is not achieved until about 2.5 years of age.

Social/Emotional Skills

18 Months
• Removing a garment
• Feeding self and spilling food
• Hugging a doll
• Pulling a toy

24 Months
• Using a spoon; spilling little food
• Verbalising toileting needs
• Pulling on a simple garment
• Verbalising immediate experiences
• Referring to self by name

36 Months
• Showing concern about the actions of others
• Playing cooperatively in small groups
• Developing the beginnings of true friendships
• Playing with imaginary friends

D. Attachment refers to the bond that forms between the infant and the caregiver. Disorders of attachment may result from inconsistent care giving and are more common in the presence of poverty, drug use, or emotional illness.

E. Temperament determines how a child approaches a given situation. Ten percent of children are less adaptable and tend to be emotionally negative and are considered "difficult."

3.4 Cognitive development

Toddlerhood is characterised by a transition from sensorimotor to preoperational thinking. During the sensorimotor period, the infant primarily learns about the world by touching, looking, and listening. Preoperational thought is marked by the development of symbolic thinking, as the child becomes capable of forming mental images and begins to solve problems.

Progression from sensorimotor to symbolic thought occurs typically between 18 and 24 months of age.

- Complete object permanence has developed, and the child can find an object under a blanket, despite not seeing it hidden.
- By 3 years, he can draw primitive figures that represent people, and he develops elaborate play and imagination.

Intellectual Abilities

18 Months
• Pointing to named body parts
• Understanding of object permanence
• Beginning to understand cause and effect

24 Months
• Forming mental images of objects
• Solving problems by trial and error
• Understanding simple time concepts

36 Months
• Asking "why" questions
• Understanding daily routine
• Appreciating special events, such as birthdays
• Remembering and reciting nursery rhymes
• Repeating three digits

3.5 Language

A. Beginning around age 2 years, toddlers use language to convey their thoughts and needs (eg, hunger). The 18-month-old has a vocabulary of at least 20 words, consisting primarily of the names of caregivers, favourite foods, and activities.

B. After 18 months the toddler begins to put together phrases. Early two and three word sentences are referred to as "telegraphic speech," and about 50% of what the child says should be intelligible to strangers.

C. By the age of 3 years, the vocabulary increases to about 500 words, and 75% of speech is uunderstandable to strangers. He begins to make complete sentences, and frequently asks "why" questions.

Language Skills

18 Months
• Looking selectively at a book
• Using 10 to 20 words
• Naming and pointing to one picture card
• Naming an object (eg, ball)
• Following two-directional commands

24 Months
• Using two to three word sentences
• Using "I," "me," "you"
• Naming three picture cards
• Naming two objects
• Knowing four-directional commands

36 Months
- Using four to five word sentences
- Telling stories
- Using plurals
- Recognising and naming most common objects

4.0 CONCLUSION

Other aspects of a child development that is equally important are communication, comprehension, peer relationship, sibling interaction and pre-school development.

5.0 SUMMARY

This unit further dealt with child growth and development. Things discussed were gross motor skills – activities of the baby like walking, running, walking up and down chair alone. Other areas are on fine motor skill, affective development and language skills.

6.0 TUTOR-MARKED ASSIGNMENT

i. Describe the intellectual activities of a child at the following stages.
   a) 18 months
   b) 24 months
   c) 36 months

ii. Explain the following terms
   a) Gross motor skills
   b) Affective development
   c) Language skill of children

7.0 REFERENCES/FURTHER READING

Paediatrics 5 minutes Reviews (2001- 2002). edition

Karen Scruggs, MD, Michael Johnson MD, Current Clinical Strategies Publishing

www.ccspublishing.com/ccs. Printed in USA

UNIT 3 NUTRITION IN CHILDREN (I)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Breast Feeding
    3.2 Exclusive Breastfeeding
        3.2.1 Who and Unicef Developed the 40-hour Breastfeeding Counselling
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Healthy eating and physical activity are essential for growth and development in childhood. To help children develop healthy eating patterns from early age. It is important that the food and eating patterns to which they are exposed – both at home and outside the home are those which promote positive attitudes to good nutrition.

In 1993 the Scottish Diet report was published by the Scottish Office. They reported that children's "dietary problems begin during the mother's pregnancy; Scottish women have a low vegetable intake and have relatively low folic acid intakes before and after conception. The susceptible mothers are particularly prone to having babies with neural tube defects and Scottish women also have a high rate of low birth weight babies. A special survey now reveals drastically low rates of breastfeeding in Scotland; breast milk provides not only immunological protection against a plethora of problems, including childhood diabetes, but also contains specific essential long chain fatty acids required for brain development. In parts of Scotland less than 10% of mothers are breastfeeding one day after delivery. Scottish infants are weaned too soon, introduced to cereals and cow's milk too early and transferred on to an inappropriate diet within the first two years of life as they acquire their family's unhealthy eating patterns. These dietary practices may explain the high rates of iron deficiency in infants and young children which is a cause for concern in relation to brain development as well as anemia. The high prevalence of dental decay in Scotland's children is also not surprising given their poor intake of fluoride and frequent consumption of sugary drinks and foods" (Scottish Office, 1993, P1).

2.0 OBJECTIVES

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

- explain breast feeding (exclusive)
- give weaning (from 4-6 months) diet.

3.0 MAIN CONENT

3.1 Breast Feeding

Breast milk is the best food for infants. Carers should support breastfeeding mothers and encourage them to continue providing breast milk. Mothers who are breastfeeding and who may wish to feed their baby in the childcare setting should have warm, private facilities made available to them. Other mothers will usually provide expressed breast milk in a bottle for the carer to give to the infant. Breast fed babies should not be given any other milks or drinks, except medically indicated.

3.2 Exclusive Breastfeeding

Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants; it is also an integral part of the reproductive process with important implications for the health of mothers. A recent review of evidence has shown that, on a population basis, exclusive breastfeeding for 6 months is the optimal way of feeding infants. Thereafter infants should receive complementary foods with continued breastfeeding up to 2 years of age or beyond.

To enable mothers to establish and sustain exclusive breastfeeding for 6 months, WHO and UNICEF recommend:

Exercise One: How early should an infant be feed after delivery?
-Do women of child bearing age practice Exclusive breastfeeding?

- Initiation of breastfeeding within the first hour of life
- Exclusive breastfeeding – that is the infant only receives breast milk without any additional food or drink, not even water
- Breastfeeding on demand – that is as often as the child wants, day and night
- No use of bottles, teats or pacifiers

Breast milk is the natural first food for babies, it provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide up to half or more of a child's nutritional needs

during the second half of the first year, and up to one-third during the second year of life.

Breast milk promotes sensory and cognitive development, and protects the infant against infectious and chronic diseases. Exclusive breastfeeding reduces infant mortality due to common childhood illnesses such as diarrhoea or pneumonia, and helps for a quicker recovery during illness. These effects can be measured in resource-poor and affluent societies (Kramer M et al Promotion of Breastfeeding Intervention Trial (PROBIT): A randomised trial in the Republic of Belarus. Journal of the American Medical Association, 2001, 285 (4): 413-420).

Breastfeeding contributes to the health and well-being of mothers, it helps to space children, reduces the risk of ovarian cancer and breast cancer, increases family and national resources, is a secure way of feeding and is safe for the environment.

While breastfeeding is a natural act, it is also a learned behaviour. An extensive body of research has demonstrated that mothers and other caregivers require active support for establishing and sustaining appropriate breastfeeding practices. WHO and UNICEF launched the Baby-friendly Hospital Initiative in 1992, to strengthen maternity practices to support breastfeeding. The foundations for the BFHI are the Ten Steps to Successful Breastfeeding described in Protecting, Promoting and Supporting Breastfeeding: a Joint WHO/UNICEF Statement. The evidence for the effectiveness of the Ten Steps has been summarised in a scientific review document.

The BFHI has been implemented in about 16.000 hospitals in 171 countries and it has contributed to improving the establishment of exclusive breastfeeding world-wide. While improved maternity services help to increase the initiation of exclusive breastfeeding, support throughout the health system is required to help mothers sustain exclusive breastfeeding.

3.2.1 WHO and UNICEF Developed the 40-Hour Breastfeeding Counselling

A training course to train a cadre of health workers that can provide skilled support to breastfeeding mothers and help them overcome problems. Basic breastfeeding support skills are also part of the 11-day Integrated Management of Childhood Illness training course for first-level health workers, which combines skills for adequate case management with preventive care. Evaluation of breastfeeding counselling delivered by trained health professionals as well as

community workers has shown that this is an effective intervention to improve exclusive breastfeeding rates
The Global Strategy for Infant and Young Child Feeding describes the essential interventions to promote, protect and support exclusive breastfeeding.

3.3 Weaning (from 4-6 months)

As the child grows and reaches the age of 6months he's introduced to the weaning diet (weaning) Weaning should not begin before four months of age. Up to four months of age babies receive all their nutritional requirements from breast milk, infant milk or formula. No food should ever be added to a baby's bottle. First solids should be pureed vegetables or fruits, or rice (use flaked rice as it is softer when cooked). It is important to offer very small amounts of a variety of flavours and pureed or soft textures at first. Pureed cooked meat, fish and pulses (for example peas, beans and lentils) are suitable foods to begin to include in the diet a couple of weeks after weaning has begun. Between 6 and 12 months, food should be given which allows the infant to learn to chew and accept a wide variety of food textures. The texture can very gradually be changed after six months, from pureed to mashed, then to chopped up small. Eggs can also be introduced from 6 months of age. Eggs given to babies or toddlers should always be cooked until both the yolk and the white are solid. Naturally sweet fruits (such as bananas) can be used to sweeten foods rather than adding sugar. Sugar, and artificial sweeteners should not be added to foods for infants. Foods containing gluten (such as bread, porridge, pasta or chapattis) should not be given to infants under 6 months.

Salt should not be added to food for infants. Commercial baby foods are available for appropriate ages and stages. These are particularly useful for days out and when travelling. If using commercial weaning foods, follow the manufacturer's instructions carefully.

4.0 CONCLUSION

Breast milk is the best food for the infant especially in the 1st 6months. It is a way of providing ideal food for the child's growth and development.

Advantages of breast milk to the mother and the child cannot be over emphasised:

It contains antibodies that can help the child to fight against infections. Mothers /Carers should be determined to breastfeed their babies with

breast milk only without adding anything (not even with water). For the period of 6months.

Appropriate weaning diet should be introduced to the child after months.

5.0 SUMMARY

This unit discusses breastfeeding and weaning. There was also a brief discussion on advantages of breastfeeding to the mother and child.

6.0 TUTOR-MARKED ASSIGNMENT

i. a. What do you understand by weaning?
   b. At what age is a child introduced to the weaning diet?
   c. List some of the local food items available in your community which can be added to a weaning diet?

ii. a. What do you understand by Exclusive Breast Feeding
   b. State the WHO and UNICEF recommendation on establishment and sustenance of exclusive Breastfeeding

iii. a. What is the best food for the infant (0-6 months)?
   b. State 5 advantages of exclusive breastfeeding both to the child and mother.
   c. List steps for successful breastfeeding

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UNIT 4 NUTRITION IN CHILDREN (II)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Food Hygiene and Safety issue
    3.2 Group of Food the Weaning Child
    3.3 Drinks for Children 1-5 Year olds
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

In unit 3 we discussed Nutrition in children 1to 5years. We shall go on in this unit to see some of the ways by which the babies food can be handled in order to avoid contamination. Unhygienic preparation of the babies food can lead to introduction of microorganism which if taken by the child can cause disease or illnesses to the child e.g. diarrhea. Carers should therefore try as much as possible to maintain good and proper hygiene in the preparation of their child's food.

2.0 OBJECTIVES

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

- explain food hygiene and safety measures
- identify the group of food for the weaning child
- list drinks for children age 1 to 5years
- drinks not suitable for children under 5.

3.0 MAIN CONTENT

3.1 Food Hygiene and Safety Issue

Expressed breast milk provided for babies in child care should be clearly labeled with the child's name and the date, stored in the refrigerator (between 0°C and 5°C) and only used for that child. Any expressed milk left over at the end of the day should be returned to the parent or guardian. Parents of children who take infant milk or formula should be encouraged to prepare their child's own feeds. Feeds should be labeled with the child's name and the time and the day the feed was made, and

should be stored in a refrigerator. Any infant milk or formula left over at the end of the day should be returned to the parent or guardian. Check fridge temperatures daily and keep all bottles of breast and infant milk in the main body of the fridge, not in the fridge door.

If the carer is making up infant milk or formula, it is preferable if it can be made in a separate milk preparation area. Feeds must also be made up according to the instructions on the pack. Carers should take particular care if milk is heated in bottles. Ideally a bottle warmer should be used. If the bottle is heated by standing it in hot water, this should be done in an area which children do not have access to. A microwave should not be used to heat milk, as the milk can become very hot even though the container still feels only warm. Bottles and teats for infants under 9 months of age should be thoroughly cleaned and sterilised. The teats of bottles for older infants should be thoroughly cleaned. If dummies or comforters are used they should be thoroughly cleaned and sterilised for infants under 9 months, and thoroughly cleaned for older infants. These recommendations also apply to dummies or comforters which are dropped. Carers also need to be aware of food safety issues such as storage of weaning foods and leftover food, and thorough cooking or heating of foods. If the carer is serving food from a can or jar and the child is unlikely to eat all the contents, a portion should be spooned into a separate dish or container before serving it to the child. Any unused portions should be stored according to the manufacturer's instructions. (If there are no instructions, the safest option is to throw the unused portion away.) If food is served straight from the jar and the child does not finish it, the remainder should be thrown away. However, any uneaten food which parents have brought in should be returned to them at the end of the day.

3.2 Group of Food for the Weaning Child

After weaning on to a variety of food tastes, children should be encouraged to eat a variety of foods from the four main food groups every day.

The four main group of food are:

1. **Fruit and vegetables**
   Number of servings per day: 2 vegetables and 2 fruits
   Useful as snacks. Try some raw vegetables.
   Offer vegetable soups. Offer a wide variety including fresh, frozen, canned or dried.

2. **Bread, cereals and potatoes**
   Number of servings per day: 4 or more.

Try to include some of these at each meal. Also useful as snacks include some wholemeal and whole grain varieties.

3. **Milk and dairy foods**
   Number of servings per day: 3

Children aged one to five need about one pint of whole milk a day. Drinking more than a pint may spoil the appetite for other foods. Semi-skimmed milk may be given from the age of 2 years provided the child is eating a wide variety of foods and is growing and gaining weight normally. Cheese, yoghurt, fromage frais and milk puddings are useful alternatives.

4. **Meat, fish and alternatives**
   Number of servings per day: 2

Encourage children to try different foods from this group, e.g. beef, pork, lamb, chicken, turkey, fish, eggs, baked beans, lentils and other types of pulses. (Nuts should not be given to children under five because of the risk of choking).

The fifth food group, the fats and sugars, should be restricted to special occasion foods only.

3.3 Drinks for Children 1-5 year olds

Encourage children to drink water if they are thirsty. Water quenches thirst, does not spoil the appetite, and does not damage teeth. Tap water is preferable as some bottled drinking waters have a high content of salts and may not be suitable for regular use. Bottled drinking water may be used in situations where the water may be unsafe or difficult to obtain, for example when travelling.

Normal fluid requirements

Age	Fluid requirements (metric)	Fluid requirements (imperial)
1 – 3 years	95 mls/kg/day	1.5 fl. Oz per lb
4-6 years	85mls/kg/day	1.25 fl.oz/lb/day

Promote milk as a drink. The following chart explains which milks are suitable for this age group. It is strongly recommended that child care providers should not offer any drinks other than water and milk.

Diluted pure fruit juice is a useful source of vitamin C. At home, children may have one glass of pure fruit juice diluted with water per

day, with their main meal or with breakfast as this may also help the body to absorb iron. However it should not be given as a regular drink through the day as the sugar content is too high.

Children who bring their own drinks to childcare should be encouraged to bring a plastic flask or a lidded plastic cup containing preferably water or milk. Otherwise they should bring an appropriately diluted drink.

If children are given soft drinks containing the intense sweetener saccharin, these should be diluted more than they would be for an adult or older child – for example. 1 part squash to at least 8 parts water.

Discourage children from having fizzy drinks and squashes (including fruit squashes/diluting juice) both diet and non-diet, as these can erode tooth enamel and contribute to tooth decay. Also they provide little in the way of nutrients, and children who drink them frequently may have less appetite to eat well at mealtimes.

Many ready-to-drink cartons of squashes, fruit drinks and fruit juices have a high sugar content and cannot be diluted if they are drunk straight from the pack. Tea and coffee are not suitable drinks for under-5s as they contain tannic acid, which interferes with iron absorption.

Milk suitable to give to children aged 1-5 years

Breast milk	From birth onwards: Breast milk may continue to be given until mother and baby choose to stop feeding.
Soya infant formula	Birth to 5 years: Not suitable for general use. Developed for infants with proven lactose intolerance or cow's milk protein intolerance. These formulae contain sugar in the form of glucose which is more harmful to teeth than the lactose in infant milk based on cow's milk. Children should be given soya infant formula in cups, preferably with meals.
Whole cow's milk	Suitable for most children from 12 months of age
Semi-skimmed cow's milk	Not suitable for children under 2 years. Suitable from 2 years, provided that the child is a good eater and has a varied diet. In group settings we recommend the use of

	whole milk from 1 to 5 years med cow's milk
Skimmed cow's milk	Not suitable for children under 5 years Goat's / Ewe's milk
Goat's/Ewe's milk	Not suitable as nutritionally incomplete. Not known to be less allergenic than cow's milk. If pasteurised may be given after 1 year of age if giving appropriate vitamin and mineral supplementation (under supervision of doctor / state registered dietician)
Oat drinks and rice drinks	Not suitable for children as nutritionally inadequate
Soya drink (other than soya infant formula)	Not suitable for children under 2 years as low in energy and nutritionally incomplete. If given after age of 2 years, make sure the drink is calcium-fortified. Drinks should be given in cups at mealtimes, because of the sugars content. condensed milk
Evaporated milk	Skimmed milk varieties are not suitable for children
Condensed milk	Not suitable for children

N.B: Milks given to under-5s must be pasteurised.

Dealing with food refusal

If a child refuses a food even after gentle encouragement to eat, remove the food without making a fuss or passing judgment. It is useful to encourage children to try different foods. Words of praise and encouragement to try foods and eat a variety of foods may help some children at mealtimes. It may be useful to adopt the approach that a food refused is 'not liked today'. Food fads often do not last more than a couple of weeks and children may, at another time, accept a food that was previously rejected While it can be distressing for carers (and parents or guardians) to have food they have prepared rejected, keeping your own attitude to eating friendly and relaxed will help children to feel that eating is a pleasurable way to satisfy hunger rather than a battleground.

A child's opinion about what they like and dislike should be respected and it is better not to 'disguise' foods that they have rejected. Changing the form a food is given in however may make a food more acceptable. For example, a child might refuse cooked carrots but enjoy raw ones or may refuse pasta coated in sauce but prefer the pasta and sauce served separately.

The following ideas may help you to cope:

Never force children to eat, and do not bribe or threaten – this will probably make the situation worse.

Although it is an extremely difficult thing to do, try not to show anxiety or annoyance at mealtimes. If a food is not eaten, take the plate away without comment. Ignoring the problem may make it go away.

Show children that you are pleased when they do eat. Reward them with your attention, e.g. smiling and playing with them.

Have regular mealtimes (at home and in child care), and try to make them enjoyable social occasions. Sit at a table and use brightly coloured and attractive plates and cups.

Many children are easily distracted. Try to eat in a quiet relaxed environment, without the television on.

Children may well be slow to eat, but do not rush a meal. However try not to let them drag on for more than about 30 minutes.

Offer regular meals and between meal snacks. However, do try to avoid too many crisps, cakes and biscuits and fizzy drinks.

Give small portions of food and offer more if the meal is completed. Do not take food away and offer something different if the first meal is refused.

Avoid giving drinks or snacks immediately before a meal.

Allow the child to play with food and do not worry if they make a mess.

Do not give chocolate, sweets or biscuits if a meal is refused as the child is then filling up on the wrong type of foods.

Don’t let children rule what is offered at mealtimes. But don’t at this stage offer too many new or unfamiliar foods.

Stop feeding the child if they indicate that they have had enough. This may be by turning their head away, screaming, spitting food out repeatedly or holding food in their mouth and refusing to swallow.

If the problem shows no sign of improving, or if you are worried that the child is losing weight, the parent or guardian should contact their Health Visitor who may be able to offer further advice.

Practical hints

Do not leave perishable food at room temperatures for more than two hours. Perishable food brought from home, including sandwiches, should be kept in a fridge or cool place below:

Insulated cool boxes, or a cool box with cool packs, should be used for carrying food when taking children on trips or outings.

Eggs should be kept in the fridge.

Food stocks should be rotated and food beyond its use by date discarded.

If food is to be eaten warm it should be re-heated until piping hot (minimum temperature of 83°C) and then cooled down before serving

Avoid keeping food hot for long periods (It must be above 63°C and kept no longer than 1½ hours).

Cool leftover food quickly and refrigerate.

Do not use unpasteurised milk or milk-based products, such as cheese and yoghurt, made from unpasteurised milk.

Root vegetables such as carrots and parsnips should always be peeled and topped and tailed. Fruit and vegetables to be eaten raw should be peeled for very young children, and washed well.

Whole pieces of nut should not be given to under-5s in case of choking. In addition do not give peanut products to children under 3 years where there is a family history of atopic disease (asthma, eczema, hay fever or food allergy).

Dental health: How carers can help reduce tooth decay in children

Pre-school children should have their teeth brushed twice a day with a fluoride toothpaste. If brushing is carried out in day care, it should be done about twenty minutes after eating or drinking. Brushing sooner after eating may weaken the enamel. Each child should have their own, labeled toothbrush and toothpaste. A smear of normal adult strength toothpaste should be used.

All children are being issued with toothpaste and a toothbrush at their 8 month screening by the Health Visitor. Reduce both the total amount and especially the frequency of sugar and sugary foods that children eat and drink. If children are having sugary foods and drinks, these should

be given with meals rather than between meals. This is because children's teeth are prone to decay if they are frequently in contact with sugars.

4.0 CONCLUSION

Handling of the child's food should be done as much as possible to prevent the child from catching infection through them.

5.0 SUMMARY

This unit has focused on infant feeding, the best food for the child (breast milk). Breast feeding should be fed exclusively to the child in the first 6 months without adding any substitute.

6.0 TUTOR-MARKED ASSIGNMENT

i. How will you persuade a child who refuses food to eat?
ii. State five food hygiene and safety issues.

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MODULE 3

Unit 1 Assessment of the Health of Children under 5 (1)
Unit 2 Assessment of Children under 5 (1)
Unit 3 Immunisation Status of Children 0-5Years (1)
Unit 4 Immunisation Status of Children 0-5 (1)

UNIT 1 ASSESSMENT OF THE HEALTH OF CHILDREN UNDER 5 (1)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Daily Examination
  3.2 Examination by the Pediatrician (or competent other)
  3.3 Head Assessment
  3.4 Cardio/Respiratory Assessment
  3.5 Abdomen
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

The Childs condition needs to be daily and always assessed to valuate progress and identify problems as they arose. In the previous unit we discussed the assessment of the condition of the new born using "apgar score" to assess the condition of the child in 1 and 10 minutes of the baby's life. This unit is concern monitoring daily charges in the baby and detecting any signs of infection that can have adverse effect on the health of the child.

2.0 OBJECTIVES

At the end of the unit, you should be able to:

- examine the child's daily progress
- assessment Cardio Respiratory and Neurological
- various method of examining the lips and blood test

3.0 MAIN CONTENT

3.1 Daily Examination

Each day, the baby should be examined by a midwife, to evaluate progress and identify problem as they arise. The examination is similar to that undertaken at birth but is now concerned with monitoring daily changes in the baby and detecting any sign of infection.
A newborn baby usually sleeps for most of the time between feeds but should be alert and responsive when awake. Erratic sleep patterns may prove disconcerting to new parents and they should be reassured by the midwife that this can be normal if the baby look healthy is alert and feeding well. Undue lethargy or irritability may indicate cerebral damage or sepsis.

The skin is a barometer of the body's hydration and general well-being. The midwife's knowledge of its normal parameters and minor variations assists in the interpretation of her findings.

The examination begins by noting the baby's posture, colour and respirations. Any cyanosis should be reported to the paediatrician immediately. Jaundice may be noted from the 3rd day of abnormal if it arises earlier, deepens or persists beyond the 7th day. If a baby remains jaundiced on discharge from hospital the mid-wife must instruct the parent to report to the nearest clinic or doctor if the baby's stools become pale or if the urine becomes dark, which may be suggestive of biliary atresia.

Palpation of the head permits assessment of the anterior fontanelie (which should be soft and fat) resolution of the caput succeaneum and moulding and allows identification of any new swellings, for example cephalhaematoma

The baby's eyes and mouth are in inspected for signs of infection. Sticky eyes are cleaned with sterile water after obtaining a swab for culture and sensitivity testing. The mouth should be clean and moist. Adherent white plaques indicate oral thrush infection. Sucking blisters on the baby's lip may be observed, especially after feeding. Theses do not require any treatment.

It is important for the midwife to note responses to handling and noise as she undressed the baby. She can use this time to inspect the identity bands, and have a discussion with the mother about feeding or any other concerns that the latter may have.

The skin, especially in flexures and between the digits is inspected for rashes, septic spots, excoriation or abrasions. Skin rashes such as erythema toxicum, a red blotchy rash, are of little significance. Sometimes a harlequin colour change, with vivid midline demarcation of colour. The baby is red on one side of the trunk and pale on the other side. This is caused by vasomotor instability and is of little importance. However, its appearance is startling and can alarm the mother.

The fingertips and toes are examined for ragged nails and paronychia. Septic spots must be differentiated from milia, which do not require treatment. Even a few septic spots must be taken seriously. The paediatrician may prescribe typical applications or systemic antibiotics and consider possible isolation of the baby.

The umbilical cord base is inspected for bleeding redness, swelling and discharge and the mother is reminded about care. In some areas the baby's temperature is recorded with a low-recording thermometer

This may be taken in the axilla, ear, in the groin or rectally. If the rectal route is used it is essential that the baby's legs and the thermometer are held firmly to prevent sudden movement, which could cause the thermometer to break and perforate the rectum. The midwife should ensure that the bulb of the thermometer is inserted no further than 2.5cm into the rectum.

Concern regarding the risk of injury has led to an increased use of alternative methods of measuring babies' temperature. This concern must be balanced against the need for an accurate estimate of core temperature when babies are ill (Morley 1992). Midwives should comply with local policy in regard to rectal temperature taking.
The phases of stools are observed in relation to the baby's age and the type of milk ingested. Non passage of stools or vomiting helps to identify abnormalities of the gastrointestinal tract, inborn errors of metabolism and infection. Constipation may be alleviated by offering the baby water between feeds. Loose, watery stools may signify sugar intolerance or infection and may cause sore buttocks. Sore buttocks may be treated by exposure to the air, but care must be taken to avoid chilling the baby. The frequency of passing urine and stools in the preceding 24 hours should be noted.

During feeds the midwife should observed the baby's eagerness or reluctance to feed and the coordination of sucking and swallowing reflexes, as well as noting the frequency with which the baby demands feeds. During feeding, babies clench their fists, tuck them under the chin and wriggle their toes while grasping their mother's fingers. Eye contact also occurs, which enhances communication between mother and baby.

Sucking is interspersed with rest periods. Abnormal finding behaviour may signify cerebral damage, congenital abnormality or illness. Breast engorgement and pseudomenstruation require no treatment but explanation to the mother is essential. No attempt should be made to express engorged breasts.

If the baby is to be weighed, this is done before dressing and the result compared with his birth weight. A common regimen is weighing every 3rd day. Weight loss is normal in the first few days but more than 10% bodyweight loss is abnormal and requires investigation. Most babies regain their birth weight in 7-10 days. Thereafter gaining weight at a rate of 150-200g per week.

All findings at the daily examination are entered in the baby's records and abnormalities reported. Parents can be introduced to the concept of daily examination and gradually assume this responsibility as their confidence increases. This helps to enhance parent-baby interaction.

3.2 Examination by the Paediatrician(or Competent Other)

All newborn babies should be examined by one of the following; paediatrician, obstrician, general practitioner, advanced neonatal nurse practitioner, advanced midwife, or midwife with appropriate training, within the first 24 hours of life. The mother should be present for the examination. Some of the examination duplicators what has been described above and so only the medical aspects area considered here. In some areas the midwife incorporates, and is accountable for, these additional element of examination following, appropriate in service education (MacKeith 1995, Michaelides 1995, Rose 1994). A general appraisal of the baby's colour, overall appearance, muscular activity and response to handling is made throughout the examination.

3.3 Head Assessment

To start this assessment the occipito-frontal circumstance (OFC) is measured using a non-strechable tape measure. The average OFC in a term baby is 33-37 cm. Next the size and tension of the anterior fontanelle are checked and suture lines palpated noting cranial moulding, caput succedaneum and cephalhaemanoma. Any abnormality detected should be reported to a senior paediatrician and documented in the baby's case notes. Parents should be reassured that moulding, caput and cephahaematoma usually resolve within a few weeks after birth.

Examination of the face should begin with observing the relationships between all the facial components, eyes, ears, nose and mouth, remembering that unusual facial characteristics may be familiar (Boyer

Johnson 1996). Inspect the eyes for conjunctivitis, cataracts, aniridia and coloboma, occulo-cephalic reflex (doll's eye reflex) eye movements and transient strabismus before sing an ophthalmoscope. The ophthalmoscope is held in the dominant hand, with the viewing aperture as close as possible to the right eye, and using the right index fingers of this hand to turn the lens selector dial to the appropriate lens for proper focus (Henning 2002, Honey field 1996). While positioning the baby's head with the free hand, the illuminating light is aligned along the baby's visual plane (Honey field 1996), observing for the red reflex and pupils reaction. Reassure parents of the temporary nature of common eye trauma including bruising or edema of the eyelids and hemorrhage seen around the iris as these usually disappear within 1-2 weeks (Boyer Johnson 1996). The ears should be assessed for size, shape and placement; abnormal formation or placement can be associated with chromosomal anomalies and syndromes. The nose should be symmetric and placed vertically in the midline. Its size and shape may be familial (Boyer Johnson 1996).

To examine the mouth a gloved finger should be inserted into the baby's mouth with the finger pad up, to ensure continuity of the hard and soft palates and to Epstein's pearls may be seen at the junction of the hard and soft palate and on the gums (Harrison 2003, Boyer Johnson 1996); these should not be mistaken for the white plaque of oral thrush.

3.4 Cardio\respiratory assessment

This assessment requires great skills in the techniques of inspection, palpation, percussion and auscultation. Inspection of the baby's colour and capillary filling time is followed by auscultation of heart sounds (Henning 2002). it is necessary to have a paediatric stethoscope with a double-headed chest piece; both sides are necessary to listen to the heart. The stethoscope should be placed firmly on bare skin, to assess the heart rate and evaluate cardiac rhythm, regularity and splitting (Henning 2002, Honey field 1996). The first heart sound is louder than the second one (Henning 2002). The practitioner carefully listens to the rhythm of the heart to determine whether there is any irregularity, a note is made of patterns and frequencies of the irregularity, which help identify the type of arrhythmia (Fraser, Askin 1996).

3.5 Abdomen

This assessment requires inspection, palpation, percussion and auscultation of the relaxed abdomen. With warm hands, palpate the abdomen for masses and organogenesis while observing the baby for pain responses. With a flat hand using a gentle compressing motion, start in the groin moving upwards to the hypochondrium until the liver

edge is felt. The normal liver is smooth and firm with a sharp and well defined edge, and is felt 1-2cm below the right costal margin (Henning 2002, Keel Conner 1996). The spleen may be palpable, but if more than one centimetre is palpable, investigation is required. The bladder of the new-born is an abdominal organ and if full is easily palpated 1-4 cm above the symphysis pubis, A persistently palpable bladder or a bladder that remains palpable after micturition, is a cause of concern (Henning 2002). The kidneys may be palpable and are palpated bimanually using a deep smooth firm pressure: the left kidney is more easily palpated than the right, unless the descending colon is filled with meconium. (Henning 2002, Keel Conner 1996). With the ear near to the percussing finger, percuss the abdomen for resonance, masses and shifting dullness (Henning 2002). Next the practitioner auscultates for bowel sounds; using a stethoscope to listen to all four abdominal quadrants, breath sounds are usually heard in the upper abdominal region. Bowel sounds are absent immediately after birth. With crying and sucking, the abdomen begins to fill with air, and bowel sounds become audible within the first 15 minutes after birth. The sounds have a metallic, tinkling quality and are usually heard every 15-20 seconds (Keels Conner 1996).

4.0 CONCLUSION

In this unit you have learnt some important assessment that should be carried out on the child to determine or evaluate his condition as he progresses in life. You have also be able to see categories of health worker that should carried out examination on the child. This unit went on to describe some of the assessment to be carried out like, daily assessment, Head assessment, Neurological assessment and Cardio respiratory assessment.

5.0 SUMMARY

This unit has focused on assessment of the health of children 0-5 years. These assessments are important because they will be able to allow the practioner to know the condition of the child and to take appropriate action to correct appropriately if there is derivation from normal.

6.0 TUTOR- MARKED ASSESSMENT

i. Highlight daily examination of the child
ii. Describe how you will carry the following test under examination of the lips Orfolani's test
    a. What daily assessment should be carried out on the child. b. What is the examination that you will carry out under cardio respiratory assessment

iii. How will you carry a blood test on the child.
iv. Mention some of the reflexes that can be found in a child during examination of Neurological system.

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UNIT 2 ASSESSMENT OF CHILDREN UNDER 5 (II)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Neurological Assessment of the Child
    3.2 Blood Test
    3.3 Continued Child Health Surveillance
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

In the previous unit, we discussed some of the assessments that are carried out in children 0-5 years we shall go on in this unit to discuss other forms of physical examination that can also be carried out on this category of children.

2.0 OBJECTIVES

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

- identify Neurological assessment of the child
- tell Various method of examining the hip
- explain how to carry out Blood test and continued child health surveillance.

3.0 MAIN CONTENT

3.1 Neurological assessment of the child

The baby's responses are elicited in order to establish normality of the neurological system. These are tested while the baby is in a quiet alert state. Absent, weak or assymetrical responses may indicate immaturity, cerebral damage, abnormality or injury.

In comparison with the other body systems, the nervous system is remarkably immature both anatomically and physiologically at birth. This results in predominantly brain stem and spinal reflex activity with minimal control by the cerebral contex in the early months, though social interaction occurs early. After birth, brain growth in rapid,

requiring constant and adequate supplies of oxygen and glucose. The immaturity of the brain renders it particularly vulnerable to hypoxia, biochemical imbalance, infection and haemorrhage. Temperature instability and uncoordinated muscle movement reflect the incomplete state of brain development and incomplete myelination of nerves.

The baby is equipped with a wide range of reflex activities, the presence of which at varying ages provides an indication of the normality and integrity of the neurological and skeletomuscular system (Gandy 1992, Roberton 1992).

Moro reflex. The Moro reflex is a vestibular reflect which is the best known neonatal primitive reflex and is elicited in response to sudden stimulus. Hold the supine baby at a 45^{o} angle on the examination surface, with the trunk and head supported from below. When the head and shoulders are suddenly allowed to full back, the baby responds by abduction and extension of arms with fingers fanned, and sometimes accompanied by 2 tremor. The then abducts and flex on the chest in a hugging movement. A similar response may be seen in the abdomen (fig 39.4). The Moro reflex is often accompanied by a cry and may be demonstrated unintentionally when briskly placing a baby in the supine position. The reflex is symmetrical and is present for the first 8 weeks of life. The most common cause of an asymmetric Moro response is a fracture of the humerus or clavicle or a brachial plexus palsy. Absence of the Moro reflex may indicate brain damage or immaturity. Persistence of the reflex beyond the age of 6 months is suggestive of mental retardation (Henning 2002. Thomas & Harvey 1992).

Rooting reflex: when touching the side of the lip and moving the finger away from the lip the head and mouth turn towards the fingers and the mouth opens ready to suckle. The reflex disappears at about 3-4 months of age (Henning 2002).

Sucking and swallowing reflexes. These are well developed in the normal baby and are coordinated with breathing. The reflexes are elicited when a finger or nipple is placed in the baby's mouth. (Henning 2002). This is essential for safe feeding and adequate nutrition. The sucking reflex disappears at one year.

Gag,Cough and sneeze reflexes. These protect the baby from airway obstruction.

Blinking and corneal reflexes. The baby's eyes when stimulated by sudden loud noise. These protect the eyes from trauma.

3.2 Blood Test

Certain inborn errors of metabolism and endocrine disorders are detected by means of a blood test. For example the Guthine test. Blood, obtained from a heel prick made with a stilence on the lateral aspect of the heel to avoid nerves and blood vessels, is dripped on to circles o an absorbent card on to which full details of the baby's identity are entered (see plane 12). For detection of phenylketonuria, hypothyroidism and cystic fibriosis the baby must have had at least 4-6 days of milk feeding, and if for any reason the baby or mother is receiving antibiotics, this information should be recorded on the card. Some centres also test routinely for gniretosemia.

3.3 Continued Child Health Susveillance

Following discharge from the health care centre, the screening of the baby is continued on a regular basis at the nearest well baby clinic which is usually a municipal clinic. The mother or care giver is educated on routine care and observation of the baby and advised of resources to access if the need arises.

4.0 CONCLUSION

In this unit you have learned about more assessment that is carried out on children 0-5 years. i.e Neurological assessment

- various methods of examining the lips, blood test and continued child surveillance. You have also learned about various reflexe that is seen on a child that is Moro reflex, Roufing reflex, sucking and swallowing reflexe etc.

5.0 SUMMARY

This unit has focused on other assessment that carried out on a child. This assessment of the child, blood test and continued child health surveillance etc.

6.0 TUTOR-MARKED ASSIGNMENT

i. How will you carry a blood tests on a child.
ii. Mention some of the reflexes that can be found in a child during examination of Neurological system.

7.0 REFERENCES/FURTHER READING

Aransson, DD. Goldberg, Mi. kling, I .F. Roy, D .R. (1994) – *Development dysplasia of the mp*. Pedatrics 94 (2): 201 – 208.

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UNIT 3 IMMUNISATION STATUS OF CHILDREN 0 - 5 YEARS (1)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 What is Immunisation
    3.2 How Long does Immunisation Takes to Work
    3.3 Immunisation
    3.4 How does Immunisation Work?
4.0 Conclusion
5.0 Summary
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1.0 INTRODUCTION

Immunisation protects children (and adults) against harmful infections before they come in contact with them in the community. Immunisation works by tricking the body into believing it is experiencing a full scale invasion by an infectious agent so that the immune system can fortify its defences. During vaccination, a harmless version of a germ is introduced to the body and the immune system respond by producing antibodies to attack the intruder. Thereafter a memory of this 'invasion' remains so that the immune system can quickly recognise and neutralise disease causing agents when they appear.

For many diseases, immunity is built up over several doses of vaccines. The World Health Organisation (WHO) recommends that the first polio vaccines be given at birth, along with the vaccine for childhood tuberculosis (BCG). In countries where transmission of hepatitis B from mother to child is common, these infant should be immunised against the disease at birth.

2.0 OBJECTIVES

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

- explain what immunisation is
- differenciate between immunisation and vaccination
- Tell how long immunisation takes to work
- identify the schedules of vaccination
- explain the after effects/events following immunisation and common misconceptions

- state the immunisation status of a child

3.0 MAIN CONTENT

3.1 What is Immunisation?

Immunisation protects children (and adults) against harmful infections before they come into contact with them in the community.

Immunisation uses the body's natural defence mechanism - the immune response - to build resistance to specific infections. Some diseases can be prevented by routine childhood immunisation - diphtheria, tetanus, whooping cough, poliomyelitis (polio), measles, mumps, rubella, Haemophilias influenza type b (Hib) and hepatitis B. All of these diseases can cause serious complications and sometimes death.

Immunisation is given as an injection or, in the case of polio vaccine, taken as drops by mouth. Immunisation helps children stay healthy by preventing serious infections.

3.2 How long does immunisation takes to work?

In general, the normal immune response takes several weeks to work. This means protection from an infection will not occur immediately after immunisation. Most immunisations need to be given several times to build long lasting protection. A child who has been given only one or two doses of diphtheria-tetanus-pertussis vaccine (DPT) is only partially protected against diphtheria, pertussis (whooping cough) and tetanus, and may become sick if exposed to these diseases. How long do immunisations last? The protective effect of immunisations is not always life-long. Some, like tetanus vaccine, can last up to 30 years, after this time a booster dose may be given. Some immunisations, such as whooping cough, give protection for about five years after a full course in general, the normal immune response takes several

3.3 Immunisation and Vaccination

Technically 'vaccination' is the term used for giving a vaccine - that is, actually getting the injection or swallowing the drops. 'Immunisation is the term used for the process of both getting the vaccine and becoming immune to the disease as a result of the vaccine. Most people use the terms 'vaccination' and 'immunisation' interchangeably but their meanings are not exactly the same because immunity follows vaccination in most, but not all, cases. For the purposes of this book, we have always used the term 'immunisation' because this is the expression most commonly used in the community. All forms of immunisation

work in the same way. When someone is injected with, or swallows, a vaccine, their body produces an immune response in the same way it would, following exposure to a disease but without the person getting the disease.

3.4 How does Immunisation Work?

Immunisation works by tricking the body into believing it is experiencing a full-scale invasion by an infectious agent so that the immune system can fortify its defences. During vaccination, a harmless version of a germ is introduced to the body and the immune system responds by producing antibodies to attack the intruder. Thereafter, a memory of this "invasion" remains so that the immune system can quickly recognise and neutralise disease-causing agents when they appear.

The Chinese performed a version of vaccination called variolation in the 16th century when they discovered they could prevent smallpox by exposing a healthy person to matter from the lesions of an infected person. In 1796, Edward Jenner, an English doctor, performed the first vaccination in Europe when he used a cowpox virus to vaccinate a young boy against the more deadly smallpox virus. (Dr. Jenner called this process vaccination after the Latin word for cow, vacca.)

Today there are several types of vaccines. Some, such as the oral polio vaccine (OPV), are live, "attenuated" vaccines which means the virus has been weakened so that it stimulates antibody production, but does not cause the disease. Others such as the "whole-cell" pertussis vaccine use an inactivated, or killed, bacteria that still triggers an immune response. Tetanus toxoid (TT), the vaccine that protects mothers and newborns from tetanus, is a detoxified version of the toxin (poison) that causes the disease. A fourth variety of vaccine, such as that for Haemophilus influenzae type b (Hib), uses only the components of the virus or bacteria that provoke an immune response.

Mothers can pass on immunity to their babies across the placenta during the final months of pregnancy. The amount of inherited immunity varies by disease and is an important factor in deciding when a child should be immunised. A mother's antibodies may protect a child from measles for 6 to 12 months. But, in the case of diseases such as pertussis, immunity may last only for a few weeks. Tetanus is one example where inherited immunity is critical and the mother must be immunised to offer protection to her newborn.

For many diseases, immunity is built up over several doses of vaccine. The World Health Organisation (WHO) recommends that the first polio

vaccine be given at birth, along with the vaccine for childhood tuberculosis (BCG). In countries where transmission of hepatitis B from mother to child is common, these infants should be immunised against the disease at birth.

The remaining doses of polio vaccine and the combination diphtheria, pertussis, tetanus vaccine (DPT) should be given three times before the age of one: at six weeks, 10 weeks and 14 weeks. Due to inherited immunity, measles vaccines are typically given at nine months. Yellow fever is also given at this time for children in high-risk regions.

The more children in a community that are vaccinated, the less likely it is that any children, even those who have not been immunised, will get sick because there are fewer hosts for the infectious agents. This is referred to as "herd" immunity and it is particularly vital with extremely contagious diseases such as measles, where immunisation of 90 to 95 per cent of infants is needed to protect a community from measles. However, this is not true for all diseases, such as tetanus, therefore an individual's vaccination status is important, not just group immunity.

4.0 CONCLUSION

Immunisation remains the most cost effective tool to reducing childhood morbidity and mortality occurring from Vaccine Preventable Diseases(VPDs) such as: Tuberculosis, Poliomyelitis, Diphtheria, Whooping Cough, Tetanus. Neonatal tetanus. Measles, Yellow Fever, Hepatitis B and CSM. Immunisation is the safest and most effective way of giving protection against the disease. After immunisation, your child is far less likely to catch the disease if there are cases in the community. The benefit of protection against the disease far outweighs the very small risks of immunisation.

If enough people in the community are immunised, the infection can no longer be spread from person to person and the disease dies out altogether. This is how smallpox was eliminated from the world, and polio has disappeared from many countries.

5.0 SUMMARY

This unit has focused on immunisation, what it is, and also gave a brief explanation of immunisation and vaccination. Also in this unit you read about how immunisation works and how long immunisation takes to work.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is immunisation?
ii. Mention some of the vaccines that you know.

7.0 REFERENCES/FURTHER READING

Understanding booklet *Childhood immunisation* - revised July (2000). (pp 61 to 63) Immunisation Infoline on 1800 671 811 - © Commonwealth of Australia 2000

http//www.unicef.org/immunisation/index_how.html

Basic Guide for Routine Immunisation Service Provider: (2005). Federal Government of Nigeria. National Programme on Immunisation (NPI).

Tayside Health Board. The Tayside master patient index Dundee, October 1978

http://www.nevdgp.org.au/info/immunisation/immunise.htm

UNIT4 IMMUNISATION STATUS OF CHILDREN 0 - 5 YEARS (II)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Adverse Events Following Immunisation (AEFI)
        3.1.1 What are the Side Effects of Immunisation?
    3.2 Immunisation Monitoring Tools
    3.3 Immunisation Status of a Child
    3.4 Immunisation Drop Outs
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

In the previous unit we discussed immunisation, difference between immunisation and vaccination among other. In this unit we shall go on to discuss some series of events that follows immunisation prevention is a topic which is easier to talk about than to practise. One major drawback with prevention is the uncertainty about the effectiveness of many preventive measures. Immunisation against infectious diseases is one form of prevention where the value is more certain. It is therefore important to assess immunisation coverage. Many professional groups are involved in the immunisation programme, including general practitioners, health visitors and clinical medical officers, and there is a danger that the prevention which is supposed to be everybody's business is nobody's.

2.0 OBJECTIVES

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

- identify adverse events following immunisation (AEFI)
- recognise side effect of immunisation and immunisation monitoring tool
- tell immunisation drop out and immunisation status of a child

3.0 MAIN CONTENT

3.1 Adverse Events Following Immunisation (AEFI)

What is "AEFI"?

1. An Adverse events following immunisation (AEFI) is a reaction that is temporarily associated with immunisation
2. Probable Causes of AEFI:
   - Adverse reaction to the vaccine or its components
   - Programmatic (human error)
   - Coincidental

What is AEFI?

- An AEFI is a medical incident that takes place after a vaccine has been administered and is believed to be caused by the vaccine.

Types of AEFI:

- Mild AEFI
- Serious AEFI

Mild AEFI

Is a mild reaction that is characterised soreness at the site of injection, mild fever and rash.

AEFI can be identified by the following:

1. Any injection site abscess following immunisation.
2. Any severe local reaction to vaccination that is any swelling extending 5cm from injection site to or redness and swelling for more than 3 days.
3. Any case requiring hospitalisation that is thought by health workers or the public to be related to immunisation.
4. Any case of anaphylactic shock
5. Any other severe or unusual medical incidents believed by health workers or the public to have been caused by or related to immunisation and
6. Any deaths thought by health workers or the public to be related to immunisation.

3.1.1 What are the side effects of immunisation?

Common side effects of immunisation are redness and soreness at the site of injections and mild fever. While these symptoms may concern

you and upset your child at the time, the benefit of immunisation is protection from the disease. Paracetamol might be required to help ease the fever and soreness. For more information, refer to Common side effects of immunisation and what to do about them. Other side effects are very rare but if they do occur, a doctor should be consulted immediately.

Key points

- There is no such thing as a "perfect" vaccine which protects everyone who receives it and is entirely safe for everyone.
- Effective vaccines (i.e. vaccines inducing protective immunity) may produce some undesirable side effects which are mostly mild and clear up quickly.
- The majority of events thought to be related to the administration of a vaccine are actually not due to the vaccine itself - many are simply coincidental events, others (particularly in developing countries) are due to human, or programme, error.
- It is not possible to predict every individual who might have a mild or serious reaction to a vaccine, although there are a few contraindications to some vaccines. By following contraindications the risk of serious adverse effects can be minimised.

3.2 Immunisation Monitoring Tools

Child Immunisation Card – Immunisation Record

The most important monitoring tool for a child's immunisation status is the Child immunisation card (Immunisation record)

Child immunisation card which is an important tool for monitoring immunisation status is very important and care givers should always be instructed to take care of it and always remember to bring them to the health facility at each visit especially when the next immunisation.

After a child is immunised the date should be recorded on his/her immunisation card. Also, all other required information should be recorded in the immunisation register

Child immunisation card should contain the following: name of child, age, sex and address, the health faculty where the immunisation is given, type of antigen, number of antigen collected and next date of appointment

Child immunisation register contains: date of immunisation for each antigen given in the appropriate column.
Each child is registered only once (on his/her first visit), and one row is used per child.

3.3 Immunisation status of a child

For a child to be fully immunised he/she should be taken to the health facility 5 times to complete the immunisation status. Also all immunisations are to be completed before a child's first birthday.

Some of the problems that can affect child immunisation status:
1) Immigration: where a child relocates from where he had the first dose of vaccination
2) Non compliance: refusing to be immunised.

IMMUNISATION SCHEDULE FOR CHILDREN< I YEAR OF AGE

Age	Vaccines
Birth	BCG,OPV0,HB1
6weeks	DPT,OPV1,HB2
10 weeks	DPT2,OPV2
14 weeks	DPT3, OPV3, HB3
9months	Measles and Yellow fever CSM
9months and 15 months	Vitamin A

(Adapted from: Basic Guide for Routine Immunisation
Service Providers Trainers' Manual 2004)

3.4 Immunisation Drop Outs

These are people who begin vaccination schedule but do not complete it. Dropout rate can affect a child's immunisation status because he/she did not complete his vaccination

Common reasons for immunisation drop out are :
- Migrant population
- Inadequate or lack of information
- Misinformation
- Poor quality services resulting in client dissatisfaction
- Erratic service
- Inconvenient schedule
- Poor documentation
- Social, cultural and political barriers
- Geographical distance – hard to reach areas.

Dropout rate is determined by DPT3 and it can be calculated thus:

$$\frac{\text{Cumulative doses of DPT1} - \text{Cumulative dose of DPT3}}{\text{Cumulative doses of D1}} \times 100$$

(Adapted from: Basic Guide for Routine Immunisation Service Providers Trainers' Manual 2004)

Immunisation status of a child can be ensured by taking the following steps

- Solution to drop out rate
- Child trafficking/contact tracing
- Advocacy to relevant authorities like state government, local government chairmen, community leaders, faith based organisations (FBOs) and association
- Monitoring and supervision
- Mobilisation and sensitisation
- Motor vaccine supply
- Creating more outreaches

4.0 CONCLUSION

Communication to mothers and care giver about what to expect during and after immunisation can go a long way to create confidence on both the health worker and programme of immunisation. The health worker should therefore respond to client/parent concern appropriately. Massages should also be kept simple and straight forward. Emphasis the complete schedule to ensure full protection for their children and themselves

5.0 SUMMARY

In this unit, we discussed:

Adverse Events Following Immunisation (AEF). Some side effect of immunisation, Immunisation monitoring tools, Immunisation status of a child and immunisation drop out.

6.0 TUTOR-MARKED ASSIGNMENT

i. How will you assess immunisation status of a child?
ii. What is AEFI and how can you prevent them?

7.0 REFERENCES/FURTHER READING

Understanding Childhood immunisation booklet - revised July (2000). (pp 61 to 63)

Immunisation Infoline on 1800 671 811 - © Commonwealth of Australia 2000

http//www.unicef.org/immunisation/index_how.html

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http://www.nevdgp.org.au/info/immunisation/immunise.htm

MODULE 4

Unit 1 Children who are at Risk
Unit 2 Concept of Integrated Management of Childhood Illness (IMCI)
Unit 3 Community Integrated Management of Childhood Illness (IMCI)
Unit 4 Condition which may Expose the Child to Grave Danger
Unit 5 Right of the Child

UNIT 1 CHILDREN WHO ARE AT RISK

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 Babies at Risk of Developing Symptomatic Hypoglycemia
  3.2 The Preterm Baby
  3.3 Low Birth Weight Baby
  3.4 Management at Birth of the Healthy LBW Baby
  3.5 Feeding of the Low Birth Weight
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

Babies who are at high risks are those whose growth has been restricted from utero and those born to diabetic mothers. There are other conditions like preterm baby, low birth weight, congenital malformation baby born to HIV/AIDS mothers and babies born through Caesarean sections that can also expose the child to a great risk. Care of these categories of children should therefore be taken with all seriousness and caution.

2.0 OBJECTIVES

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

- list those conditions that can expose the babies to risk
- classify the babies who are at risk of developing symptomatic hypoglycaemia
- discuss conditions like preterm baby and low birth weight babies

- explain the care and prevention of each of the conditions mentioned.

3.0 MAIN CONTENT

3.1 Babies at Risk of Developing Symptomatic Hypoglycaemia:

1. Babies with intrauterine growth restriction
2. Babies of diabetic mothers
3. Preterm babies
4. Babies who have suffered fetal distress in labour
5. Babies who are 'large for dates'- possibility of undiagnosed maternal gestational diabetes

Babies who are at the highest risk are those whose growth has been restricted in utero and those born to diabetic mothers. Occasionally an apparent healthy term baby has a rare condition, such as idiopathic hyperinsulinaemic hypoglycaemia of infancy (formerly called neisidioblastosis), which will manifest as symptomatic hypoglycaemia in the first days of life. Very rarely, a healthy baby becomes hypoglycaemic from breast milk insufficiency. In these situations, prolonged symptomatic hypoglycaemia can occur and this can be brain damaging. A balance needs to be struck between screening for and prevention of symptomatic hypoglycaemia in at risk babies, with recognition of symptomatic hypoglycaemia in babies who are ill, whilst avoiding over investigation and over treatment in the normal term baby whose mother is trying to establish breastfeeding.

Signs of hypoglycaemia in the newborn are vague and include lethargy/floppiness, apnoea and excessive jitteriness. These non-specific signs can also be due to sepsis. If a term baby of normal weight is sleepy, he needs help to feed directly from the breast or to be given expressed breast milk or formula from a cup, syringe or bottle. However, if the signs are more than just sleepiness & worsen or persist, the baby must be examined fully by a doctor and investigation to exclude sepsis and/or hypoglycaemia should be considered. Checking a glucose level in this situation is not an excuse for omitting a proper examination.

If a low serum glucose is confirmed, then the diagnosis is symptomatic hypoglycaemia until proven otherwise. This is an emergency and intravenous glucose must be given without delay. Blood samples for true blood glucose, insulin and ketone body levels should be collected at the same time as commencing an intravenous infusion of 10 per cent dextrose. To avoid rebound hypoglycaemia, boluses of dextrose should

be avoided if possible or restricted to 'mini-boluses' of 3mL/kg of 10 per cent dextrose.

Hypoglycaemia in at-risk babies should be prevented by screening and supplementary feeding. Small for gestational age babies can require as much glucose as 12mg/kg per minute to maintain glucose levels. Asymptomatic hypoglycaemia is managed with an increase in feeds in the first instance, with recourse to intravenous treatment only if the baby cannot tolerate feeds, symptoms develop or the hypoglycaemia persists (Rennie and Roberton 2002).

Inborn errors of metabolism:

There are many such conditions but the ones of immediate importance to the midwife are those that are screened for in the first week of life. Screening procedures have changed over time in response to other changes in neonatal care and society. Parental consent now has to be gained before the screening can be done. Midwives should check their local policies.

Phenylketonuria

Screening for phenylketonuria (1 in 13000 babies) using dried blood spots collected on to filter paper (the Guthrie test) was introduced in 1969. Milk feeds need to be established first and midwives collect blood by heel stab on the fifth to ninth day of life, posting the cards to the laboratory. If the test is positive, an alteration in diet can successfully control the condition without complications.

Hypothyrodism

The same system was expanded to include a screen for congenital hypothyrodism (1 in 3000) from 1981. Audit of the programme shows that it has been extremely successful, and that it detects far more cases than were suspected clinically at a much earlier stage in life. Virtually all babies with congenital hypothyrodism now start treatment by 28 days of age and have a better IQ as a result.

Cystic fibrosis and other conditions

Certain areas of the UK use the dried blood spot to screen for cystic fibrosis (usually by measuring immunoreactive trypsin) and haemoglobinopathies, such as sickle cell haemoglobin or thalassaemia. Tests are also available for a host of other rare conditions including maple syrup urine disease, Duchenne muscular dystrophy, fragile X syndrome and congenital adrenal hyperplasia, but none have been implemented in the UK. Screening for neonatal neuroblastoma using

vanillylmandelic acid (VMA) levels in urine is implemented only in Japan where the incidence is peculiarly high.

3.2 The Preterm Baby

This describes a baby before the end of the 37th week of gestation, regardless of birthweight. Most of these babies are appropriately grown and whereas some are SGA, a small number are LGA (these tend to be infant of diabetic mothers). The factors that play a role in the initiation of preterm labour are largely unknown, are described as multifactorial and in large part overlay with factors that impair foetal growth. They are divided into those labours that start spontaneously and those where a decision is made to terminate a viable pregnancy before term (referred to as elective causes)

Table: Causes of Preterm Labour

Spontaneous causes:

- 40% unknown
- Multiple gestation
- Hyperpyrexia as a result of viral or bacterial infection
- Premature rupture of the membrane caused by maternal infection
- Maternal short stature
- Maternal age and parity (Teenagers and Primips)
- Poor obstetric history; history of preterm labour
- Cervical incompetence
- Poor social circumstances

Elective Causes

- Pregnancy-induced hypertension, pre-eclampsia, chronic hypertension
- Maternal disease; renal, cardiac
- Placenta praevia, abruptio placenta
- Rhesus incompatibility
- Congenital abnormality
- IUGR

Sources: Blackburn & Loper (1992), Harlow & Spencer (1999)

Characteristics of the Preterm Baby

The appearance depends upon the gestational age. The following description will focus upon the baby born during the last trimester of pregnancy. Preterm babies rarely become large enough in utero to develop muscular flexion and fully adopt the foetal position (Young 1996) and as a result their posture appears flattened with hips abducted,

knees and ankles flexed. They are generally hypotonic with a weak and feeble cry. The head is in proportion to the body; the skull bones are soft with large fontanelles and wide sutures. The chest is small and narrow and appears underdeveloped owing to minimal lung expansion during foetal life. The abdomen is prominent because the liver and spleen are large and abdominal muscle tone is poor. The liver is large because it receives a good supply of oxygenated blood via the foetal circulation and is active in the production of red blood cells and erythropoiesis. The umbilicus appears low in the abdomen because linear growth is cephalocaudal (it is more apparent nearer to the head than the feet), by virtue of the foetal circulation oxygenation. Subcutaneous fat is laid down from 28 weeks' gestation, therefore its presence and abundance will affect the redness and transparency of the skin. Vermix caseosa is abundant in the last trimester and tends to accumulate at sites of dense lanugo growth (i.e. the face, ears, shoulders and sacral region) and protects the skin from amniotic fluid maceration. The ear pinna is flat with little curve, the eyes bulge and the orbital ridges are prominent. The nipple areola is poorly developed and barely visible. The cord is white, fleshy and glistening. The plantar ceases are absent before 36 weeks but soon start to appear as fluid loss occurs through the skin. In girls the labia majora fail to cover the labia minora and in boys the testes descend into the scrotal sac at about the 37^{th} gestational week.

3.3 Low Birth Weight Baby

The incidence of low birth weight in a given community is expressed as a percentage of all live births in that community over a specific period of time and is termed low birth weight ratio (LBWR). The LBWR is calculated as: Total number of births < 2500g X 100 Total number of births. (Levene, Tudehope & Thearle, 2000).

The LBWR for births in developed countries is around 7% and as high as 15% in developing countries (Mangate in de Kock & van der Walt, 2004). In developed countries, a fixed figure of <2500g birth weight is used, while in developing countries a birth weight of 2000g or even 1500g may be more appropriate due to a lower mean birth weight (Steyn in Cronjé & Grobler, 2003). In 1977, the World Health Organisation (WHO) 1977a) recommended that babies who weigh less than 2500g should be called low birth weight (LBW). (Levene, Tudehope & Thearle, 2000; Woods in Kibel & Wagstaff 2001; Mangate in de Kock & van der Walt, 2004)

Classification of Babies by Weight and Gestation

Definitions of low birth weight are based upon weight alone and do not consider the gestational age of the baby. Likewise, definitions of gestational age disregard any considerations of birth weight. The

concepts and categories that surround LBW are complex. The following classification describes the different types of LBW babies seen in practice.

The low birth weight categories are:

- low birth weight (LBW) babies are those weighing below 2500g at birth
- very low birth weight (VLBW) babies are those weighing below 1500g at birth
- extremely low birth weight (ELBW) babies are those who weigh under 1000g at birth (Levene, Tudehope & Thearle 2000, Harrison 2002).

Gestational age

A preterm baby is one born before completion of the 37th gestational week. Gestational weeks are calculated from the first day of the last menstrual period (LMP) and have no relevance to the baby's weight, length, head circumference, or indeed any other measurement of foetal or neonatal size.

Thus, it is the relationship between these two separate considerations of weight (for assessment of growth) and gestational age (for assessment of maturity) that is of great importance. This relationship can be plotted on centile charts as shown below

Fig X: Centile chart

These charts visually demonstrate that growth is appropriate, excessive or diminished for gestational age and that the baby is either preterm, term or post-term. They are based on measurements of foetal growth that has been collected over the last 20 years, from multiple ultrasound measurements. To act as an accurate tool, growth charts should be derived from studies of local populations, because genetically derived growth differences exist between countries, cultures and lifestyles (Roberton 1999).

Various types of LBW babies can be described:

1. Babies whose rate of intrauterine growth was normal at the moment of birth: they are small because labour began before the end of the 37th gestational week. These preterm babies are appropriately grown for their gestational age (AGA).
2. Babies whose rate of intrauterine growth was slowed and who were delivered at or later than term: these term or post-term babies are under grown for gestational age. They are small for their gestational age (SGA).
3. Babies whose rate of intrauterine growth was slowed and who, in addition, were delivered before term: these preterm babies are

small by virtue of both early delivery and impaired intrauterine growth. They are small for gestational age and preterm babies.

4. Babies who are considered large for their gestational age (LGA) at any weight when they fall above the 90^{th} centile. Therefore, it follows that both term and preterm babies can be SGA, AGA or LGA

3.4 Management at Birth of the Healthy LBW Baby

Given the unpredictability of the LBW baby and the birth process, the role of the midwife in the delivery room is to adequately prepare the environment, staff and parents for all eventualities. This takes the form of asking the multi professional team (second midwife, paediatrician and neonatal nurse), to be on standby for the delivery. The incidence of perinatal asphyxia and congenital abnormality is greater in SGA babies and the baby with a scaphoid abdomen could be physically normal, but alternatively could deteriorate quickly if presenting with a diaphragmatic hernia. Current cot availability in the NICU, transitional care unit (as applicable) and postnatal ward should be known. The delivery room ambient temperature should ideally be between 23 and $25^{O}C$; the neonatal resuscitaire should be checked and ready for use.

The Apgar score is traditionally scored at 1 and 5 minutes and acts as a guide in helping staff communicate the resuscitative needs of neonates immediately after birth. Some consider it as limited usefulness in LBW babies because it was originally devised by Apgar in 1953 for term babies and does not take into account how gestational age, congenital abnormalities or sedation affect the score (Juretschke 2000).

Labelling of the LBW baby is particularly important because separation of mother and baby could happen at any time if the baby's condition becomes unstable. If the baby needs admission to the NICU, the midwife may consider, on cutting the cord to size, to leave an extra length, in any case access to the umbilical vessels should be necessary at a later time. A detailed but expedient examination of the baby should be conducted by the midwife in the presence of the parents and recorded accordingly. It is particularly important in SGA babies to check that the anal sphincter is patent, which could provide information on the internal integrity of the gastrointestinal system.

This is a good time to allay any parental anxieties about their baby's general appearance, which may be quite different to what they were expecting (Redshaw 1997, Manders 2002). Once it is established that the baby is healthy, the midwife may attempt to normalise the care by emphasising to the parents the importance of preventing cold stress and promoting skin-to-skin contact for a period of up to 50 minutes. The

midwife should ensure that the baby is thoroughly dried before skin-to-skin contact is attempted. This will secure the baby's conductive heat transfer gains, and help him to become physically stabilised and to find the breasts. If the mother chooses not to engage in skin-to-skin contact the father may wish to do so, but if not, the baby can be dressed, wrapped and held by his parents in the normal way. The baby's axilla temperature should be maintained between 36.4 and 37^{o}C.

3.5 Feeding of the Low Birth Weight

Both preterm and SGA babies benefit from human milk because it contains long chain polyunsaturated omega-3 fatty acids, which are thought to be essential for the myelination of neural membranes and for retinal development. Preterm breast milk has a higher concentration of lipids, protein, sodium, calcium and immunoglobulin, a low osmolarity, and lipases and enzymes that improve digestion and absorption (Jones and Spencer 1999). The uniqueness of the mother's milk for her own baby cannot be overstated. For any mother to commit to the challenge of breastfeeding her LBW baby, and in particular the preterm baby, she should be thoroughly prepared both cognitively and emotionally by the midwife, so that her expectations are realistic as she anticipates the likely sequence of events that her baby may take her through (Lang 1997). First, she needs to understand what her baby may be able to achieve related to his development, which is based upon the combined influences of his gestational age at birth and his postnatal age. For a baby to feed for nutritive purposes, the coordination of breathing with suck and swallow reflexes is thought to reflect neurobehavioural maturation and organisation and is thought to occur between the 32 and 36 weeks' gestation (Heper & Shahidullah 1994, Pinelli & Symington 2001). Sucking and swallowing reflexes are present by 28 weeks' gestation, but the baby is unable to coordinate these activities until 34 - 36 weeks. Preterm babies are limited in their ability to suck because of their weak musculature and flexor control, which is important for firm lip and jaw closure (Blackburn & Loper 1992). Before 32 weeks, most healthy preterm babies will need to be tube fed on a regular basis, usually on a 3-hourly regimen with preset amounts of breastmilk, hind milk or formula milk based on postnatal age and present weight to provide the necessary calories for growth, but not at the expense of energy expenditure.

It has become common practice for patients to tube feed their baby. Als (1986) believes that parents should be encouraged to hold their baby during tube feeds and provide physical support for his trunk and shoulders, bracing his feet and giving him something to hold. Sucking is part of the flexor pattern of development and may be enhanced by giving the baby something to grasp (Young 1996). Tube feeding has the

advantage that the tube can be left in situ during a cup or breastfeed and has been shown to eliminate the need to introduce bottles into a breastfeeding regimen (Kliethermes et al 1999). However, several problems have been identified with tube feeding. First, nasal and oral gastric tubes encourage milk lipid adherence to their inside surfaces and reduce the amounts of fat calories available to the baby. Cup feeding is said to reduce this tendency (Lang et al 1994). Secondly, babies are preferential nose breathers and the presence of a naso-gastric tube will inevitably take up part of their available airway. Finally, their prolonged use has been associated with delay in the development of sucking and swallowing reflexes simply because the mouth is bypassed. For these reasons, cup feeding has been used in favour of tube feeding in order to provide the baby with a positive oral experience, to stimulate saliva and lingual lipases to aid digestion (Lang 1997), and to accelerate the transition from naso/gastric feeding to breastfeeding without the introduction of bottles and teats (Jones & Spencer 1999). Oral gastric tubes have been associated with vagal stimulation and have resulted in bradycadia and apnoea and, of the two types, most clinicians favour the nasogastric tube (Kliethermes 1999).

Certain behaviours such as licking and lapping are well established before sucking and swallowing (Ritchie 1998) and, when babies are given the opportunity, it is not unusual to see them as early as 28 and 29 weeks, licking milk that has been expressed on the nipple by their mother. Thus, babies between 30 and 32 weeks' gestation can be given expressed breast milk (EBM) by cup. Lang(1994) makes the point that tongue movement is vital in the efficient stripping of the milk ducts, so cup feeding can be seen as developmental preparation for breastfeeding. Between the 32 and 34 weeks' gestation, cup feeding can act as the main method of feeding, with the baby taking occasional breast feeds. Attitudes towards cup feeding vary, but initial concerns expressed by clinicians are according to Samuel (1999), related to fear of milk inhalation and the extra time needed to give a feed. These fears have not been realised in practice because, as Samuel argues, the baby controls the pace and volume he takes; some babies are slow feeders, others more expedient, so, in general, cup feeds tend to last about the same duration as bottle feeds. More importantly, however, they utilise little energy, which is a crucial factor in their favour for LBW babies.

A preterm baby of less than 35 weeks' gestation can be gently wrapped prior to a breast (or formula) feed and this is thought to provide reassurance and comfort, not unlike the unique close-fitting tactile stimulation of the uterus (Sparshott 1997). A preterm baby may easily tire and the mother can be thought to start the flow of milk by expressing this before attaching him to the breast. Long pauses between sucks are to be expected. This burst-pause pattern is a signal of normal

development and seems to occur earlier with breastfeeding (Blackburn & Loper 1992). The baby may appear to be asleep and a change in position may remind him of the task in hand, but it is thought to be a mistake to force a reluctant baby to feed (Sparshot 1997). If it is obvious that the baby is more interested in sleeping, the mother can complete the feed by tube.

From 35 weeks onwards, cup feeding can be gradually replaced by complete breastfeeding (Lang 1997). Progress in the feeding method is often dependent upon the preterm baby, who cues his mother that he is ready to take milk from the breast. In the interim, she must express her milk so that she can maintain her milk supply and provide the milk for cup feeding as necessary. An unrushed feed can take up to an hour to complete. Any advances on this time frame should be reviewed in terms of the quality of the baby-nipple attachment, maternal milk flow (which may be affected by anxiety or other factors) and the general condition of the baby (e.g. the development of physiological jaundice). Feeding frequency can vary between 6 and 10 feeds per day. The baby should be left to establish his own volume requirements and feeding pattern. The mother should be encouraged to rely upon her own instincts and common sense so that the rhythm of total care she adopts in hospital will thoroughly prepare her for when she goes home (Lang 1997). Often the difference between early and late transfer home is more dependent upon the mother's positive attitude and skill development than the baby's maturity and inherent abilities.

4.0 CONCLUSION

The survival of a preterm or low birth weight baby is dependent on the acquisition of skill by the medical personnel on their quality care. A balance should therefore need to be struck between the prevention of compilation of the preterm/low birth weight baby and their quality care

5.0 SUMMARY

This unit discussed some of the conditions that can expose the baby to risks:

- What preterm/low birth weight is.
- Causes of preterm/low birth weight.
- Care of preterm baby.

6.0 TUTOR-MARKED ASSIGNMENT

i. Discuss the causes of preterm baby or low birth weight baby.
ii. How will you feed a preterm baby?

iii. In what ways can we prevent preterm baby or low birth weight baby?

7.0 REFERENCES/FURTHER READING

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UNIT 2 CONCEPT OF INTEGRATED MANAGEMENT OF CHILDHOOD (IMCI)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
  3.1 What is IMCI?
  3.2 Why is IMCI Better than Single Condition Approaches?
  3.3 Implementation of IMCI
  3.4 Evaluation of IMCI
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

Every day, millions of parents seek health care for their sick children, taking them to hospitals, health centres, pharmacists, doctors and traditional healers. Surveys reveal that many sick children are not properly assessed and treated by these health care providers, and that their parents are poorly advised. At first-level health facilities in low-income countries, diagnostic supports such as radiology and laboratory services are minimal or non-existent, and drugs and equipment are often scarce. Limited supplies and equipment, combined with an irregular flow of patients, leave doctors at this level with few opportunities to practice complicated clinical procedures. Instead, they often rely on history and signs and symptoms to determine a course of management that makes the best use of the available resources.

These factors make providing quality care to sick children a serious challenge. WHO and UNICEF have addressed this challenge by developing a strategy called the Integrated Management of Childhood Illness (IMCI).

2.0 OBJECTIVES

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

- define IMCI
- Explain why IMCI is better than single-condition approaches?
- implement f IMCI
- evaluate IMCI strategy.

3.0 MAIN CONTENT

3.1 What is IMCI?

IMCI is an integrated approach to child health that focuses on the well-being of the whole child. IMCI aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age. IMCI includes both preventive and curative elements that are implemented by families and communities as well as by health facilities.

The Strategy includes Three Main Components:

i. Improving case management skills of health-care staff
ii. Improving overall health systems
iii. Improving family and community health practices.

In health facilities, the IMCI strategy promotes the accurate identification of childhood illnesses in outpatient settings, ensures appropriate combined treatment of all major illnesses, strengthens the counselling of caretakers, and speeds up the referral of severely ill children. In the home setting, it promotes appropriate care seeking behaviours, improved nutrition and preventative care, and the correct implementation of prescribed care.

3.2 Why is IMCI better than Single Condition Approaches?

Children brought for medical treatment in the developing world are often suffering from more than one condition, making a single diagnosis impossible. IMCI is an integrated strategy, which takes into account the variety of factors that put children at serious risk. It ensures the combined treatment of the major childhood illnesses, emphasising prevention of disease through immunisation and improved nutrition.

3.3 Implementation of IMCI

Introducing and implementing the IMCI strategy in a country is a phased process that requires a great deal of coordination among existing health programmes and services. It involves working closely with local governments and ministries of health to plan and adapt the principles of the approach to local circumstances. The main steps are:

- Adopting an integrated approach to child health and development in the national health policy.
- Adapting the standard IMCI clinical guidelines to the country's needs, available drugs, policies, and to the local foods and language used by the population.

- Upgrading care in local clinics by training health workers in new methods to examine and treat children, and to effectively counsel parents.
- Making upgraded care possible by ensuring that enough of the right low-cost medicines and simple equipment are available.
- Strengthening care in hospitals for those children too sick to be treated in an outpatient clinic.
- Developing support mechanisms within communities for preventing disease, for helping families to care for sick children, and for getting children to clinics or hospitals when needed.

IMCI has already been introduced in more than 75 countries around the world.

3.4 Evaluation of IMCI

The results of the MCE support planning and advocacy for child health interventions by ministries of health in developing countries, and by national and international partners in development. To date, MCE has been conducted in Brazil, Bangladesh, Peru, Uganda and the United Republic of Tanzania.

The Results of the MCE Indicate that:

i. IMCI improves health worker performance and their quality of care;
ii. IMCI can reduce under-five mortality and improve nutritional status, if implemented well;
iii. IMCI is worth the investment, as it costs up to six times less per child correctly managed than current care;
iv. Child survival programmes require more attention to activities that improve family and community behaviour;
v. The implementation of child survival interventions needs to be complemented by activities that strengthen system support;
vi. A significant reduction in under-five mortality will not be attained unless large-scale intervention coverage is achieved.

4.0 CONCLUSION

In this unit you have learnt what IMCI single-condition approaches. Implementation of IMCI and measures taken to evaluate IMCI strategy. You should therefore be able to explain what IMCI is, the need for IMCI in child illnesses and explain measures taken to implement IMCI.

5.0 SUMMARY

The unit focuses on IMCI, its implementation. The need for IMCI and evaluation of IMCI

6.0 TUTOR-MAIKED ASSIGNMENT

i. What is the concept of IMCI?
ii. Highlight the results of IMCI, what are the main steps to implementing IMCI

7.0 REFERENCES/FURTHER READING

Manual for Trainers of community Resource persons. The United Nations Foundation (UNF). Funded Project entitled *Empowering communities to improve children's Health in Nigeria*. (2002 – 2006)

A Pictoral Counselling guide for community Resource Persons (CORPS) 2008. WHO and UNICEF.

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UNIT 3 COMMUNITY INTEGRATED MANAGEMENT OFCHILDHOOD ILLNESS (CIMCI)

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Key Household Practices
    3.2 Community Resources Persons (CORPs)
    3.3 Communication and Counselling
        3.3.1 Points of Emphasis: Communication and Counselling
        3.3.2 Counselling in Community IMCI
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 Reference / Further Reading

1.0 INTRODUCTION

In the previous unit we saw the concept of IMCI & its importance and necessity. In this unit we shall go on to consider the community aspect of IMCI (CIMCI) is an integrated child care approach that aims at improving key household and community practices that are likely to have the greatest impact on child survival, growth and development. This is very essential because

1. Majority of children die at home in spite of availability of health services.
2. Initial care (whether using orthodox or tradition medicine) takes place in the family.
3. Trained health workers are usually either inaccessible or unavailable
4. Feasible interventions that can significantly reduce morbidity and mortality exist and can be practised in the communities such as:
    a) Appropriate breast feeding which can reduce child mortality by 10%
    b) Improved complementary feeding which can prevent deaths from malnutrition, diarrhoea, ARI (especially pneumonia) and measles.
    c) Good hygiene practices which can reduce diarrhoea by 10%

2.0 OBJECTIVES

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

- identify various household practices
- recognise the Community Resource Persons (CORPs)
- communicate and counsel persons concern

3.0 MAIN CONTENT

3.1 Key Household Practices

The key practices are broadly grouped under four major headings. They are:

- Growth promotion and development has the following household practices under it.
- Exclusive breastfeeding
- Home management
- Disease prevention
- Care seeking and compliance

Growth Promotion and development:

- Exclusive breastfeeding for 6 months
- Appropriate complementary feeding from 6 months whilst continuing breastfeeding up to 24 months
- Adequate micronutrients through diet or supplementation
- Growth monitoring
- Promotion of mental and psychosocial development
- Birth registration

Home Management

- Continue to feed and offer more food and fluids when child is sick
- Give child appropriate home treatment for infections
- Take appropriate actions to prevent and manage child injuries and accidents

Disease Prevention

- Proper disposal of faeces, hand washing etc
- Child and pregnant woman sleep under Insecticide Treated Nets (ITNs)
- Prevention and care of HIV/AIDS
- Prevention of child abuse/neglect and taking appropriate action

Care Seeking and Compliance

- Take child to complete full course of immunisation before 1st birthday
- Recognise when child needs treatment outside home and take to Health worker
- Follow Health worker advice about treatment, Follow up and Referral
- Birth Preparedness and Complication Readiness (including ANC and TT Vaccination during pregnancy)
- Essential community newborn care
- Active participation of men in childcare and reproductive health activities

Exercise I

1) List the key practises
2) Mention some of the practices of women of child bearing age in the following areas: breastfeeding and weaning.

3.2 Community Resource Persons (CORPS)

In implementing CIMCI, there is need to build capacity of the community to improve the 19 key household and community practices that have the greatest impact on child survival and development. Communities are expected to nominate their members who will be trained as community resource persons (CORPs) to promote these key practices by counselling caregivers within their communities as well as collecting data for community based information system (CBIS). CORPs are resident in and accepted by the community, has the ability to mobilise community members, and is willing and available to work voluntarily.

There is also a CORP supervisor who is trained to regularly supervise the activities of the CORPs to ensure that the counselling and other activities are properly carried out as planned.

A care giver is a person that takes care of under-five children at home or in institutions like motherless babies home, day care centres, etc. He/she could be a parent (mother and or father), grandparent, uncle, aunt, older sibling, nanny or any other person living within the household/institution.

Exercise 2

1) Who is a CORPs
2) Do you have them in your community

3.3 Communication and Counselling

Communication is a process of sending a message from a source to a receiver in order to create mutual understanding and to, in addition, elicit a response. Counselling is a communication method geared towards assisting or encouraging individuals and families to take responsibility for identifying and solving their own problems. CORPs and their trainers require effective communication and counselling skills, to ensure caregivers acquire knowledge and skills to care for their children.

3.3.1 Points of Emphasis: Communication and Counselling

- Communication and counselling promote free flow of information between counsellors and their clients as well as trainers and their trainees (including CORPs, their trainers and supervisors, and caregivers).
- CORPs trainers require adequate communication and counselling skills to teach CORPs to counsel caregivers on key household and community practices for child survival.
- Counselling ensures that caregivers acquire knowledge and skills on key household and community practices for child survival.

3.3.2 Counselling in Community IMCI

The main purpose of counselling in community IMCI is to help caregivers think about child health so that they can commit themselves to taking appropriate action as situations present themselves. Counselling promotes choice not force. Often, counsellors (such as CORPs and their supervisors) think they know what is best for the caregivers and therefore try to force them to do as instructed. Although the idea of the counsellor may be excellent, it may not be appropriate to the particular circumstances of the caregiver. By counselling, we encourage people to change by their own freewill (voluntarily).

4.0 CONCLUSION

Community IMCI is a very important aspect of IMCI. It aimed at enlightening the care givers especially at the grass root on early recognition treatment of ailment at home. It also equipped the care givers, on the prevention of some of those illnesses. Emphasis is also on the need for the care giver to know the need of seeking health care and compliance with treatment message at an appropriate health facility. All these effort will help to care for the child appropriately thereby reducing child morbidity and mortality.

It also emphasises the importance for men to assist their wives in the day to day running of the homes.

5.0 SUMMARY

In this unit we have been able to discuss what CIMCI is, it's importance.

- The key house hold practices
- Know who is a care giver and supervisor
- We also try to discuss briefly communication & counsellor and qualities of a good counsellor importance of counselling.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is the concept of community IMCI?

ii. a. What is communication & Counselling
    b. Mention 5 qualities of a good counsellor

iii. Explain briefly the following Terms
    a. Corps
    b. Care giver
    c. Supervisor.

7.0 REFERENCES/FURTHER READING

Manual for Trainers of community Resource persons. The united Nations foundation (UNF). Funded Project entitled: *Empowering communities to improve children's Health in Nigeria*.(2002 – 2006)

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UNIT4 CONDITION WHICH MAY EXPOSE THE CHILD TO GRAVE DANGER

CONTENT

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Most Recent Development
    3.2 Street Children and Exploitation
    3.3 Education and the Economic Impacts
    3.4 Agricultural and Food Impacts
    3.5 Stigma, Discrimination and Depression
    3.6 Gender Exploitation
        3.6.1 Economic and Material Responses
        3.6.2 Education and Skills Training
        3.6.3 Protection and Legal Support
4.0 Conclusion
5.0 Summary
6.0 Tutor- Marked Assignment
7.0 References / Further Reading

1.0 INTRODUCTION

In the previous unit we saw some of the medical conditions which can subject the new born to risks. In this unit we shall go on to discuss some of the social/economic factors which can further put the child to risk. The Orphan and Vulnerable Children (OVC) are another group of children who are at risk Since HIV/AIDS was discovered in 1981, more than 20 million people have lost their lives to the virus. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), nearly 40 million are currently living with HIV/AIDS, including nearly 2.2 million children under the age of 15. In 2004, 4.9 million people acquired the virus, and 3.1 million died from AIDS. Sub-Saharan Africa remains the most affected region with 25.4 million people living with HIV/AIDS at the end of 2004, 1.9 million of whom were children under the age of 15. The United States Agency for International Development (USAID), the United Nations Children's Fund (UNICEF), and UNAIDS estimate that at the end of 2003, 15 million children under the age of 18 had lost one or both parents to AIDS, with the majority (82%) in sub-Saharan Africa. In just two years, from 2001 to 2003, the global number of children orphaned by AIDS increased from 11.5 million to 15 million. By 2010, it is expected that more than 25 million children will be orphaned by this deadly virus. Due to the 10-year time lag between HIV infection and death, officials predict that orphan populations will continue to rise for a similar period, even after the HIV rate begins to

decline. Experts say only massive spending to prolong the lives of parents could be expected to change this trend. The impact of HIV/AIDS on children is just beginning to be explored. Not only are children orphaned by AIDS affected by the virus, but those who live in homes that have taken in orphans, children witch little education and resources, and those living in areas with high HIV rates are also impacted. Children who have been orphaned by AIDS may be forced to leave school, engage in labour or prostitution, suffer from depression and anger, or engage in high-risk behaviour that makes them vulnerable to contracting HIV.

2.0 OBJECTIVES

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

- identify that due to HIV/AIDS many children have been orphaned and made vulnerable
- recognise one of the reasons children are on the streets and exploitation of these
  - effect of stigma, discrimination and depression on these people
  - gender exploitation

3.0 MAIN CONTENT

3.1 Most Recent Developments

The plight of children affected by HIV/AIDS is gaining increased congressional attention, particularly through the enactment of P.L. 108-25 (The United States Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003), which authorised 10% of HIV/AIDS funds to be used for children orphaned or made vulnerable by the virus (OVC). As the United States increases its funding for HIV/AIDS initiatives, many are calling for streamlining of activities that are related to children affected by HIV/AIDS. Some want a senior position for children orphaned and affected by HIV/AIDS in the AIDS Coordinator's Office in the Department of State to ensure that programmes that affect this vulnerable population complement one another and conserve spending. Still others argue that the scope should be expanded to include children who are orphaned from other causes, as they are just as vulnerable as those orphaned by HIV.

3.2 Street Children and Exploitation

As HIV/AIDS rates continue to soar around the world and household poverty deepens, children are increasingly pressured to contribute

financially to the household. The streets have become the place where children orphaned and made vulnerable by HIV/AIDS often turn to supplement lost wages, find refuge, and sometimes to find an escape from stigma. While on the street, children can be exposed to rape, drug abuse, child labour, including child prostitution, and other forms of exploitation, making them more vulnerable to contracting HIV/AIDS. Children as young as nine years old have been found to be engaged in sex work. While no one seems to know how many children actually live on the streets worldwide, many reports cite a UNICEF estimate of 100 million. Country reports from a number of heavily affected nations all report a significant increase in the number of children roaming the streets over the past ten years. A number of reports emphasise that the majority of children on the streets have families and homes in which to sleep. However, most children go to the streets for about 12 hours to beg, work, or to seek food, and then return home to sleep, as young as two years old have been sent out by their parents to beg for food and money. Whether the children live on the streets or spend the majority of their days on the streets, experts are concerned about their vulnerability to terrorist organisations and militias, crime, and HIV infection. A UNICEF worker in Kenya recently asked, "What kind of adults does such an existence produce, if crime and violence become their survival strategies?" Many analysts have expressed concern that the growing number of orphaned children and those on the streets are increasingly rootless, uneducated, under nurtured and traumatised, making them ripe for recruitment for crime, military warlords and terrorists. Children as young as seven years old are among the 300,000 children fighting in wars around the world today. Some are particularly concerned that orphans and other children affected by HIV/AIDS can become easy conscripts for warring factions, as they search for food, shelter, nurturing, and safety. A rebel fighter in Congo reportedly claimed that his militia pays the school fees for the children in his group, most of whom are orphans.24 Children's vulnerability to other forms of exploitation was illustrated in a study conducted by the International Labour Organisation (ILO). The study found that in Zambia the majority of street children and children involved in sex work were orphans. Another study in Ethiopia found that the majority of child domestic workers were orphans. It was found in Uganda that girls were especially vulnerable to sexual abuse while engaged in domestic work. Scott Evertz, Director of the White House Office of AIDS Policy has said. More and more AIDS orphans are growing into young adults with little or no adult supervision. Clearly this presents a security risk. We will have whole populations of them in much of the world, ripe for the picking by those individuals who would want to engage the interests of young adolescents. Although a number of social scientists have raised concerns about the growing number of children orphaned and made vulnerable by HIV/AIDS, others feel that the prediction of rising crime

rates and increased political instability is alarmist. Those who dispute the linkage between social breakdown and increased orphan hood cite a lack of evidence and a reliance on anecdotal data. Furthermore, they argue that children have lived among extended family members for some time.

3.3 Education and the Economic Impacts

Some social scientists are concerned that the growing number of children affected by HIV/AIDS could lead to a decrease of skilled labourers within a country, further destabilising the national economy and society at large. The issue is that an inefficient transfer of skills and scholarship leads to a decline in human capital, the body of knowledge, and ability found in a population. It is human capital that drives economic growth, some experts argue, and when that is threatened so is the economic security of a nation. A 2003 World Bank report warned that "a widespread epidemic of AIDS will result in a substantial slowing of economic growth, and may even result in economic collapse." The report argues that the effects of these weakened knowledge-transmission processes are felt only over the longer run, as the poor education of children today leads to the low productivity of adults in the future. The economic challenges of children affected by HIV/AIDS occur in stages.

The first stage often begins when children realise that their parent has AIDS and is likely to die. They begin to fear for their future, wonder who will care for them, and worry about how they will be able to stay in school. Children are often pulled out of school to care for an ailing family member, or because meagre household income is now spent on the sick. School fees, notebooks, and pencils become unaffordable and children begin to struggle to provide care and replace lost adult labour and income. At this stage, the quality of child-rearing is compromised, and many important lessons on life skills and self-sufficiency are not thought, mostly because the parent(s) is too ill to transfer the knowledge. After one parent dies, most children continue to live with the surviving parent or a relative, but they often slide more deeply into poverty. For some, the next stage begins when they find themselves the heads of households. A young adolescent may be responsible for many siblings, some of whom may be infants. Children who are the heads of households are in a difficult position not only because they must now support their siblings with little to no education and/or employable skills, but also because they most likely have limited resources. In many cases much of the family's possessions may have been sold to care for the sick. Large numbers of orphaned children find themselves in homes that cannot afford to pay school expenses and drop out to work in the household, fields, or on the street. Young children with minimal

education or employable skills can be found doing work such as shining shoes, begging for money in the streets, bartending, selling food, and most often in the case of girls, becoming domestic workers. Many observers believe that the desperation of these young children makes them more vulnerable to abuse and exploitation, ultimately making them more susceptible to contracting HIV.

3.4 Agricultural and Food Impacts

Stories of children going hungry or starving in areas that always had food, because HIV-infected parents who were farmers became too weak to till the fields are increasingly reported across Africa. Many traditional agrarian societies rely on women to produce food, particularly in Africa, where 80% of subsistence farmers are women. During times of famine these women know which wild grains, roots, and berries can be eaten when there are no crops.32 The women also teach their children how to farm and survive off the land. As significant numbers of women of childbearing age fall ill due to HIV/AIDS, they become unable to transfer these skills to their children, both in times of famine and without. This is of particular concern in Africa where 67% of all people infected with HIV/AIDS are women.33 Farmers in the last stages of AIDS usually produce little to no crop yields. Lower crop yields within households require the families to spend more of their money on food, leaving less money for education and health care. Some experts have expressed concern that in the long-run African people will be unable to sustain themselves as they are forced to put off transferring life skills to cope with HIV/AIDS. In recognition of the long-term effects of AIDS on nutrition and food security, WFP has announced that it is now a co-sponsor of the Joint United Nations Programme on HIV/AIDS (UNAIDS).A significant part of its efforts will include integrating food aid with education programmes.

3.5 Stigma, Discrimination, and Depression

According to UNAIDS, stigma and discrimination continue to accompany the HIV/AIDS epidemic. Children are not immune from stigmatisation. In cases of stigma, children begin to be rejected early as their parents fall ill with AIDS. Some children may be teased because their parents have AIDS, while others may lose their friends because it is assumed that proximity can spread the virus. Harsh cases of discrimination have been reported in many countries, including Nigeria. Orphaned children have reported that unsympathetic teachers yelled at them, made fun of them, or put them out of the classroom. However, other orphaned children have reported that their teachers have been their primary support base at school. Orphaned children can also experience discrimination and exploitation within their new households. Reports

have emerged of orphaned children receiving less food, denied school fees, and forced to do more work. Exploitation remains an issue even in countries like Botswana, where the government offers support to orphans. It has been reported that some caretakers, while offering minimal care, are using children to benefit from the government orphan packages. Children, especially girls, have also reported instances of sexual abuse in their new households. However, many may silently accept it because they have nowhere else to turn to for shelter or protection.

3.6 Gender Exploitation

The rapid spread of HIV/AIDS in many countries is fuelled by gender inequities. Since girls tend to be educated at lower rates than boys, some assert they are more likely to engage in survival sex. . In addition to the practice of exchanging sex for food, money, and clothing, as discussed earlier, young girls face a range of challenges that affect their seroprevalence. While at school young girls may be raped by their peers or coerced into having sex with their teachers. Young girls are also vulnerable to sexual exploitation as they work, particularly as vendors and domestic servants.

Young girls often engage in domestic work for food, clothing and shelter in impoverished areas. Sexual abuse by male relatives also remains a significant challenge for girls, particularly for orphans. Additionally, a widespread perception that virgins can cure HIV/AIDS has reportedly led to a significant rise in cases of rape among young girls.

3.6.1 Economic and Material Responses

USAID supports a number of programmes that offer material and other support to orphans and vulnerable children, mostly through its Child Survival and Health Fund (CSH) programmes. Many of the programmes use an integrated approach, which responds to more than one set of needs. For example, USAID uses a combination of funding sources to support school feeding programmes that reduce hunger, malnutrition, and disease while advancing basic education.62 similar programmes that combine food and education aid have been instituted by the World Food Programme (WFP) and UNICEF, as well as by other international and local non-governmental organisations, such as Save the Children.

3.6.2 Education and Skills Training

Attaining basic education and employable skills is an important part of preventing the spread of HIV/AIDS and breaking the cycle of poverty. Education has a number of positive impacts, particularly for orphans

and vulnerable children. Not only are those who are educated more likely to have a higher income than those who are not, studies have also shown that the educated are also less likely to contract HIV and tend to have children later in life. Messages about HIV prevention are beginning to be integrated into school curricula to raise awareness about the disease among the young, a group that experiences an estimated 1,600 deaths daily HIV/AIDS awareness remains very low among the young. According to a 2001 UNAIDS survey, 74% of young women and 62% of young men aged 15-19 in Mozambique are unaware of any way to protect themselves against HIV. UNICEF has launched a programme in Swaziland that offers training in farming to children orphaned by AIDS and affected by famine. This programme is intended to help the children develop a source of income and combat famine that is affecting the region. Experts argue that vocational skills training programmes can have additional benefits for girls. It is hoped that those who participate in vocational training will no longer be forced to rely on sex work to feed themselves and their siblings.

3.6.3 Protection and Legal Support

Children who are solely responsible for their siblings struggle not only to support the household, but also to keep their homes. Property grabbing, a practice where relatives of the deceased come and claim the land and other property is reportedly a serious problem for widows and child-headed households. Traditional law in many rural areas dictates that women and children cannot inherit property. Property grabbing has a number of negative consequences particularly for girls and women. Girls may experience sexual abuse and exploitation from their new caretakers; girls and women may be forced into the sex trade in exchange for shelter and protection, further increasing the risk of contracting HIV. Some are concerned that the practice of property grabbing heightens the strain on extended families and increase the number of street children. In an effort to help parents prevent property grabbing, USAID supports organisations, such as the Population Council and UNICEF, which work with HIV infected parents to plan for the future of their children through will-writing and other succession-planning initiatives. These initiatives encourage HIV-infected parents to disclose their HIV status to their children, appoint and train stand-by guardians, create memory books (journals of lasting record of life together and family information), and write wills before they die.

National legislation, at times, has minimised the effectiveness of succession programmes. The legislative issues that AIDS-affected countries are beginning to face are often complex and interlinked. For example, the single issue of inheritance rights may require governments to ensure that each child has a birth certificate and national identification (which many children in developing countries do not

have), to strengthen the coordination and administration of their child services and social services departments that offer safety nets to children, to revisit property and trustee laws, and to reconsider who may legally represent minors. Laws in many rural countries follow traditional cultural practices, which are based on the extended family structure. However, in the wake of the HIV/AIDS pandemic, they inadequately protect orphans and widows, as all adults in whole families may have died. When the close family members die, children can be left in a precarious situation, as they may be forced to rely on distant relatives, who may be unknown. In many cases children are left with their grandmothers, women who often have little legal power.

4.0 CONCLUSION

Orphan and Vulnerable children are exposed to a lot of dangers. Some of which are rape, sexual exploitation, sexual abuse and emotional trauma. Orphan as a result of HIV/AIDs are also exposed to the danger of been stigmatised and may therefore not be able to cope in school or any other public organisation they find themselves. Efforts should therefore be made by the government and other various organisations to support the Orphan and Vulnerable Children towards living a healthy and social life.

5.0 SUMMARY

This unit discussed orphan and vulnerable children under the following heading: Recent development, street children and exploitation, Education and economic impact, Agricultural and food impacts, Stigma, discrimination and depression and what can be done for them (OVC).

6.0 TUTOR-MARKED ASSIGNMENT

i. a. What is OVC?
   b. State the type of dangers that the orphan and vulnerable children are exposed to.

ii. What can you as an individual do to help the OVC to live a healthy and sociable life?

7.0 REFERENCES/FURTHER READING

UAIDS, Accelerating Action against AIDS in Africa. p.24. - [http://www.unaids.org]

Stanmeyer, Anastasia, AIDS in Asia: Cruel Epidemic Hits Kids Hard.San Francisco Gate. December 19, 2002. [http://www.sfgate.com]

UNIT 5 RIGHT OF THE CHILD

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1.0 INTRODUCTION

When the various human rights documents are considered, even though they are applicable to all human beings, they are not necessarily child specific and fail to address the peculiar needs of children. For the rights of the child, an International law or "International Convention" was required. On 20th November 1989, the United Nations General Assembly adopted the Convention on the Rights of the Child (CRC), whilst the OAU Assembly of Heads of States and Governments adopted the African Union Charter on the Rights and Welfare of the Child (CRCW) in July 1990. Nigeria has signed both International Instruments and had ratified them in 1991 and 2000 respectively. Both international instruments contain universal set of standards and principles for survival, Development, protection and participation of Children. It reflects children as human beings and as Subjects of their own rights. The Convention on the Rights of the Child (CRC) outlines the human rights to be respected and protected for every child under the age of 18 years and requires that these rights are implemented.

2.0 OBJECTIVES

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

- define a child
- domestication of child Right Act in Nigeria & State level
- state basic provision of the child Right Act.

3.0 MAIN CONTENT

3.1 Definition of a Child

The Act defines a child as one who is below the age of eighteen years. It categorically provides that such a child's best interests shall remain paramount in all considerations. A child shall be given such protection and care as is necessary for its well being, retaining the right to survival and development and to a name and registration at birth.

3.2 Domestication of Child Right Act in Nigeria

The Convention on the Rights of the child enjoins that "Member States shall undertake to disseminate the Conventions principles and take all appropriate legislative, administrative and other measures for the implementation of the Rights recognised in the present Convention."
Against this background, a draft Child's Rights Bill aimed at principally enacting into Law in Nigeria the principles enshrined in the Convention on the Rights of the Child and the AU Charter on the Rights and Welfare of the Child was prepared in the early 90's.

But it is only after about ten years with several Heads of Government and heated debates by the Parliamentarians that the Bill was eventually passed into Law by the National Assembly in July 2003. It was assented to by the President of the Federal Republic of Nigeria, Chief Olusegun Obasanjo in September 2003, and promulgated as the ***Child's Rights Act 2003***.

3.3 Basic Provisions of the CRA

- Provisions of freedom from discrimination on the grounds of belonging to a particular community or ethnic group, place of origin, sex, religion, the circumstances of birth, disability, deprivation or political opinion; and it is stated categorically that the dignity of the child shall be respected at all times.
- No Nigerian child shall be subjected to physical, mental or emotional injury, abuse or neglect, maltreatment, torture, inhuman or degrading punishment, attacks on his/her honour or reputation. Nigeria Country Programme August 2007.
- Every Nigerian child is entitled to rest, leisure and enjoyment of the best attainable state of physical, mental and spiritual health.
- Every government in Nigeria shall strive to reduce infant mortality rate, provide medical and health care, adequate nutrition and safe drinking water, hygienic and sanitised environments, combat diseases and malnutrition, support and

mobilise through local and community resources, the development of primary health care for children.

- Provisions for children in need of special protection measures (mentally, physically challenged, or street children): they are protected in a manner that would enable them achieve their fullest, possible social integration, and moral development.
- Expectant and nursing mothers shall be catered for, and every parent or guardian having legal custody of a child under the age of two years shall ensure its immunisation against diseases, or face judicial penalties.
- Betrothal and marriage of children are prohibited.
- Causing tattoos or marks, and female genital mutilation are made punishable offences under the Act; and so also is the exposure to pornographic materials, trafficking of children, their use of narcotic drugs, or the use of children in any criminal activities, abduction and unlawful removal or transfer from lawful custody, and employment of children as domestic helps outside their own home or family environment.
- Child abduction and forced exploitative labour (which is not of a light nature) or in an industrial undertaking are also stated to be offences. The exceptions to these provisions are where the child is employed by a family member, in work that is of an agricultural or horticultural or domestic in nature, and if such a child is not required to carry or move anything heavy that is likely to adversely affect its moral, mental, physical spiritual or social development.
- Buying, selling, hiring or otherwise dealing in children for purpose of begging, hawking, prostitution or for unlawful immoral purposes are made punishable by long terms of imprisonment. Other offences considered grave include sexual abuse, general exploitation which is prejudicial to the welfare of the child, recruitment into the armed forces and the importation /exposure of children to harmful publications. It further preserves the continued application of all criminal law provisions securing the protection of the child whether born or unborn.

Children's responsibilities

Children under the Act, are also given responsibilities which include working towards the cohesion of their families, respecting their parents and elders, placing their physical and intellectual capabilities at the service of the State, contributing to the moral well being of the society, strengthening social and national solidarity, preserving the independence and integrity of the country, respecting the ideals of freedom, equality, humaneness, and justice for all persons, relating with others in the spirit of tolerance, dialogue and consultation, and contributing to the best of their abilities solidarity with and unity with

Africa, and the world at large. To these end, the Act mandates parents, guardians, institutions and authorities in whose care children are placed, to provide the necessary guidance, education and training to enable the children live up to these responsibilities.

3.4 Child Justice

The Act makes provisions for the establishment of "Family Courts". The courts which will operate at the High Court and Magistrate Court levels have been vested with the jurisdiction to hear all cases in which the existence of a legal right, power, duty, liability, privilege, interest, obligation or claim in respect of a child is in issue, and any criminal proceeding, relating thereto. The Act has provided for Child Justice Administration, to replace the Juvenile Justice Administration, which has been in existence for several decades in Nigeria. The provisions prohibit the subjection of any child to the criminal justice process, and guarantees that due process be given to any child subjected to the child justice system, at all the stages of investigation, adjudication and disposition of any case against such a child. It has prohibited the use of capital punishment, use of imprisonment and use of corporal punishment for children under 18 years and further provides for the use of scientific tests in deciding paternity cases. These are all novel Nigeria Country Programme August 2007 provisions, as no such prohibition existed under the previous legislations guiding children matters (Children and Young Persons Act -CYPA). The Act frowns at institutionalisation for pregnant children/teenagers and expectant mothers. But where institutionalisation is desirable or unavoidable, it mandates the establishment of Special Mothers Centres for pregnant mothers/teenagers, while Children Residential Centres and Children Correctional Centres are to be established to replace the present Approved Schools created under the CYPA. Where the court decides against institutionalisation, it should utilise such disposition measures as dismissing the charge, placing the child under care, guidance and supervision, which is now a replacement for probation and probation officers.

3.4.1 Children Living under difficult Circumstances

Much along the principle of creation of institutions for servicing the needs and welfare of children living under difficult circumstances like orphans, street children and those physically challenged are provisions for the establishment, registration, regulation and monitoring of Community/Children's Homes. It provided for the supervisory functions and responsibilities of the Minister having responsibility for children in relation to the various children's homes, which includes monitoring,

provision of financial support, research and returns of information on activities of these homes.

3.4.2 Child Rights Implementation Committees

The Act provides for the establishment of the Child Rights Implementation Committees at the National, State and Local Government levels. These are to ensure that there is governmental commitment at all levels to fulfilling the implementation of the provisions of the Act, through research, investigation and jurisprudence.

3.5 Domestication at State level

The provisions of the ***Act*** supersede all other legislations that have a bearing on the rights of the child. Having been enacted at the National level, the States are expected to formally adopt and adapt the Act for domestication as State laws. This is because issues of child rights protection are on the residual list of the Nigerian Constitution, giving states exclusive responsibility and jurisdiction to make laws relevant to their specific situations. State laws inimical to the rights of the child are also to be amended or annulled as may be required, to conform to the Act and the CRC.

4.0 CONCLUSION

Child Right act is aimed at protecting the interest of the child. A child deserves such care that is necessary for his/her wellbeing. It also protects the child from discrimination and abuse of any sort. The government of each country has a responsibility to ensure that the Child Right Act is enforced and followed appropriately.

5.0 SUMMARY

This unit has focused on the right of the child focusing on Domestication of the convention of the Right of the child. The child right act structure and content of the Child Right Act and definition of a child. It also laid emphasis on the programme of the Child Right Act in Nigeria on the right of the child.

6.0 TUTOR-MARKED ASSIGNMENT

i. a. Who is a child?
   b. Write short note on domestication of Child Right Act in Nigeria
ii. State 8 of the basic provisions of the Child Right Act.

7.0 REFERENCES/FURTHER READING

United Nations Treaty collection convention of the Rights of the child. Returned 21.

Article 49

http//www.who.int

www.clean.org/nigeria.age.report.omct.pdf

www.law.yale.edu/raw/rcw/../afw/nigeria/frontpage.htm.