AUXILIARY NURSING & MIDWIFERY (ANM)
FIRST YEAR STUDY MATERIAL

SUB: CHILD HEALTH NURSING

UNIT-I INTRODUCTION TO GROWTH AND DEVELOPMENT

GROWTH

DEFINITION

It is a net increase in size or mass of tissues. Hypertrophy and hyperplasia leads to increase in growth.

DEVELOPMENT

It is a specified maturation of functions. It indicates acquisition of a variety of skills for optimal functioning of the individual.

STAGES OF GROWTH AND DEVELOPMENT

PRENATAL PERIOD

***ovum-:**0-14days after conception

***Embryo:** 14 Days to 8 weeks

***Fetus**: 8 weeks to birth

POSTNATAL PERIOD

***Neonate:** From birth to 4 weeks

***Infancy:** First year of life

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***Toddler:**1-3 year

***Preschool** child**:** 3-6 years

***School going** child :6-12 years

***Adolescent**: From puberty to adulthood

FACTORS AFFECTING GROWTH AND DEVELOPMENT

*Genetic factors

*Environmental factors

*Social factors

*Emotional factors

*Hormonal factors

*Cultural factors

PRINCIPLES OF GROWTH AND DEVELOPMENT

*It is a personal matter

*It is gradual and orderly but uneven

*It proceeds from the large to the small

*It proceeds from the center of the body out

*It proceeds from head-to- toe

*It is orderly

*It occurs in stages

*Differentiability

*General to specific

*Sequentiality

*Continuity

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MILESTONES

Development milestones can be defined as a set of functional skills or age specific tasks that an average child is able to do when he reaches a specific age.

CLASSIFICATION OF MILESTONES

*Physical development

*Motor development

*Language development

*Psychosocial development

*Sensory development

*Psychosexual development

*Spiritual development

*Moral development

*Intellectual development

MONITORING AND RECORDING OF GROWTH AND DEVELOPMENT

GENERAL EXAINATION

General examination should be conducted in following sequence:

*Attitude and posture of the patient.

*Level of consciousness of the patient

*Grading of consciousness by the use of Glasgow coma scale

*Vital parameters

ANTHROPOMETRIC MEASUREMENT

The anthropometric measurement can be broadly divided into age dependent measurement and age independent measurements. It includes measurement of weight ,height , head circumference , mid – arm circumference and chest circumference etc.

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PURPOSE

*To find out the nutritional status of child

*To find the growth and development pattern of child

*To find any deviation in growth and development from the normal pattern

*To help in confirmation of diagnosis

ARTICLES

*Infant weighing machine/electronic weighing machine

*Spring balance / beam balance

*Infantometer

*Stadiometer

*Measuring tape

*Bed sheet or news paper or plastic sheet

*Examination table

*Percentile chart/ growth chart

TOILENT TRAINING

The children begin to learn independence in self- care, by the time they reach 3 years of age.

By the age of 15-18 months toddler can walk to toilet and ready for starting toilet training and should be encouraged to go to toilet. At 2 years the child is trainable. By the age of 3 years the child can with hold and post-phone bowel movement.

-For bladder control, the child is able to indicative wet pant by the age of 18 months.

-The 2.5 years old child may have begun to master night time bladder control and usually by the age of 3 year becomes dry by night.

Bladder control May not be completed until the child is4-5 years of age.

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INDICATIONS OF TODDLER'S READINESS FOR TOILET TRAINING

*Physiological readiness

*Psychological readiness

*Intellectual reaction

PARENTS SHOULDBE MADE AWARE ABOUT THE FOLLOWING ASPECTS DURING TOILET TRAINING:

*Comfortable child size toilet seat or potty chair to be provided at suitable area as the child likes.

*Feeding at the same time each day both at day and night.

*Parents should stay with the child and explain in simple language about what to be done during urination about defecation.

*Wiping immediately and drying the child after toilet to promote comfort.

*Rewarding the child with praise and cuddling on desired behavior to get cooperation. Punishment and negative approach by forcing on potty may lead to unsuccessful training.

*Child's illness, accidents and hospitalization during toilet training may cause regression and ineffective training.

PLAY ACTIVITIES FOR ILL HOSPITALIZED CHILD

Play is essential to children's mental, emotional and social being. As with their developmental needs, the need for play test not stops when children are ill or when they enter the hospital.

FUNCTIONS OF PLAY IN THE HOSPITAL

*Provides diversion and relaxation

*Helps the child feel more secure in a strange environment.

*Lessens the stress of separation and feeling of homesickness

*Encourage interactions and development of positive attitudes towards others.

*Provides an expressive outlet for accomplishing therapeutic goals.

*Places the child in active role, providing an opportunity to make choices and be in control

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TYPES OF PLAY TO REDUCE STRESS

*Energy release

*Dramatic play

*Creative play

*Expressive activity

*Social effective play

*Sense pleasure play

*Onlooker play

*Solitary play

*Parallel play

*Cooperative play

*Diversional activity

PLAY IN MEDICAL SETTING / HOSPITAL

*Assessing child health through play

*Play in a medical setting

*Play for sick child

ACCIDENT AND PREVENTION

DEFINITION

An accident is a happening that is not intended, foreseen or expected that can cause an injury and sometimes death.

PREDISPOSING FACTORS TO ACCIDENTS

*Environmental factors

*Childhood factors

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PREVENTION

*****Parents should be educated about various kinds of accidents as per the age and also should be told about preventive measures.

*Improving to quality care

*Children should be kept away from dangerous things such as domestic cleaning agents, hazardous substances

*Child should not allowed to go to kitchen and kept them away from hot things.

* All the electric switches should be at some height so that we can keep the children away from the switches.

*Small objects such as coin, pear, pea etc. should not be given for play.

*Providing a safe environment.

*Traffic rule and regulation has to be taught to parents and child

CONGENTIAL ANOMALIES

Congenital malformation is also called as congenital anomalies or birth defect.

RISK FACTORS

*****Advanced maternal age has risk of having birth of the baby with Down syndrome or other congenital anomalies

*Consanguinity, are at risk of congenital defects like mental retardations.

*Maternal malnutrition especially folic acid deficiency can lead to CNS defects and iodine deficiency can lead to mental retardation or other congenital anomalies.

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DIAGNOSIS

*Ultrasonography

*Fetal blood sampling

*Radiographic studies

*Fetoscopy

*Alpha fetoprotein

*Chronic villus sampling test to test the chromosomal abnormalities

*Antenatal screening of maternal disease, metabolic and endocrine functions by regular examination, lab findings and detail family history.

COMMON CONGENITAL ABNORMALITIES

Congenital anomalies of central nervous

*Anencephaly

*Spina bifida (occulta and cystic)

*Hydrocephalus

*Microcephaly

*Macrocephaly

*Guillain barre syndrome

Congenital anomalies of cardiovascular system

*Patent ductus arteriosus

*Transposition of great vessels

*Tricuspid atresia

*Fallot's teratology

*Aortic stenosis

*Coarctation of the aorta

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Congenital anomalies of genitourinary system

*Undescended testes

*Congenital phimosis

*Hypospadiasis

*Epispadiasis

*Congenital hydrocele

Congenital anomalies of musculoskeletal system

*Club foot

*Congenital dislocation of hip

*Scoliosis and lordosis

Chromosomal abnormalities

*Down syndrome (Trisomy-21)

*Edward syndrome (Trisomy -18)

*Klinefelter's syndrome

*Patau's syndrome (Trisomy-13)

ANENCEPHALY

In this condition both cerebral hemisphere are absent. This condition is incompatible with life and survival rate is rare in this condition.

SPINIA BIFIDA

Spina bifida is a birth defect that involves the incomplete development of the spinal cord or its coverings.

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TYPES

*Spina bifida Occulta

*Spina bifida Cystica

Spina bifida manifesta included two types: Meningocele

Myelomeningocele

Symptoms of spina bifida

*A birth mark or a dimple may be present on the skin over the lower spine.

*Babies who are born with the meningocele form have a fluid –filled sac visible on the back.

TREATMENT OF SPINA BIFIDA

Babies with myelomeningocele need more immediate attention and often have surgery within the first 1-2 days after birth.

HYDROCEPHALUS

Hydrocephalus is a buildup of fluid that is CSF fluid inside the skull that leads to brain swelling.

CAUSES

*The flow of CSF is blocked

*It does not get absorbed into the blood properly

*Brain makes too much of CSF.

SYMPTOMS

*Eyes that appear to gaze downwards

*Irritability

*Seizures

*Separated sutures

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TREATMENT

*Surgery may be done to remove a blockage, if possible.

TRANCHEOESOPHAGEAL FISTULA AND ATRESIA

Abnormal connection between trachea and esophagus.

PYLORIC STENOSIS

Pyloric stenosis is a narrowing of the pylorus the opening from the stomach into the small intestine .

SYMPTOMS

*projectile vomiting

*Abdominal pain

*Bleching

*Constant hunger

DIAGNOSTIC TESTS

*Physical examination

*Ultrasound

*Blood chemistry panel

TREATMENT

Pyloroplasty

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UMBILICAL HERNIA

An umbilical hernia is an outward bulging (protrusion) of the abdominal lining or part.

OMPHALOCELE

An omphalocele is a birth defect in which the infant's intestine or other abdominal organs stick out of the belly button.

TREATMENT

Omphalocele are repaired with surgery, although not always immediately

CLEFT LIP AND CLEFT PALATE

Failure of fusion of lip and palate in gestational period

ASSOCIATED PROBLEMS

*****feeding problems

*Middle ear fluid bulid up and hearing loss

TREATMENT

*****Surgical treatment for cleft lip and cleft palate

* A cleft lip usually repaired between the ages of 3-6 months

*A cleft palate is usually repaired between 9-12 months of age

UNDESCENDED TESTIS

Failure of testis to come into the scrotum during gestational period.

HYPOSPADIAS

Hypospadias is a birth (congenital) defect in which the opening of the urethra is on the underside.

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EPISPADIAS

In the epispadias defect is present on ventral side.

CLUBFOOT

Clubfoot is when the foot turns inward and downward. It is a congenital condition, which means it is present at birth.

SCOLIOSIS

Scoliosis is an abnormal curving of the spine. The spine might look like the letter 'c' or's'.

CAUSES

In children age 3 and younger, it is called infantile scoliosis**.**

TYPES

*Congenital scoliosis

*Neuromuscular scoliosis

SIGNS AND TESTS

***One shoulder is higher than the other

*The pelvis is titled

*Spinal curve measurement (scoliometer screening)

*MRI of the spine

DOWN SYNDROME

Down syndrome is a genetic condition in which a person has 47 chromosomes instead of the usual 46.

SYMPTOMS

*Decreased muscle tone at birth.

*Excess skin at the nape of the neck

*Flattened nose

*Separated joints between the bones of skull

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*Single crease in the palm of the hand

*Small ear

*Small ears

*Upward slanting eyes

*Wide, short hands with short fingers

*White spots on the colored part of the eye

*Physical development is often slower than normal

DIANOSTIC TESTS

*Physical examination

*A blood test that is chromosomes studies

*ECG

*X-ray of the chest and gastrointestinal

TREATMENT

A child born with a gastrointestinal blockage may need major surgery immediately after birth.

PREVENTION OF CONGENITAL ANOMALIES

***Genetic counseling is the true prevention measure of congenital anomalies.

*Reducing and discouraging consanguineous marriage.

*Avoiding late marriages of female and avoidance of pregnancy beyond the age of 35 years

*Promotion of health of girl child and pre-pregnant status of the female by prevention of malnutrition, anemia, folic acid deficiency, iodine deficiency.

*Encourage the immunization of all girls child by MMR

*Immunization by anti-D gamma immunoglobulin to the Rh- negative mothers after abortion.

*Elimination of active and passive smoking to tobacco by mothers.

*Avoidance of drug intake without consulting the physician in the first trimester of pregnancy

*Prevention of intrauterine infection and promote sexual hygiene.

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GENETIC COUNSELLING

It is a problem solving approach or communication process in relation to genetic disorders and congenital anomalies in family. This process in helps in providing appropriate information and advice about the course of action in relation to occurrence or risk of occurrence or recurrence of genetic problems in a family.

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UNIT-2 FEEDING OF CHILD

BREAST FEEDING

It is the feeding directly from the mother. Breast feeding should be started as soon as possible just after the delivery. Feeding helps to maintain normal metabolism and growth. It promotes maternal infants bonding and decrease the risk of hypoglycemia, hyperkalemia , dehydration.

ADVANTAGES OF BREAST FEEDING

BENEFITS TO THE BABY

*Complete food, species specific

*Easily digested and well absorbed

*Protect the baby against infection

*Promote emotional bonding between mother and baby

*Promote better growth in baby

BENEFITS TO MOTHER

*Breast feeding help in involution of uterus

*Breast feeding act as natural contraceptive and delay pregnancy

*Lower risk of breast and ovarian cancer

*Decreases mother's work load

BENEFITS TO FAMILY AND SOCIETY

*Save money

*Promote family planning

*Decrease need for hospitalization

*Contribute to child survival

ANATOMY AND PHYSIOLOGY

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The breast consists of glandular tissue and supporting tissue and fat. Milk is secreted by the glands and travels through tubules which drain into lactiferous sinuses. The sinuses which store small quantities of milk, lie below areola.

MILK PRODUCTION AND SECRETION

Milk is produced as result of interaction between hormones and reflexes . Two reflexes mediated by two different hormones, come into play during lactation.

PROLACTIN REFLEX

Prolactin is produced by anterior pituitary gland which is responsible for milk secretion by mammary gland cells. When the baby sucks , the nerve endings in the nipple carry message to anterior pituitary which in turn releases prolactin . this cycle from stimulation to secretion is called prolactin reflex.

OXYTOCIN REFLEX

Oxytocin is a hormone produced by posterior pituitary . It is responsible for contraction of myoepithelium around the gland leading to ejection of the milk from the glands into the lacteal sinuses and lacteal ducts. This reflex is affected by mother's emotion; a relaxed, confident attitude helps this milk ejection reflex.

TYPES OF BRESAT MILK

COLOSTRUM

It is the milk secreted during first week after delivery. it is yellow , thick and contain more antibody and white blood cells. It has higher protein content and is most suited for the need of the baby. It should never be discarded.

TRANSITIONAL MILK

It is the milk secreted during the following two weeks. The immunoglobulin and protein content decrease while the fat and sugar content increases.

MATURE MILK

It follows transitional milk. It is thinner and watery but contains all the nutrients essential for optimal growth of the baby.

PRETERM MILK

It is a type of milk of a mother who delivers prematurely. It contains higher quantities of proteins.

FOR EMILK

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It is secreted at the start of a feed. It is watery and rich in proteins, sugar, vitamins, minerals and water and satisfies the baby's thirst.

HIND MILK

It comes later towards the end of a feed and is richer in fat content and provides more energy and satisfies the baby's hunger. For optimum growth the baby needs both fore and hind milk.

POSITIONING AND ATTACHMENT

*Supporting whole of baby's body.

*Ensure baby's head , neck and back are in same plane .

*Entire baby's body should face mother.

*Baby's abdomen touches mother's abdomen.

ATTACHMENT OF BABY ON MOTHER'S BREAST

SIGNS OF GOOD ATTACHMENT

***Baby's mouth wide open

*Lower lip turned outward

*Baby's chin touches mother's breast

*Majority of areola inside baby's mouth.

POOR ATTACHMENT RESULT IN

*Pain or damage to nipple or sore nipple.

*Lack of breast feeding leads to breast engorgement.

*Breast produces less milk resulting in a frustrated baby and refusal to suck. This leads to poor weight gain.

PROBLEMS IN BREASTFEEDING

***Inverted/ flat nipples

* Sore nipples

*Breast engorgement

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*Breast abscess

CONTRAINDICATIONS TO BREASTFEEDING

***HIV infection

*Mother on antimetabolic / anticancer radioactive drug

Complementary feeding / supplementary feeding / weaning

DEFINITION

It is the process of gradual and progressive transfer of the baby from the breast feeding to the usual family diet.

QUALITIES OF COMPLEMENTARY FOODS

*Liquid at staring then semisolid and solid foods to be introduced gradually.

*Clean, fresh and hygienic, so that no infections can occur.

*Easy digestible, easily acceptable and palatable for the infants.

ARTIFICAL FEEDING

Artificial feeding means to feed the child other than breast milk. It involves the milk substitute in the form of liquid milk such as cows milk, buffaloes milk.

INDICATION OF ARTIFICAL FEEDING

***Death of a mother

*Absence of mother

*Prolonged maternal illness

*Complete failure of breast milk production.

*Unavailability of surrogate mother.

PRINCIPLES OF ARTIFICAL FEEDING

***To provide adequate nutrition to infant.

*Be free from contaminants

* It should be economical

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*It should be according to the needs of the child

HIV and infant feeding

Factors that may decrease the risk of HIV transmission through breastfeeding include:

*Shorter duration of breastfeeding

*Exclusive breastfeeding in the early months.

* Preventive and treatment of breast problems.

*Prevention of HIV-infection during breastfeeding

*Early treatment of sores or thrush in the mouth of the infant

The risk of HIV-infection has to be compared with the risk of morbidity and mortality due to not breastfeeding.

BABY FRIENDLY HOSPITAL INITIATIVE

Baby friendly hospital initiative (BFHI) was launched in 1992 in India, as a part of "Innocent declaration " on breast feeding.

CODE OF PRACTICE OF WHO/UNICEF

*Have a written breastfeeding policy that is routinely communicated to all health care staff.

*Train all health care staff in skills necessary to implement this policy.

* Educate mothers regarding the importance of breastfeeding

*Help mothers to initiate breastfeeding within half an hour of birth.

* Demonstrate mother about the technique of breastfeeding

*Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

*Practice rooming in. allow mothers and infants to remain together 24 hours a day.

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UNIT-3 RIGHTS OF CHILD

Rights of the child

*Right to develop in an atmosphere of affection and security and wherever possible in the care under the responsibility of his /her parents.

*Right to enjoy the benefits of social security.

*Right to free education

*Right to full opportunity for play and recreation.

*Right to special care if handicapped.

*Right to home and nationality

*Right to be brought up in the spirit of understanding, tolerance

*Right to affection and love

PREVENTION OF CHILD LABOUR

LEGISLATION

Fundamental rights and the directive principles of state policy , lays down that:

*No child below the age of 14 years shall be employed to work in any factory or mine or engaged in any other hazardous employment.

*The state shall provide free and compulsory education to all children of the age 6-14 years

*The state shall direct its policy towards securing that the health ad strength of workers, men and women.

***THE CHILD LABOUR (PROHIBITION AND REGULATION) ACT 1986**

*The act prohibition the employment of children below the age of 14 years in 16 occupations and 65 processes that is hazardous to the children's live and health.

THE FACTORIES ACT, 1948

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The act prohibition the employment of children below the age of 14 years. An adolescent aged between 15- 18 years can be employed

THE JUVENILE JUSTICE (CARE AND PROTECTION) OF CHILDREN ACT, 2000

This act was last amended in 2002 in conformity with the UN convention on the rights of the child covers young persons below 18 years of age .

PREVENTIVE MEASURES FOR CHILD LABOUR

*****Making children to understand their rights and the importance of education.

*Stopping children from working in dangerous places.

*Motivate children to go to school or trained

*Ensure that working children are not hurt by their employees.

*****Raise awareness about the dangers of child labour in community

*Child is encouraged to stop the silence.

*Demand protection from abuse and violence in orphans and reformatory homes.

*Have discussion at school

CHILD ABUSE

*Physical Abuse

*Educational Abuse

*Emotional Abuse

*Sexual Abuse

MANAGEMENT OF CHILD ABUSE

*Increasing awareness regarding rights of children.

*Strict punishment to person abusing children

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*Counseling services

*Assistance in financial matters

*Education in schools regarding rights of the children

*Legal assistance for abused and neglected children and juvenile delinquents

FEMALE FOETICIDE

Female infanticide in the India has a history spanning centuries. The dowry system has been cited as one of the main reason for female infanticide and sex- selective abortion as many families who live in poverty cannot afford to raise the funds for a suitable dowry.

The dowry system was abolished in 1961 in 1991 financial incentives began and in 1992 the baby cradle scheme was launched.

India passed its first abortion – related law, the so called medical termination of pregnancy act of 1971.

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UNIT-4 CARE OF THE SICK CHILD

ACUTE RESPIRATORY TRACT INFECTION

Acute respiratory tract infections are acute infections of any part of the respiratory tract and related structures including paransal sinuses, middle ear and pleural cavity**.**

CLASSIFICATION

Depending upon the site if infection of respiratory tract.

*****Acute upper respiratory infections

*Acute lower respiratory infections**.**

Depending upon the anatomical involvement of lung

*****Bronchopneumonia

*lobar pneumonia

*Pneumonitis or interstitial pneumonia

CAUSATIVE AGENTS OF ARTI

***Bacterial:** pneumococcus, Staphylococcus, Streptococcus

***Viral: Influenza,** measles

***Mycoplasma:** Mycoplasma pneumonia

***Fungal**: Candidiasis, histoplamosis

CLINICAL MANIFESTATION

*****Fever

* Dry cough

* wheezing

*cough becomes productive after 5 days

*Tachypnea

*Air hunger

* Flaring of alae nasi

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DIAGNOSTIC MEASURES

*History taking

*Auscultation of chest sound

* Blood for TLC,

*DLC, ESR and chest X-ray can be done

COMPLICATIONS

*Otitis media

*chronic sinusitis

*pericarditis

*congestive cardiac failure

*respiratory failure

MANAGEMENT

***Child with 'no pneumonia'** – It can be treated at home remedies for symptomatic treatment

***Child with 'pneumonia'-** This type of patient can be treated in outpatient department with oral antibiotics.

***Child with 'severe pneumonia'-** This kind of patient should be hospitalized urgently and requires parenteral antibiotic with symptomatic treatment.

***Child with 'very severe pneumonia'**-This kind of patient needs immediate hospitalization and to be treated with parenteral antibiotics, oxygen therapy, antipyretics , bronchodilators and other supportive care.

DIARRHOEA

DEFINITION: Diarrhoea is defined as the passage of loose liquid or watery stools, more than three times per day.

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ACUTE DIARRHOEA: It is an attack of loose motion with sudden onset which usually lasts 3-7 days but may last up to 10-14 days**.**

CHRONIC DIARRHOEA: It is defined when the loose motion is occurring for 3 weeks or more. It is usually related to underlying organic disease with or without malabsorption**.**

AGENT FACTORS

Viruses: Rotavirus, adenovirus, enterovirus

Bacterial: Campylobacter jejuni, E.coli, shigella

Parasities: E. histolytica, G. Lamblia

OTHER CAUSES

*****Malnutrition

*Worm infestation

*Indigestible food

CLINICAL MANIFESTATION

*****Dry tongue

* Tachypnea

*tachycardia

*increase thirst

*lethargic

*sunken eye

DIAGNOSIS

*****Physical examination

*stool examination

*Blood examination

MANAGEMENT

***REHYDRATION THERAPY**

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The management of diarrhoea in a vast majority of children is best done with ORS(oral rehydration salts) solutions and continued breast feeding .

ORT is beneficial in three stages of diarrhoeal disease:

*Prevention of dehydration

*Rehydration of the dehydrated child

*Maintenance of hydration after severely dehydrated patient has been rehydrated with I/v fluid therapy

*Approximate amount of ORS Solution to be given in the first 4 hours are as following

-Age less than 4 months or weight less than 5kg (200-400ml)

-Age 4-11 months or weight 5-7.9kg (400-600ml)

-Age 12-23 months or weight 8-10.9kg (600-800ml)

SYMPTOMATIC MANAGEMENT

*drug therapy

*Dietary management

PREVENTIVE MEASURES

*Improvement of food hygiene

*Personal hygiene

* Environmental hygiene

*Safe water

*Adequate sewage disposal

*Hand washing practices

*Clean utensil

EAR INFECTION

Otitis media is inflammation of the middle ear or middle ear infections.

Common causative organisms are streptococcus pneumonia and haemophilus influenza

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CLINICAL MANIFESTATION

*Pain in affected ear

*Discomfort and irritability

*Restlessness and continuous crying

*Fever

*Parenteral diarrhoea , vomiting

*Discharge and hearing impairment

DIAGNOSIS

*Culture and sensitivity test

*Tympanogram

MANAGEMENT

*Antibiotic therapy (amoxicillin, erythromycin)

*Other measure includes symptomatic treatment with analgesics, antipyretics, decongestants and local heat application.

*Aspiration of middle ear (Tympanocentesis)

TONSILLITIS

Tonsillitis is inflammation of the tonsils. Most commonly caused by viral or bacterial infection. Symptoms may include sore throat and fever.

COMMON SIGN AND SYMPTOMS

*Sore throat

*Red and swollen tonsils

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*Pain when swallowing

*High temperature

*Coughing

*Headache

* White pus- filled spots on the tonsils

CAUSES

Adenovirus, rhinovirus

DIAGNOSIS

Culture of samples obtained by swabbing both tonsillar surfaces

TREATMENT

*Pain relief, anti- inflammatory, antipyretic medications

*Sore throat relief (warm salt water gargle, lozenges)

*Chronic cases may be treated with tonsillectomy

MUMPS

Mumps is a highly contagious infections spread by a paramyxovirus characterized by painful swelling of salivary glands.

SYMPTOMS

*Swelling

*Pain and discomfort from the swelling, fever, headache, feeling, sick, dry mouth

DIAGNOSIS

*Diagnosis can be made from the symptoms a patient has, especially the swollen glands.

*Blood, urine or cerebrospinal fluid

TREATMENT FOR MUMPS

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*Isolate the child

*Administer aspirin to relieve pain and PCM May help relieve some of the symptoms

*Saline mouth wash

PREVENTING MUMPS

*Isolation from school, university

*Proper hand washing and use of tissue

*Vaccination against mumps

MEASLES

Measles is a highly contagious respiratory system disease. It is caused by viral agent and has no specific treatment.

SYMPTOMS OF MEASLES

*Fever (104 F)

*Rash

*Cough

*Runny nose

*Eye infection (Conjunctivitis)

*Appearance of koplik's spot (Tiny white spots with blue – white center of the inner lining of the cheek)

DIAGNOSIS

*Physical examination

*Patient history

*blood test

TREATMENT

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*Isolate the child

*Encourage the child to use amount of liquid

*Use of aspirin for fever

*Maintain cleanliness

*Use promethazine for cough

PREVENTION

*Child should be given immunization with measles vaccine.

*Education regarding nutritious diet should be given to all mothers.

SKIN INFECTION

SCABIES

It is an endemic infestation caused by the scabies mite, characterized by papules, vesicles and pustules with intense itching.

SIGN AND SYMPTOMS

*Red papules all over the body

*Itching

*Fever

*Swelling in salivary gland may occur

*Pruritus

*Eczematous dermatitis especially in the palm**,** soles, face and scalp

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TREATMENT

*Daily bath with soap and water

*Apply topical agents on whole body

*Do not scratch over the affected area

*Cloths should be disinfected properly

*Apply benzyl benzoate 25%

WORM INFESTATION

Worm infestation is very common seen in India. The common worm infestation is thread worm, round worm and hookworm.

SIGNS AND SYMPTOMS

*Vomiting

*Malnutrition

*Abdominal tenderness

*Weakness and indigestion

*Weight loss and growth failure

*Sleeplessness and irritability

DIAGNOSIS

*History of illness

*History of passage of worms in stool

*Clinical examination and stool examination

TREATMENT

*Single dose of albendazole (10-15mg/kg) or mebendazole (100mg) twice daily for 3 days.

*Correction of anemia should be done with iron therapy and blood transfusion.

*Nutritious diet should be provided to the child

*Supportive care with hygienic measure.

*Maintain cleanliness and personal hygiene

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UNIT- 5 SCHOOL HEALTH SERVICES

INTRODUCTION

School health services are an important economical and powerful health care delivery to improve community health especially of future generations.

The school health committee was constituted by the government of India in 1960 to assess the standards of health and nutrition of school children and to suggest recommendations to improve them.

OBLECTIVES

*The promotion of positive health.

*Promote prevention of diseases.

*Early diagnosis, treatment and follow up of defects.

* Increasing health awareness in children

*The provision of healthful environment.

ASPECTS OF SCHOOL HEALTH SERVICE

*Health appraisal of school children and school personnel.

*Remedial measures and follow up

*Prevention of communicable diseases.

*Healthful school environment.

* Nutritional services

*First aid and emergency care

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*Mental health

*Dental health

*Eye health

*Health education

*Education of handicapped children.

*Maintenance and use of school health records

NUTRITIONAL DEFICIENCIES

Protein energy malnutrition (PEM) is term given to a group of clinical conditions which occur due to inadequate protein and calories intake, especially in children.

CLASSIFICATION OF PROTEIN ENERGY MALNUTRITION

GOMEZ CLASSIFICATION

***GRADE I:** 90-75% of expected weight

***GRADE II:** 75-60% of expected weight

***GRADE III:** <60% of expected weight

CLINICAL CLASSIFICATION

*Kwashiorkor

* Marasmus

*Marasmic kwashiorkor

KWASHIORKOR

Kwashiorkor comes from an African word meaning 'displaced child' referring to the illness of the older infant who is denied breast milk . It occur due to protein deficiency.

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SYMPTOMS OF KWASHIORKOR

***Children appear smaller than their age

* Skin is pale, dry and flaky, hair turns reddish

*Muscles are limp and underdeveloped

* Fluid retention in the body causes a distended abdomen, swollen hands and ankles which leads to edema.

MARASMUS

This condition is generally seen in infants less than one year old. It occurs due to a deficiency of proteins, carbohydrates and fats.

SYMPTOMS OF MARASMUS

*A large face over a shrunken body.

* Eyes are sunken; cheeks are hollow giving a prematurely aged look.

*Edema is absent, abdomen is curved inwards.

* Skin is dry, loose and wrinkled due to loss of fat below the skin

*Bones are prominent due to absence o f fat around them.

PREVENTION OF PROTEIN ENERGY MALNUTRITION

*Promotion of health of pre- pregnant state, pregnant mother and lactating women towards healthy mother for healthy child.

*Exclusive breastfeeding should be given up to six months of age to prepare firm base of child health.

* Enhance weaning practices and necessary nutritional supplementation.

*Improvement of family dietary habit.

* Promote nutritional education and nutrition counseling to promote correct feeding practices, food habits, food hygiene, safe water, environmental sanitation.

* Provision of nutritional supplementation

* Treatment of any kind of infections as early as possible.

OTHER IMPORTANT POINTS

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*Nutritional services

* First aid and emergency care

* Mental health

* Dental problem

* Eye health

*School health education for children

*Education of handicapped children

*School health records

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