

ASSIGNMENT
ON
COMMUNITY MEDICINE

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BATCH : A

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PMC -11

COMMUNICABLE DISEASES

1. Vaccine Preventable Diseases

Disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Tuberculosis	<p>>Agent - <i>M. tuberculosis</i> <i>M. bovis</i> Atypical mycobacterium</p> <p>>Host – Age : All ages Sex : More in males</p> <p>></p>	<p>Symptoms -</p> <ol style="list-style-type: none"> 1) Chronic cough for 3 or more weeks with or without coughing of blood 2) Fever 3) Chest Pain 4) Shortness of breathe 5) Loss of weight <p>Signs -</p> <ol style="list-style-type: none"> 1) Crepitation 2) Signs of consolidation, cavitation, fibrosis, pleural effusion and spontaneous pneumothorax 	<ol style="list-style-type: none"> 1) ESR 2) Chest X-ray 3) Mantoux test 4) Sputum for AFB 5) Sputum for culture 	<p>New Patients</p> <ol style="list-style-type: none"> 1) Initial phase- 4FDC for 2 months 2(HRZE) 2) Continuation phase - 2FDC for 4 months 4(HR)3 <p>Patients with past history of treatment</p> <ol style="list-style-type: none"> 1)Initial Phase 4FDC+Inj. Streptomycin for 2 months followed by 4FDC for 1 month 2(HRZE)S + 1(HRZE) 2. Continuation Phase - 2FDC+ Ethambutol for 5 months 5(HR)3 E3 	<ol style="list-style-type: none"> 1) Pleurisy 2) Pleural Effusion 3) Pericarditis 4) Pericardial Effusion 5) Pneumothorax 6)Miliary TB 7) Progressive Pulmonary TB 8) Haemoptysis 9) Disseminated Tuberculosis

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complication
Diphtheria	<p>>Agent - <i>Corynebacterium diphtheriae</i> <i>C. gravis</i> <i>C. mitis</i> <i>C. intermedius</i></p> <p>>Host - Age - 1-5 years mainly Sex - Both sexes</p> <p>>Env Factors - All seasons, maximum incidence in winter</p>	<p>1)Respiratory tract forms -</p> <p>a) Pharyngotonsillar diphtheria - Sore throat, Difficulty in swallowing, Low grade fever</p> <p>b) Laryngotracheal diphtheria- Hoarseness of voice and croupy cough</p> <p>c) Nasal diphtheria- It is localized to the sputum or turbinates of one side of the nose</p>		<p>1)Notification 2)Isolation 3)Diphtheria antitoxin 4)Anti-Bacterial - a)Penicillin or amoxicillin should be administered for 2 weeks to eliminate <i>C. diphtheriae</i> b) Patients allergic to penicillin can be given Erythromycin 5)Immunized with diphtheria toxoid following recovery 6)Strict isolation 7) Treatment of complications</p>	<p>1) 1st Week - Laryngeal obstruction or paralysis 2) 2nd Week - Myocarditis Acute circulatory failure 3) 3rd Week - Peripheral Neuropathy Palatal Paralysis 4) 4th Week - Paralysis of eye muscles of accommodation 5) 5th Week - Generalized polyneuritis and weakness Paraesthesia 6) 6th Week - Pharyngeal Paralysis Diaphragmatic Paralysis</p>

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complication
Pertussis	<p>>Agent - <i>Bordetella pertussis</i></p> <p>>Host - Age - 1-8 years commonly. Children under 6 months are also affected</p> <p>>Env Factor - Incidence is higher during winter season</p>	<p>1) Catarrhal Stage - Conjunctivitis Rhinitis Unproductive Cough</p> <p>2) Paroxysmal Stage - Spasmodic cough that ends with an inspiratory whoop, Vomiting, During the spasms the face becomes suffused or frankly cyanosed, Eyelids are swollen and there maybe sub conjunctival haemorrhage</p> <p>3) Convalescent Stage- Cough becomes less frequent Sputum less tenacious</p>		<p>1)Erythromycin (500mg-4 times a day orally for 10 days)</p> <p>2)Alternatives- Ampicillin, septran or tetracycline</p> <p>3) A cough suppressant Eg. Dextromethorpan, Pholcodine</p>	<p>1)Respiratory System - Bronchitis Bronchopneumonia Bronchiectasis Haemoptysis Atelectasis</p> <p>2)Eye - Sub-Conjunctival Haemorrhage</p> <p>3)Nose - Epistaxis</p> <p>4)Brain - Cerebral Haemorrhage</p> <p>5) Rectum - Rectal Prolapse</p> <p>6) Tongue - Ulceration of frenulum of tongue in children</p> <p>7) Umbilicus - Umbilical hernia</p>

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Tetanus	>Agent - <i>Clostridium tetani</i> >Host - Age - 5-40 years Sex - Higher incidence in male, female are more exposed to the risk of tetanus during delivery and abortion >Env Factors - a) Occurrence depends upon man's physical and ecological surrounding the soil, agriculture, animal husbandry b) Unhygienic customs and habits c) Unhygienic delivery practice	1) Painful muscle spasms and stiff immovable muscle in jaw 2) Difficulty in swallowing 3) Rigid abdominal muscles		1) Wound cleaning 2) Removal of foreign bodies 3) Removal of necrotic tissue 4) Proper use of antibiotics like penicillin 5) TIG 5000 units i.m is given as soon the diagnosis is clinically arrived. To neutralize absorbed toxin, i.v injection of 3000 IU of antitoxin may also be undertaken.	1) Breathing problems 2) Pulmonary embolism 3) Pneumonia

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Poliomyelitis	<p>>Agent - Poliovirus</p> <p>>Host -</p> <p>Age - It is a disease of childhood and infancy</p> <p>Sex - Male:Female = 3:1</p> <p>> Env Factors - Occurs more in rainy season, during June to September. Contaminated water, food and flies and overcrowding are important contributory factors</p>	<p>1) In-apparent polio-</p> <p>a) This occurs in 95% of infection</p> <p>b)No sign and symptom</p> <p>2) Abortive polio-</p> <p>a) Occurs in 4-8% infections</p> <p>b) Mild or self limiting illness</p> <p>c) Patient recovers quickly</p> <p>3) Non-paralytic polio-</p> <p>a) 1% infection</p> <p>b) Stiffness and pain in the neck and back</p> <p>4) Paralytic polio-</p> <p>a) <1% of infections</p> <p>b) The virus invades CNS and causes asymmetrical flaccid type of paralysis</p> <p>c) A history of fever at the time of onset of paralysis is suggestive of polio</p> <p>5)Other associated symptoms -</p> <p>Malaise</p> <p>Constipation</p> <p>Anorexia</p> <p>Abdominal Pain</p> <p>Nausea</p> <p>Headache</p> <p>Sore throat</p>			<p>1) Asymptomatic seroconversion</p> <p>2) Aseptic Meningitis</p> <p>3) Febrile Illness</p>

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Measles	<p>>Agent - RNA Paramyxovirus</p> <p>>Host - Age- 6th month to 3 years of age Sex- Both sexes are affected</p> <p>>Env Factors- Incidence is higher in spring and winter Incidence is higher in densely populated urban areas</p>	<p>1) Prodromal Stage- Day 1-2: Fever, coryza, sneezing, running nose, red watery eyes. Day 2+: Cough, photophobia, Koplik's spots</p> <p>2) Eruptive Stage- Days 3-4: Maculopapular rash Days 6-7: Fever and rash begins to fade</p> <p>3) Post-measles Stage- The child will have lost weight and will be weak for a number of days.</p>			<p>1) Effects of measles virus- Stomatitis Enteritis Pneumonia Keratitis Measles associated diarrhoea</p> <p>2) Secondary bacterial infection- Otitis media Bronchopneumonia Conjunctivitis</p> <p>3) Neurological Complications- Post-viral encephalitis Sub-acute sclerosing panencephalitis</p> <p>4) Nutritional- Severe weight loss Kwashiorkor Corneal liberation</p>
Rubella	<p>>Agent- An RNA virus of the togavirus family</p> <p>>Host- Age- 3-10 years Immunity- One attack results in life long immunity.</p>		<p>1) Isolation of virus- Throat swab culture</p> <p>2) Serology- a) Haemagglutination inhibition test b) ELISA test c) Radio-immune assay (RIA)</p>		

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Viral Hepatitis B	<p>>Agent- Hepatitis B virus double stranded DNA virus</p> <p>>Host- Age- Highest prevalence between 20-40 years of age High risk group- Doctors, nurses, dentist, hospital staff, laboratory workers, percutaneous drug addicts, infants of HBV carrier mothers</p> <p>>Env Factors- May occur around the year and has no seasonal pattern.</p>	<p>1) Clinical infection- Jaundice Flu-like</p> <p>2) Sub-clinical infection- asymptomatic</p>			<p>1) Fulminant Hepatic failure</p> <p>2) Chronic Hepatitis</p> <p>3) Cirrhosis of liver</p> <p>4) Hepatocellular carcinoma</p> <p>5) Relapsing hepatic failure</p> <p>6) Aplastic anaemia</p> <p>7) Post Hepatic syndrome</p> <p>8) Connective tissue disease</p>
Influenza	<p>>Agent- Influenza virus types A, B and C</p> <p>>Host- All ages and sexes are equally affected. Maximum age of incidence is between 5-15 years</p> <p>>Env Factors- Disease incidence is higher in colder months, but in Bangladesh the disease may occur around the year. Occurrence is high in crowded population groups</p>			<p>Treatment includes- Basic symptomatic care, early use of antiviral drugs if available, antimicrobials for co-infection. Hospital care requires supplemental oxygen therapy to correct hypoxaemia.</p>	

2. Other Communicable Diseases

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Leprosy	<p>>Agent- <i>Mycobacterium leprae</i></p> <p>>Host Age- Infection can take place at any age Sex- More in men than women</p> <p>>Env Factors-</p> <p>a) Presence of infectious case in that environment.</p> <p>b) Humidity favours the survival of <i>M.leprae</i></p> <p>c) Overcrowding and lack of ventilation within households</p>	<p>1) Hypopigmented patches</p> <p>2) Partial or total loss of cutaneous sensation in the affected areas.</p> <p>3) Presence of thickened nerves</p> <p>4) Presence of acid-fast bacilli in the skin or nasal smears.</p>	<p>1) Microscopic examination of smears made from skin lesions or nasal mucous membrane</p> <p>2) Mouse foot-pad culture</p> <p>3) Histamine test</p> <p>4) Histological examination of biopsy material</p> <p>5) Immunological tests-</p> <p>a) Lepromin test</p> <p>b) Monoclonal antibody test</p> <p>c) FLA-ABS test</p> <p>d) ELISA</p>	<p>1) Multibacillary leprosy- The drugs used are-</p> <p>a) Rifampicin- 600mg, once monthly, given under supervision</p> <p>b) Dapsone- 100mg, daily, self administered</p> <p>c) Clofazimine- 300mg, once monthly supervised and 50mg daily, self-administered.</p> <p>Duration-The end of combined treatment should be for at least 2 years and continued upto smear negativity</p> <p>2) Paucibacillary leprosy-</p> <p>a) Rifampicin- 600mg, once a month for 6 months, supervised.</p> <p>b) Dapsone, 100mg daily for 6 months, self-administered</p>	<p>1) Hands and feet deformity</p> <p>2) Blindness</p> <p>3) Peripheral Neuropathy</p> <p>4) Multi-organ failure</p>

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Scabies	<p>>Agent- Sarcoptes scabiei hominis</p> <p>>Host- Sex- Both sexes are affected</p> <p>Site of lesion- Hands and wrists, extensor aspect of elbow and axillae, genitals of male and female, thighs and abdomen</p>	<p>1) Intense itching at night</p> <p>2) More than one member in the family has been affected in adults</p> <p>3) Face and scalp are not usually affected in adults</p> <p>4) Itching of nipple in female and itching of papules in males of penis or scrotum.</p>			<p>1)Glomerulonephritis</p> <p>2)Rheumatic Fever</p> <p>3)Secondary Infection</p> <p>4)Urticaria</p> <p>5)Eczema</p>
AIDS	<p>>Agent- Human immunodeficiency Virus</p> <p>>Host- Age- Mostly 20-49 years</p> <p>Sex- Frequently among female as male</p> <p>>Mode of transmission- Sexual transmission, contaminated blood, maternal foetal Transmission</p>	<p>1)Major Signs-</p> <p>a) Weight loss > 10% of body weight</p> <p>b) Chronic diarrhoea for > 1 month</p> <p>c) Prolonged fever for > 1 month</p> <p>2)Minor Signs-</p> <p>a) Persistent cough for > 1 month</p> <p>b) Generalized pruritic dermatitis</p> <p>c) History of herpes zoster</p> <p>d) Oropharyngeal candidiasis</p> <p>e)Chronic progressive or disseminated herpes simplex infection</p> <p>f) Generalized lymphadenopathy.</p>	<p>Serological test for antibody detection against the HIV.</p> <p>Specimen collection- Blood for serological test and culture.</p>		<p>1) Unexplained diarrhoea lasting longer than a month</p> <p>2) Fatigue</p> <p>3) Malaise</p> <p>4) Loss of more than 10% of body weight</p> <p>5) Fever</p> <p>6) Night sweats</p>

3. Zoonotic Diseases

Name of disease	Epidemiology	Clinical Features (of rabies in dogs)	Investigation	Treatment	Complications
Rabies	<p>>Agent- Lyssavirus type-1 (rabies virus)</p> <p>>Host- Rabies virus can infect all warm blooded mammals. Man is infected accidentally.</p> <p>>Env Factors- It may occur at any time but is more prevalent in the summer months.</p>	<p>1) Furious type-</p> <p>a) It is common and more frequent</p> <p>b) The dog is easily irritable and may bite</p> <p>c) It becomes restless, excited, furious, may bite anybody and has a tendency to snap at anything that comes on its way.</p> <p>d) The dog will attempt to eat indigestibles like stick, straw, paper, etc.</p> <p>2) Dump type-</p> <p>a) There is no irritability</p> <p>b) The animal hides in dark corners of the house and suffers from sleepiness and melancholia</p> <p>c) Paralysis of jaw and limbs set in</p> <p>d) Dog here usually does not bite</p> <p>e) Death occurs within 3 days after the onset</p>		<p>Human diploid cell vaccine (HDCV) -</p> <p>6 doses, 1 ml each.</p> <p>On days- 0,3,7,14 & 28.</p> <p>Booster dose on day 90</p>	

4. Parasitic Diseases

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Amoebiasis	<p>>Agent- <i>Entamoeba histolytica</i></p>		<p>1) Demonstration of trophozoites containing red cells is diagnostic</p> <p>2) Serological test- Indirect haemagglutination test (IHA)</p> <p>3) Newer techniques- Counter immuno-electrophoresis (CIE)</p> <p>4) ELISA</p>	<p>1) Symptomatic cases- Metronidazole orally 30mg/kg body weight/day, Divided into 3 doses after meals, for 8-10 days.</p> <p>2) Asymptomatic infections- Oral diodohydroxyquin, 650 mg t.d.s (adults) or 30-40 mg/kg of body weight (children) for 20 days, or oral diloxanide furoate, 500 mg t.d.s for 10 days</p>	
Ascariasis	<p>>Agent- <i>Ascaris lumbricoides</i></p> <p>>Host- It may occur in all ages but the highest incidence is found among the group of 15-25 years</p> <p>>Env Factors- Moist and shady localities with clayish soil is favourable for the worm to thrive</p>	<p>1) Infected child becomes ill.</p> <p>2) Growth retardation</p> <p>3) Protein-energy metabolism</p> <p>4) Vitamin-A deficiency</p> <p>5) Abdominal pain and discomfort</p> <p>6) Vomiting</p> <p>7) Diarrhoea</p> <p>8) Perverted appetite</p> <p>9) Pyrexia</p> <p>10) Intestinal obstruction</p>	<p>1) Demonstration of eggs of <i>Ascaris lumbricoides</i> in the stool.</p> <p>2) Frequently adult worms can be seen in the stool</p> <p>3) During pulmonary phase, there may be eosinophilia</p> <p>4) Larvae are occasionally found in sputum</p>		

5. Vector borne diseases

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Malaria	<p>>Agent –</p> <ol style="list-style-type: none"> 1) <i>Plasmodium vivax</i> 2) <i>Plasmodium falciparum</i> 3) <i>Plasmodium malariae</i> 4) <i>Plasmodium ovale</i> <p>>Host – human Age – all ages Sex- male>female >Environment – more prevalence from July to November specially rainy season</p>	<ol style="list-style-type: none"> 1)Fever 2)weakness 3)headache 4)bodyache 		<p>(A)Uncomplicated malaria</p> <ol style="list-style-type: none"> 1)Chloroquine 2)Quinine 3)Doxycyclin <p>(B)Complicated /severe/ cerebral malaria</p> <ol style="list-style-type: none"> 1)Quinine 2)Artesunate 	
Filaria	<p>>Agent –</p> <ol style="list-style-type: none"> 1) <i>Wuchereria bancrofti</i> 2) <i>Brugia malayi</i> <p>>Host- human Age – all ages Sex- more common in male</p> <p>>Environment- Temperature- 22 to 38 degree Celsius Humidity -70 percent</p>	<p>(A)Acute condition</p> <ol style="list-style-type: none"> 1)Lymphangitis 2)Lymphadenitis 3)Fever <p>(B) Chronic conditions</p> <ol style="list-style-type: none"> 1)Hydrocele 2)Elephantiasis 3)Chyluria <p>(C)Allergic reactions</p> <ol style="list-style-type: none"> 1)rash 2)itching 	1)Microscopic examination by blood smear	<p>Chemotherapy</p> <ol style="list-style-type: none"> 1)Diethylcarbamazine <ol style="list-style-type: none"> a)bancroftian filiarisis- 6mg/kg/day for 12 days b)3-6mg/kg/day 2)Ivermectin 	<ol style="list-style-type: none"> 1)Bacterial infection in skin 2) Bacterial infection in lymph system 3)hardening and thickening of skin 4)disfigurement 5)sexual disability

Kala Azar	<p>>Agent – <i>Leishmania donovani</i></p> <p>>Host – human</p> <p>Age- more common in young adult</p> <p>Sex more common in male</p> <p>>Environment – usually 3 months after the onset of rains</p>	<p>1)Irregular fever</p> <p>2)malaise</p> <p>3)weight loss</p> <p>4)anorexia</p> <p>5)anaemia</p> <p>6)haemorrhage</p> <p>7)non tender progressive splenomegaly</p>	<p>(A)Serological diagnosis</p> <p>1)direct agglutination test</p> <p>2)ELISA test</p> <p>3)Indirect fluorescent test</p> <p>(B)Parasitological test</p> <p>1)Leishman staining</p>	<p>1)Sodium stibogluconate - 20mg/kg for 30 days</p> <p>2)Miltefosine</p> <p>(a)25kg-100mg daily for 28 days</p> <p>(b)<25kg-50mg daily for 28 days</p> <p>3)Amphotericin – 1mg/kg for 20 days</p>	
Dengue	<p>>Agent – flavivirus of 4 immunological types-1,2,3,4</p> <p>>Host- human</p> <p>>Environment- more commonly in rainy season, temperature 28 degree celcius, 80% humidity</p>	<p>(A)Dengue fever</p> <p>1)abrupt onset of high fever, chills</p> <p>2)headache</p> <p>3)retro orbital pain</p> <p>4)thrombocytopenia</p> <p>5)rash, nausea, vomiting</p> <p>6)sore throat</p> <p>(B)Dengue haemorrhagic fever</p> <p>1)Fever- very high, long lasting</p> <p>2)haemorrhagic manifestation- epistaxis, gum bleeding, haematemesis, malena, purpura</p> <p>3)anorexia, vomiting</p> <p>4)epigastric discomfort</p> <p>5)thrombocytopenia</p> <p>6)generalized abdominal pain</p>	<p>1)Platelet count</p> <p>2)Total count of WBC</p> <p>3)Serum enzymes</p>	<p>1)Paracetamol</p> <p>2)full bed rest</p> <p>3)corticosteroids</p> <p>4)fluid replacement</p> <p>5)blood transfusion</p>	

Yellow Fever	>Agent – flavi virus(togavirus family) >Host - human >Environment- temperature 25 degree celcius			1)Analgesics 2)fluid and electrolyte balance 3)blood transfusion 4)plasma expanders 5)peritoneal dialysis	
Zika Virus	>Agent- zika virus(member of flavi virus) >Host- human >Environment – more common in rainy season	1)Fever 2)Skin rash 3)Conjunctivitis 4)muscle and joint pain 5)malaise 6)headache	1)Polymerase chain reaction 2) Virus isolation from blood sample	1)Adequate rest 2)Plenty of fluid intake 3)Antipyretic (paracetamol) 4)Treatment of pain	

6. Vehicle borne diseases

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Infective hepatitis	<p>>Agent – hepatitis A virus</p> <p>>Host – human Age- children(infection is mild and subclinical) Adult(severe)</p> <p>>Environment- increase after flood, heavy rainfall</p>	<ol style="list-style-type: none"> 1)Fever 2)Headache 3)Fatigue 4)Weakness 5)Pain in body 6)Anorexia 7)Nausea 8)Vomiting 9)Dark urine 10)Jaundice and enlarged liver 	<ol style="list-style-type: none"> 1)ELISA test 2)Specific viral antigens 3)Abnormal liver function, serum ALT 	<ol style="list-style-type: none"> 1)Vaccines- formaldehyde inactivated vaccine, live attenuated vaccine 2)Immunoglobulin 	<ol style="list-style-type: none"> 1)Hepatic failure 2)Cirrhosis of liver 3)Chronic hepatitis 4)Aplastic anaemia 5)Hyperbilirubinemia
Enteric fever (typhoid and paratyphoid)	<p>>Agent 1)<i>Salmonella typhi</i> 2)<i>Salmonella paratyphi</i></p> <p>>Host – human Age- usually 5 to 19 years</p> <p>>Environment – high in rainy season</p>	<ol style="list-style-type: none"> 1)Chills 2)High fever 3)Malaise 4)Headache 5)Cough 6)Sore throat 7)Abdominal pain 8)Constipation 9)Abdominal distension 10)Bradycardia 	<ol style="list-style-type: none"> 1)Microbiological test 2)Serological test 3)IDL Tubex test 4)Widal test 	<ol style="list-style-type: none"> 1)Ampicillin(4-6g/day) 2)Amoxycillin(4-6g/day) 3)Probenecid(2g) 	<ol style="list-style-type: none"> 1)Intestinal haemorrhage 2)Intestinal perforation 3)Urinary retention 4)Pneumonia 5)Thrombophlebitis 6)Myocarditis 7)Psychosis 8)Cholecystitis 9)Nephritis 10)Osteomyelitis
Food poisoning	<p>>Agent Non bacterial-sea food and chemical fertilizer, pesticide) Bacterial- salmonella typhi, campylobacter jejuni , bacillus cereus >Host- human</p>	<ol style="list-style-type: none"> 1)Vomiting 2)Diarrhoea 3)Abdominal pain 4)Fever 5)Tenesmus 6)Dehydration 7)Headache 8)Increased temperature 	<p>Laboratory investigation of</p> <ol style="list-style-type: none"> 1)vomit 2)stool 3)Remnants of food 	<ol style="list-style-type: none"> 1)Symptomatic treatment 2)Antibiotic 	

7. Air Borne Diseases

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Mumps	<p>>Agent – Mumps virus(member of paramyxovirus)</p> <p>>Host – Human Age-commonly 5-15 years</p> <p>>Environment- occur whole year but more commonly in winter</p>	<p>1) Pain and swelling in parotid gland. May also involve sublingual and submandibular gland</p> <p>2)Ear ache on affected side</p> <p>3)Pain and stiffness on opening mouth</p> <p>4) It also affect testis, pancreas, cns, ovaries, prostate, etc.</p> <p>5) fever, headache which last 4 to 5 days</p>	<p>1)Serological test</p> <p>2)CF</p> <p>3)HI</p>	<p>1)No specific treatment</p> <p>2)Adequate nutrition</p> <p>3)Mouth care</p> <p>4)Analgesics</p> <p>5)Dry mild heat-application to reduce pain</p> <p>6)In mumps orchitis – Prednisolone 40mg daily 4 days</p>	<p>A) Frequent complications:</p> <ol style="list-style-type: none"> 1)Orchitis 2)Ovaritis 3)Pancreatitis 4)Meningo-encephalitis 5)Thyroiditis 6)Neuritis 7)Hepatitis 8)Myocarditis <p>B) Rare complications:</p> <ol style="list-style-type: none"> 1)Bilateral orchitis leads to sterility Diabetes <p>C) Rarer complications:</p> <ol style="list-style-type: none"> 1)Nerve deafness 2)Polyarthritis 3)Hydrocephalus 4)Encephalitis 5)Cerebellar ataxia
Chicken pox	<p>>Agent – Varicella zoster</p> <p>>Host – human</p> <p>>Environment – more common in winter and spring</p>	<ol style="list-style-type: none"> 1)Rash(macule, papule, vesicle, crustation) 2)Pneumonia 3)Myocarditis 4)Encephalitis 5)Glomerulonephritis 	<ol style="list-style-type: none"> 1)Virus isolation on tissue culture 2)Serum antibodies 	<ol style="list-style-type: none"> 1)Majority patients – no drug treatment 2)Immuno compromised patients- acyclovir 3)Varicella zoster immunoglobulin (VZIG) 	<ol style="list-style-type: none"> 1) Haemorrhage (Varicella haemorrhagica) 2) Pneumonia 3) Encephalitis 4) Acute cerebral Ataxia 5) Reye's syndrome 6) Congenital defects and malformation 7) Oncogenecity 8) Skin infection 9) Septicemia 10) Septic arthritis.

<p>Acute respiratory infection (ARI)</p>	<p>>Agent (A) Bacteria- 1)<i>Haemophilus influenza</i> 2)<i>Staphylococcus aureus</i> (B)Virus - 1)Adenovirus 2)Influenza (C)<i>Mycoplasma pneumoniae</i></p> <p>>Host – young infant, malnourished children</p> <p>>Environment- climate conditions , housing, overcrowded dwellings, poor nutrition</p>	<p>1)Running nose 2)cough 3)sore throat 4)difficult breathing 5)ear problem 6)fever</p>	<p>(A) physical examination</p> <p>1)Count the breaths in 1 minute 2)Look for chest indrawing 3)Look and listen for stridor 4)Look for wheeze 5)Check if the is sleepy 6)Check body temperature</p>	<p>Cotrimoxazole</p> <p>Less than 2 months – 1 tablet twice a day</p> <p>2 months to 12 months – 2 tablet twice a day</p> <p>1 year to 5 year – 3 tablet twice a day</p>	
<p>Small pox (Variola)</p>	<p>>Agent – Variola virus</p> <p>>Host- human</p> <p>>Environment – low temperature and low humidity</p>	<p>1)Fever 2)Malaise 3)Backache 4)Prostration 5)Rash 6)Bleeding in mucous membrane</p>		<p>Vaccination</p>	

8. Water Borne Diseases

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Diarrhoeal disease	<p>>Agent</p> <p>1)Viral(Rotavirus, adenovirus, astrovirus)</p> <p>2)Bacterial(Escherichia coli, shigella)</p> <p>3)Other(Entamoeba hystolytica, intestinal worms)</p> <p>>Host - human</p> <p>>Environment – mostly in rainy season</p>	<p>1)Dehydration</p> <p>2)Weight loss</p> <p>3)weakness</p> <p>4)Malnutrition</p> <p>5)Electrolyte imbalance</p>	<p>1)Complete blood count test</p> <p>2)Lab test of stool sample</p>	<p>Symptomatic treatment</p> <p>1)Oral rehydration therapy</p> <p>2)Appropriate feeding</p> <p>3)Chemotherapy</p>	
Cholera	<p>>Agent – Vibrio cholerae</p> <p>>Host – human(both child and adult)</p> <p>>Environment – most commonly in warm season</p>	<p>1)Nausea</p> <p>2)Diarrhoea(watery)</p> <p>3)Vomiting</p> <p>4)Dehydration</p> <p>5)Electrolyte imbalance</p> <p>6)Lethargy</p>	<p>1)Culture method by samples of stool</p>	<p>1)Adult – tetracycline 500mg 6 hourly for 3 days</p> <p>2) children - Erythromycin</p>	
Dysentery	<p>>Agent – Shigella Flexneri, Shigella dysenteriae</p> <p>>Host - human</p> <p>>Environment – most frequently during warm season</p>	<p>1)Fever</p> <p>2)Anorexia</p> <p>3)Irritability</p> <p>4)Protein losing enteropathy</p> <p>5)Malnutrition</p>	<p>1)Blood test</p> <p>2)Lab test of stool samples</p>	<p>1)Cotrimoxazole</p> <p>2)Ampicillin</p> <p>3)Ciprofloxacin</p>	

NON-COMMUNICABLE DISEASES

Name of disease	Epidemiology	Clinical Features	Investigation	Treatment	Complications
Hypertension	<p>Risk Factors-</p> <p>1) Modifiable Factors-</p> <p>a) Obesity b) Salt intake c) Saturated fat intake d) Alcohol taking e) Reduced physical activity f) Environmental stress g) Other factors-OCP, noise, temperature, humidity</p> <p>2) Non-Modifiable Factors-</p> <p>a) Age b) Genetic Factors c) Family History</p>				<p>1) Hypertensive cardiovascular diseases 2) Hypertensive cerebrovascular diseases 3) Hypertensive renal disease 4) Atherosclerotic complication 5) Aortic dissection 6) Hypertensive emergencies-</p> <p>a) Encephalopathy b) Nephropathy c) Retinopathy d) Unstable angina e) MI</p>
Diabetes Mellitus	<p>>Agent- Insulin deficiency</p> <p>>Host factors-</p> <p>Age Sex Genetic factors Genetic markers Immune mechanisms Obesity Maternal diabetes</p> <p>>Env factors-</p> <p>Sedentary lifestyle Diet Alcohol Malnutrition Stress Viral infections Chemical agents</p>	<p>1) Polyuria 2) Polydipsia 3) Polyphagia 4) Loss of body weight 5) General weakness</p>			<p>1) Acute complications-</p> <p>a) Diabetic ketoacidosis b) Hypoglycemic coma c) Non-ketotic hyperosmolar diabetic coma d) Lactic acidosis</p> <p>2) Chronic complication-</p> <p>a) Microvascular- Retinopathy, nephropathy, peripheral neuropathy, autonomic neuropathy, foot disease b) Macrovascular- Coronary circulation (MI), Cerebral circulation (stroke, transient ischaemic attack), Peripheral circulation (claudication, ischaemia)</p>

Coronary Heart Disease	<p>Risk Factors -</p> <p>1) Non-modifiable factors-</p> <p>a) Age</p> <p>b) Sex</p> <p>c) Family History</p> <p>d) Genetic Factors</p> <p>e) Personality</p> <p>2) Modifiable factors-</p> <p>a) Smoking</p> <p>b) High blood pressure</p> <p>c) Diabetes</p> <p>d) Obesity</p> <p>e) Stress</p> <p>f) Elevated serum cholesterol</p>				<p>1) Angina pectoris of effort</p> <p>2) Myocardial infarction</p> <p>3) Irregularities of the heart</p> <p>4) Cardiac failure</p> <p>5) Sudden death</p>
Rheumatic fever	<p>>Agent - Streptococcus</p> <p>>Host- human</p> <p>Age – usually 5to15 years</p> <p>>Environment</p>		<p>1) Raised ESR</p> <p>2) prolonged pr interval in ecg</p> <p>3) leucocytosis</p> <p>4) ASO titre raised</p>		<p>1) Continuing damage to the heart.</p> <p>2) Increasing disabilities.</p> <p>3) Repeated hospitalization.</p> <p>4) Premature death usually by the age of 35 years or even earlier .</p>
Obesity	<p>(A) Behavioural</p> <p>1) Sedentary worker</p> <p>2) Diet</p> <p>3) Alcohol</p> <p>4) Smoking</p> <p>5) High blood pressure</p> <p>(B) Genetic factor</p>				<p>1) Type 2 Diabetes mellitus</p> <p>2) Gall stone</p> <p>3) Osteoarthritis</p> <p>4) Obstructive sleep apnea</p> <p>5) Cancer</p> <p>6) menstrual irregularity</p> <p>7) Stress incontinence</p>
Cancer			<p>1) X ray</p> <p>2) CBC</p> <p>3) Pap smear</p> <p>4) Mammography</p> <p>5) Sigmoidoscopy</p>	<p>1) Surgery</p> <p>2) Radiotherapy</p> <p>3) Chemotherapy</p>	

3. ENTOMOLOGY

Name of Disease	Agent
Malaria	<i>Plasmodium vivax</i> , <i>P. falciparum</i> , <i>P. ovale</i> , <i>P. malariae</i>
Filariasis	<i>Wucheria bancrofti</i> , <i>Brugia malayi</i> , <i>Brugia timori</i>
Dengue	Dengue virus
Leishmaniasis	<i>Leishmania donovani</i>
Scabies	<i>Sarcoptes scabiei hominis</i>
Yellow fever	Flavivirus
Plague	<i>Yersinia pestis</i>
Japanese encephalitis	Group-B arbovirus
Thyphoid and paratyphoid fever	<i>Salmonella typhi</i> , <i>S. paratyphi</i>
Diarrhoea	<i>E.coli</i> , Shigella, Rotavirus, Norwalk virus, Enterovirus
Dysentery	Shigella
Cholera	<i>V. cholera</i>
Gastro-enteritis	<i>E.coli</i>
Amoebiasis	<i>E. histolytica</i>
Helminthic infestation	Different helminthes
Conjunctivitis	<i>Haemophilus influenzae</i> , <i>Staphylococci</i>
Poliomyelitis	Polio virus type 1,2,3
Trachoma	<i>Chlamydia trachomatis</i>
Anthrax	<i>B. anthracis</i>
Yaws	<i>T. pertenue</i>
Kala-azar	<i>Phlebotomus argentipes</i>
Sand fly fever	<i>Phlebotomus papatasi</i>
Oriental sore	<i>Phlebotomus sergenti</i>
Sand fly fever	<i>Sergentomyia</i>
Epidemic typhus	<i>Rickettsia prowazeki</i>
Relapsing fever	<i>Borrelia recurrentis</i>
Trench fever	<i>Rickettsia quintana</i>
Dermatitis	Due to scratching and secondary infection