Health & Disease

1. Physical quality of life index has three indicators; infant mortality, life expectancy at age one and literacy.
2. Human development index measured by life expectancy at birth, ability to acquire knowledge and ability to achieve a decent standard of living.
3. WHO target of at least 5% expenditure of each country GNP on health care.
4. Infant mortality rate is the most universally accepted indicator of health status and socioeconomic condition of a country.
5. Proportional mortality rate tells us about the burden of a disease in a community.
6. Case fatality rate measures severity and virulence of disease.
7. There are 8 millennium development goals.(All goals are health related except goal two and three.)
8. There are 17 sustainable development goals.(third goal is specific for health.)
9. Natural history of disease is best established by Cohort studies.
10. Natural history of disease has two phases; prepathogenesis and Pathogenesis. See fig 8 Page 40 K.Park 24E
11. Iceberg of disease is related to spectrum of disease.
12. There are two parts of iceberg of disease; floating tip(what physician see in community.i.e clinical cases), submerge portion(represent the hidden mass of disease i.e latent, inapparent and undiagnosed cases.)
13. Diseases in the submerge portion are Hypertension, diabetes, anaemia, malnutrition & mental illness.
14. Disease elimination means regional elimination.
15. Eradication means tear out by roots i.e small pox.
16. Sentinel Surveillance is method for identifying missing cases.
17. There are four levels of prevention. A) primordial B) primary C) secondary D) Tertiary.
18. Primordial prevention is prevention of emergence or development of risk factors in population in which they have not yet appeared.
19. Primary prevention is the prevention to prevent onset of disease, where the risk factors are established.
20. Secondary prevention in which we prevent the progress of disease by early diagnosis(screening) and prompt treatment.
21. Tertiary Prevention are measures to reduce or limit impairments and disabilities to minimise sufferings.
22. There are five modes of intervention; A) health promotion B) specific protection{immunisation & chemoprophylaxis} C) early diagnosis and treatment D) Disability limitation E) Rehabilitation
23. Disease—> impairment—> disability—>handicap.
24. Types of rehabilitation; a) medical rehabilitation b) vocational c) social d)psychological
25. Medical rehabilitation is the restoration of function. e.g hearing aid in deaf.
26. Vocational rehabilitation is the restoration of the capacity to earn a livelihood.
27. Social rehabilitation is the restoration of family and social relationships.
28. Psychological rehabilitation is the restoration of personal dignity and confidence.
30. Community Diagnosis is identification and quantification of health problems in community in rates and ratios and factors which influence the health problems

Infectious disease Epidemiology

1. Obligate host Means the only host for example man in measles & man in typhoid fever.
2. Host in which the parasite attains maturity or passes its sexual stage is primary or definitive

host.
3. Larval or asexual state are secondary or intermediate host.
4. Epidemic is unusual occurrence in community or region of disease clearly in excess of expected occurrence.Eg; cholera
5. Endemic is constant presence of disease within a given geographic area or population group without importation from outside. Eg; common cold
6. Hyper-endemic Effects all age groups equally. Holo-endemic affecting most of the child population.
7. Exotic are diseases which are imported into a country e.g Rabies in UK
8. Anthropozoonoses is infection transmitted to man from vertebrate animals.Eg; Rabies, plague, anthrax.
9. Zooantroponoses is infection transmitted from man to vertebrate animals.Eg; human TB in cattle.
10. Amphixenoses is infection maintained in both man and lower vertebrate animals.Eg; T.cruzi & S.japonicum
11. Epizotic; an outbreak of disease in an animal population.
12. Expornithic; an outbreak of disease in a bird population.Eg; Pacheco's parrot disease (PPD) in psittacine birds
13. Enzootic; an endemic occurring in animals.
14. Iatrogenic Disease ;any adverse consequence of preventive diagnostic regimen causes impairment resulting from physician professional activity. e.g aplastic Anaemia due to chloramphenicol
15. Surveillance is continuous scrutiny of factors that determine the occurrence and distribution of disease and other conditions of ill health.
16. Eradication means tear out by roots i.e small pox.
17. Chain of infection; see page 100 K.park 24Ed
18. Source defined as the person, animal, object or substance from which an infectious agent passes to the host.
19. Reservoir is defined as any person, animal, arthropod, plant, soil or substance in which an infectious agent lives and multiplies, on which it depends primarily for survival and where it reproduce itself in such manner that it can be transmitted to a susceptible host.
20. Primary case refers to first case of a communicable disease introduced into population unit being studied.
21. Index case refers to first case comes to the attention of investigator.
22. Secondary cases are those developing from contact with primary case.
23. Typhoid Mary is a classical example of carrier.
24. Classification of carriers; see page 101 K.park 24Ed.
25. Droplet of 5mmm or less can penetrate deeply and reach alveoli.
26. Direct transmission from contact with soil. e.g tetanus
27. Transplacental vertical transmission; (TORCH) • Toxoplasma • Rubella • CMV • Herpes.
28. 5F's of indirect transmission; "flies, fingers, fomites, food and fluid."
29. Transovarial transmission; when infectious agent is transmitted vertically from the infected female or her progeny in the vector.
30. Transstadial transmission; transmission of the disease agent from one stage of the life cycle to another as for example nymph to adult.
31. Median incubation period is defined as the time required for 50 percent of the cases to occur following exposure.
32. Communicable diseases which are communicable during the later part of the incubation

period are measles, chickenpox, whooping cough and hepatitis A.
33. Latent period is the period from disease initiation to disease detection.
34. Serial interval is the gap in time between the onset of primary case and secondary case.
35. Generation time is the interval of time between recipient of infection by a host and maximal infectivity of that host.
36. Communicable period is a time during which an infectious agent may be transferred directly or indirectly from an infected person to another person.
37. An important measure of communicability is secondary attack rate. See page 105 K.park 24Ed
38. The primary case is excluded from both the numerator and denominator.

Mother Child Health & IMNCI

1. Diarrhoea is the no. 1 killer in children of Pak.
2. Malnutrition is like an iceberg.
3. The 1st Antenatal visit is within 12 weeks, 2nd b/w 14 & 26 weeks, 3rd b/w 28 & 34 weeks and 4th antenatal visit is b/w 36 weeks & term.
4. The presence of albumin(+2) with high blood pressure is sufficient to categorise pregnant mother as “pre-eclampsia.”
5. Woman gains 9-11 kg of weight during her pregnancy.
6. The fundal height is measured as; at 12th weeks, fundus is palpable per abdomen, at 20th week, fundus is flat at the lower border of umbilicus & at 36th fundus is felt at level of xiphisternum.
7. The most accurate gold standard for gestational age is routine early ultrasound assessment together with foetal measurements in the first trimester.
8. HBsAg investigation is done at PHC level.
9. Pregnancy in total duration consumes about 60,000 kcal, while lactation demands about 550 kcal a day.
10. In pregnancy 8 hours sleep and 2 hours rest after the mid-day meals is advised.
11. Thalidomide in pregnancy causes deformed hands and feet of the babies born.
12. If the mother was not immunised earlier, 2 doses of adsorbed tetanus toxoid should be given; the first dose at 16 to 20 weeks and the second dose at 20 to 24 weeks of pregnancy.
13. Hepatitis B can you blocked by immediate post-delivery administration of B immunoglobulins and hepatitis B vaccine.
14. Lactation contributes to the child’s nutrition for 18 months or longer.
15. Combined or sequential oral pills should be avoided in lactating mother as they do suppress lactation.
16. The most serious cause of Conjunctivitis of the newborn is infection with N. gonococcus as it can rapidly cause blindness.
17. 1st bath of newborn is given after a week.
18. BCG vaccine is contraindicated in HIV+ve children born to HIV+ve mother.
19. Phenylketonuria is autosomal recessive trait.
20. Neonatal hypothyroidism is most common disorder that is screened.
21. Weaning is a gradual process that start around the age of 6 months.
22. At birth the head circumference is about 34 cm & is about 2 cm more than the cheat circumference.
23. Measurement of weight & rate of gain in weight are best parameters for assessing physical growth.
24. Low birth weight; birth weight of less than 2.5kg(up to & including 2499 g)

Family Planning

1. NRR(net reproduction rate)=1 can be achieved only if the CPR(couple protection rate) exceeds 60%.
2. Types of IUD's:
3. Contraindication of Intrauterine Devices(IUD's)
4. The commonest complaint of women fitted with an IUD(inert or medicated) is increased vaginal bleeding.
5. With levonorgestrel IUD the chances of ectopic pregnancy are less.
6. Women who cannot tolerate the adverse effects of oral pills may find IUD an acceptable alternative. It does not interfere with lactation.
7. College OSPE
8. The risk of Cardiovascular adverse effects of oral contraceptive pills substantially increase with age and cigarette smoking.
9. Premature cessation of lactation occurs by use of oral contraceptive pills.
10. Checklist for prescription of oral contraceptives.
11. DMPA; Depot-medroxyprogesterone acetate.
12. DMPA contraceptive should find good use among mutiparae of age over 35 years who have already completed their families.
13. Basal body temperature method .. the rise of temperature is very small, 0.3 to 0.5 degree Celsius.
14. Age of the husband should not ordinarily be less than 25 years nor should it be over 50 years for sterilisation.
15. The age of the wife should not be less than 20 years or more than 45 years.
16. Post-operative advice to vasectomy patient; he is not sterile immediately after the operation: at least 30 ejaculations may be necessary before the seminal examination is negative.
17. Pearl index;
18. Life table analysis

*School Health Services *

1. Main emphasis fall in the following categories regarding health problems of school children; 1) malnutrition 2) infectious diseases 3) intestinal diseases 4) diseases of skin, eye & ear 5) dental caries.
2. Objectives of School Health Services: 1. The promotion of positive health; 2. The prevention of diseases; 3. Early diagnosis, treatment and follow-up of the defects; 4. Awakening health consciousness in children; 5. The provision of healthful environment.
3. Medical examination of children is done at time of entry and thereafter every 4 years, i.e inspection at the age of 5,9,13 and 17 years.
4. Communicable diseases control through Immunisation is the most emphasized school health service function.
5. 10 acres of land should be provided for higher elementary schools and 5 acres for primary school with an additional 1 acre of land per 100 students.
6. No classroom should accommodate more than 40 students per capita space for students in a classroom should not be less than 10 sq. ft.
7. International recommendations are one wash room for 50 students.
8. Desks should be of "minus" type.
9. Combined door and window area should be at least 25 percent of the floor space.
10. School meal should provide at least one-third(1/3) of the daily calorie requirement and about half(1/2) of daily protein requirement of the child.
11. Functions of School Health Services; 1) Primary prevention— health education, accident prevention, immunisation, teacher training 2)Secondary Prevention— Complete GPE, follow up

of cases, treatment of minor ailments, prevention of spread of communicable diseases 3) Tertiary Prevention— remedial classes for Autistic, ADHD and disabled child, assistance for families and schools in managing children with chronic disorders.
12. Sitting Arrangement. Minus desks are preferred

Surface Infections, Planning, Screening, Non-Communicable Diseases, Biostatistics

1. Incubation period for trachoma is 5 to 12 days.
2. In trachoma control treatment may be given to the entire community – this is known as mass treatment or blanket treatment.
3. The incubation period for Tetanus is 6 to 10 days.
4. Fig 1 page 331 K.park 24 Ed
5. Prostitution is the major factor in spread of STD's.
6. Gonococcal infection causes inflammation of the genital tract involving the urethra of man and the woman, the cervix and rectum in woman, and the rectum in men who have sex with men.
7. Syphilis causes ulceration of uro-genital tract, mouth or rectum.
8. 5 C's of STDs control approach; Counselling, Contact tracing, Confidentiality, Compliance and Condom use.
9. Tuberculosis and Kaposi's sarcoma are usually seen relatively early in AIDS.
10. Toxoplasma Encephalitis is protozoal infection of CNS presenting with focal neurological signs such as mild hemiplegia or stroke, resulting from damage to the brain, seizures or altered mental status.
11. Cryptococcal Meningitis is a fungal infection in the CNS which usually presents with fever, headache, vomiting and neck stiffness.
12. A Plan consists of five major elements; objectives, policies, programmes, schedules and budget.
13. Management consist of four basic activities: planning, organising, communicating, monitoring(controlling).
14. Network analysis is of two types; i)PERT(Programme Evaluation and Review Technique) ii)CPM (Critical Path Method)
15. The submerged portion of the iceberg represents the hidden mass of disease i.e. subclinical cases, carriers, undiagnosed cases).
16. Screening; The search for unrecognised disease or defect by means of rapidly applied test, examinations or other procedures in apparently healthy individuals.
17. Detection programs should be restricted to those conditions in which there is considerable time lag between disease onset and the usual time of diagnosis.
18. "Lead time" is the advantage gained by screening, i.e. the period between diagnosis by early detection and diagnosis by other means.
19. Screening test must satisfy the criteria of acceptability, repeatability and validity, besides others such as yield, simplicity, safety, rapidity, ease of administration and cost.
20. Sensitivity is defined as the ability of a test to identify correctly all those who have the disease, that is, "true positives".
21. Specificity is defined as the ability of a test to identify correctly all those who do not have the disease, that is, "true negatives".
22. Road Traffic Accident is defined as any person who was killed outright or who died within 30 days as a result of the accident.
23. Legal limit of alcohol intake in certain countries is 80mg/100mL but impairment may be at 50mg/100mL.
24. In males, lung cancer is most common, while in females, breast cancer is more common &

as a whole in both lung cancer is more common.
25. WHO has called CHD(Coronary Heart Disease) as our Modern Epidemic.
26. In Pakistan, circulatory Diseases cause over 100,000 deaths per year.
27. Hypertension is in “iceberg disease.”
28. “Rule of Halves”; about half of the hypertensive subjects in the general population of most developed countries were aware of the condition, only about half of Countries were aware of the condition, only about half of those aware of the problems are being treated, and only about half of those treated were considered adequately treated.
29. “Tracking of blood pressure” If blood pressure levels of individuals were followed up over a period of years from early childhood into adult life, then those individuals whose pressures were initially high the distribution, would probably continue in the same “track”as adults.
30. Breast Cancer is firstly noticed by BSE(breast self exam) by the patient.
31. Rheumatic fever is initiated by infection of the throat by group A beta-haemolytic streptococci.
32. Insulin dependent Diabetes is associated with HLA-DR3 and DR4 and also with HLA-B8 and B15, while Non-insulin dependent diabetes is not HLA-associated.
33. The major causes of blindness and their estimated prevalence are cataract 33%; Glaucoma 2%.
34. +2 SD(Standard Deviation) from the median weight for height is a cut off point for obesity.
35. Skin Fold Thickness is measured by Mid-triceps, biceps, sub-capsular, supra-iliac regions.
36. Mean data is written is X(bar) for sample and Meu(u) for population.
37. Median is most reliable because it avoids extreme values.
38. In Pie charts areas of segments of a circle are compared.
39. Histogram is used for Continuous Quantitative Data.
40. A line diagram is used to show events with passage of time- e.g. cases of malaria.
41. When statistical data refer to geographic or administrative areas, it is presented either as “Shaded maps” or “Dot maps”.
42. Scattered diagram shows the relationship between two variables.
43. When the sample size in calculating standard deviation is more than 30 the “n” is used without modification.
44. The meaning of standard deviation can only be appreciated fully when we studied with frequent with reference to Normal Curve.
45. A sampling frame is a listing of the members of the universe from which the sample is to be drawn.
46. 1SD covers an area of 68.3% of people under study, while 2SD covers 95.4% and 3SD covers 99.7% area under study.
47. Standard error is a measure which enables us to judge whether the mean of a given sample is within the set of confidence limits or not.
48. Type I error is rejection of null hypothesis when actually it is true or we may rephrase it as falsely rejecting the null hypothesis.
49. P value can be defined as probability of committing type I error.
50. When null hypothesis is false and we accept it, it is type 2 error.

Occupational Health

1. Ergonomics simply means “fitting the job to the worker.”
2. The chronic effects of light on health includes “miner’s nystagmus.”
3. White fingers is caused by vibrations.
4. Ultraviolet radiations mainly affects the eyes causing intense conjunctivitis and keratitis (welder’s flash).

5. Particles smaller than 5 μm are directly inhaled into the lungs and all retain there. This fraction of dust is called "respirable dust" & is mainly responsible for pneumoconiosis.
6. Dust within the size range of 0.5 to 3 μm is a health hazard producing, after a variable period of exposure , a lung disease known as pneumoconiosis.
7. Silicosis; An x-ray of the chest shows "snow-storm" appearance in the lung fields.
8. Silicosis is progressive and what is more important is that silicotics are prone to pulmonary tuberculosis, A condition called "silico-tuberculosis."
9. Byssinosis is due to inhalation of cotton fibre dust over long periods of time.
10. Percival Pott was 1st to draw attention to cancer of scrotum in chimney sweeps in 1775.
11. Cancer bladder was first noted in men in aniline industry in 1895. In more recent years it was noted in the rubber industry.
12. Exposure to benzol, roentgen & radioactive substances give rise to leukaemia.
13. The characteristics of occupational cancer are: 1) they appear after prolonged exposure, 2) the period between exposure and development of the disease may be as long as 10 to 25 years, 3) the disease may develop even after the cessation of exposure, 4) the average age incidence is earlier than that for cancer in general, 5) localisation of the tumours is remarkably constant in any one occupation.
14. The employees should be monitored at intervals not exceeding 6 months by use of the film badge or pocket electrometer devices.
15. Absenteeism is a useful index in industry to assess the state of health of workers and their physical mental and social well-being.
16. No child below the age of 14 shall be employed to work in any factory or mine or engaged in any other hazardous employment.

*Basic Epidemiology *

1. The basic requirements for screening are validity, reliability, accuracy, sensitivity and specificity. (VRASS)
2. In Mid-Year population, the mid-point reffers to the population estimated as on 1st July of an year.
3. Specific death rate due to tuberculosis = number of deaths from tuberculosis during a calendar year/ mid-year population * 1000
4. Case Fatality rate(ratio)= Total number of deaths due to a particular disease/ But a number of cases due to the same disease * 100
5. Standardised Mortality Ratio(SMR) = Observed deaths / Expected deaths * 100
6. Three aspects of morbidity are commonly measured by morbidity rates or morbidity ratios, namely frequency, duration and severity.
7. Attack rate= Number of new cases of the specified disease during a specified time interval/ total population of praise during the same interval * 100
8. Secondary attack rate (MCQ)
9. P= I * D (P= prevalence, I= incidence, D= mean duration
10. Some diseases don't have prevalence for example food poisoning, the disease is so short lived, & there are no old cases. Similarly, it is true for fatal conditions; homicides.
11. Common source, single exposure epidemic; for example food poisoning.
12. Median incubation period is the time required for 50% of the cases to occur following exposure.
13. Common source, continuous or repeated exposure epidermic; a prostitute may be a common source in a gonorrhoea outbreak.
14. Hepatitis A and Polio are examples of propagated epidemics.
15. The cyclic trends for measles occur every 2-3 years and for the Rubella every 6-9 years

while influenza pandemics occur at interval of 7-10 years.
16. Local place distributions are best studied with the help of “spot maps” or “shaded maps.”
17. Cross-sectional study is also known as “prevalence study.”
18. Cross-sectional studies are more useful for chronic Than short-lived diseases.
19. Longitudinal studies are useful to study 1: natural history of disease and its future outcome 2: for identifying risk factors of disease and 3: for finding out incidence rate or rate of occurrence of new cases of disease in the community.
20. Case-control studies are often called retrospective studies.
21. Hospital controls are often source of “selection bias.”
22. A Confounding Factor is defined as one which is associated both with exposure and disease, and is distributed unequally in study and control groups.
23. If the P-value in case-control study is less than or equal to 0.05, it is recorded as “statistically significant.”
24. In general, the relative risk can be exactly determined only from a cohort study.
25. Bias is any systematic error in the determination of association between the exposure and disease.
26. Memory or recall bias; When cases and controls are asked questions about their past history, it may be more likely for the cases to recall the existence of certain events or factors, then the controls who are healthy persons. For example, those who have had a myocardial infarction might be more likely to remember and recall certain habits and events than those who have not.
27. Berkesonian Bias; the bias arises because of the different rates of admission to hospital for people with different diseases(that is hospital cases and controls).
28. 90% of lung cancer among smokers was due to their smoking.
29. Population attributable risk is useful because it provides an estimate of the amount by which disease could be reduced in that population if the suspected factor was eliminated or modified.
30. The classic example of “before and after comparison studies” were prevention of scurvy in sailors by James Lind in 1750.

*Health of Adolescents, Geriatrics, Health Management Information System(HMIS), Smoking, Snake Bite, Surface Infections, Planning, Screening, Non-Communicable Diseases, Biostatistics *

1. The term “adolescence has been defined as including those aged between 10 and 19 & “youth” as those between 15 and 24; “young people” is a term that covers both age groups, i.e. those between the ages of 10 and 24.
2. High rate of mortality & morbidity has always been associated with pregnancy and childbirth in pubertal and adolescent girls.
3. The World Fertility Survey observed an inverse relationship between fertility and the education of woman.
4. The study of physical and psychological changes which are incident to old age is called “Gerontology.”
5. Cancer of the prostate is common after the age of 65.
6. Fracture neck of femur is a very common geriatric problem.
7. Immunisation of Elderly; Influenza, Pneumovax(Pneumococcal) and Tetanus.
8. Primary healthcare is based on the principles of; Equity, Culturally acceptable, Cost that the community can afford & Active community participation.
9. Disease is notifiable to WHO; 1)Cholera 2)Plague 3) Yellow Fever
10. Diseases subjected to international surveillance; 1)Louse borne typhus 2)Relapsing fever 3)Polio 4)Influenza 5)Malaria 6)Rabies 7)Salmonellosis

11. Osteoporosis is accelerated with tobacco use in women.
12. Intrauterine growth retardation and low-birth-weight babies(200 grams less than those of non-smokers) are known out-comes of smoking during pregnancy.
13. Withdrawal symptoms of smoking may continue for 4-6 weeks, and craving may continue for many months.
14. Smokeless tobacco: pan masala, guthka, khaini, and chewing tobacco with areca nuts.
15. Oral cancer, lip cancer and tongue cancer are caused by smokeless tobacco.
16. Neurotoxic Envenomation(cobras) may cause ptosis, dysphagia, diplopia and respiratory failure.
17. Cholinesterase is present in washings in case of elapid(cobra, krait) bites.
18. Thromboplastin in simple reveals viper bite.
19. Seasnake bite, hyperkalemia on ECG.
20. Antivenom (now antivenom are polyvalent) is injected into the person intravenously.
21. A test dose of 0.21 mL antivenom must be given I/D and 20 to 50 mL diluted five times(100-250mL)in normal saline given I/V drip at a rate of 15 drops/ minute.
22. Incubation period for trachoma is 5 to 12 days.
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64. When null hypothesis is false and we accept it, it is type 2 error.

Immunity

1. Passive immunity transferred to new born is “biological shield.”
2. In Primary response the Antibody that is elicited first is entirely of the IgM type.
3. Fig 19 graph of the primary response
4. The antigenic dose required for the induction of IgG is about 50 times that which is required to induce IgM into body.
5. Both active and passive immunisations are done in hepatitis B and rabies infections.
6. Herd immunity has been achieved in diseases like Diphtheria & poliomyelitis.
7. In case of the Tetanus herd immunity does not protect the individual.

8. The proportion of immune individuals in a population, above which a disease may no longer persist, is “herd immunity threshold.”
9. Table 29 imp ... in Yellow fever live attenuated vaccine is administrated.
10. Travelling vaccines are BCG, Yellow fever vaccine, polio vaccine and meningococcal vaccine.
11. Table 30 comparison of characteristics of killed and live vaccines.
12. The term “polyvalent” is applied to vaccines(e.g polio, influenza vaccines) which are prepared from two or more strains of the same species.
13. MMR vaccine and IPV each contains less than 25 μg of neomycin per dose.(less than 0.000025g)
14. Table 32 mcq’ on Alum adjuvant.
15. Half-life of IgM antibody is about 7 days.
16. Normal human Ig is used to prevent measles in highly susceptible individuals and to provide temporary protection (up to 12 weeks) against hepatitis A infection for travellers to endemic areas.
17. Live vaccines should not normally be given for 12 weeks after an injection of normal human Ig, and if a live vaccine has already been given. NHIg injection should be deferred for 2 weeks.
18. Normal human Ig is an Antibody-rich fraction (Cohn fraction II), obtained from a pool of at least 1000 donors.
19. Specific human Igs are used for chickenpox prophylaxis of highly susceptible individuals and for post-exposure prophylaxis of hepatitis B and rabies and for tetanus prophylaxis in the wounded.
20. Generally, Immunoglobulins should not be given shortly before or after active immunisation to avoid inhibiting immune response; tetanus and hepatitis B immunisation are exceptions to this role.
21. Antitoxins prepared from nonhuman sources such as horses(against tetanus, Diphtheria, botulism, gas gangrene and snake bite) are still mainstay of passive immunisation.
22. Table 34 Passive Immunisation procedures with antisera.
23. Most sensitive vaccine to heat is group A (OPV) oral poliovirus vaccine and than group B influenza vaccine.
24. Vaccines sensitive to light are BCG, measles, measles-rubella, measles-mumps-rubella and rubella.
25. Contraindications for polio vaccine are diarrhoea & Administration within three weeks of tonsillectomy.
26. Use a temperature monitoring device to ensure temperatures remains between +2°C and +8°C.
27. Open Vial policy applies only for DPT, TT, hepatitis B, oral polio vaccine(OPV) and Liquid pentavalent.
28. All open vials of the BCG, measles and JE should be destroyed after 48 hours or before next session, whichever is earlier.
29. Fig 22 Ospe VVM showing colour change sequence and interpretation.
30. Diseases under surveillance by WHO - louse-borne typhus fever, relapsing fever, paralytic polio, malaria, viral influenza-A, SARS(Severe acute respiratory syndrome), smallpox etc.
31. In chickenpox the duration of isolation is usually about 6 days after onset of rash while in measles the duration of isolation is through 3rd day of rash.
32. Yellow fever: Vaccination certificate for yellow fever is the only certificate required for international travel.
33. Reaction to Pertussis vaccine is inconsolable screaming, seizures.

34. Reaction to Tetanus toxoid, DT is Brachial neuritis.
35. Contraindication of yellow fever vaccine is egg allergy.
36. Pertussis-containing vaccine ... evolving neurological disease.
37. Diseases under surveillance by WHO – louse-born, typhus fever, relapsing fever, paralytic polio, malaria, viral influenza-A SARS, small pox etc.
38. Duration of isolation in chickenpox is usually about 6 days after onset of rash and in measles from the onset of catarrhal stage 3 day of rash.

*Nutrition and Health *

1. Histidine is essential even for adults.
2. Egg proteins are considered to be the best among food proteins because of their high biological valve and digestibility.
3. At present, best measure of state of protein nutrition is probably serum albumin concentration. It should be more than 3.5 g/dl, a level of 3.5 g/dl is considered mild degree of malnutrition.
4. Since vanaspati is lacking fat-soluble vitamins, it is fortified with vitamin A and D by government regulation to extent of 2500 IU of vitamin A and 175 IU of vitamin D per 100 grams.
5. Several large cohort studies have found that intake of trans-fatty acids increases the risk of coronary heart disease.
6. Dietary fibre is known to be associated with reduced incidence of coronary heart disease.
7. Conjunctival xerosis; this is the first clinical sign of vitamin A deficiency.
8. The recommended daily intake of vitamin A is 600 micrograms for adults.
9. The most common lesion associated with riboflavin deficiency is angular stomitis.
10. Pellagra is historically a disease of the maize-eating population.
11. Pyridoxine deficiency is associated with peripheral neuritis.
12. Vitamin B12 is synthesised by bacteria in colon.
13. The estimated requirement for vitamin C is 40 mg/day for adults.
14. Adult requirement of sodium is about 5g/day. Depletion of NaCl causes muscular cramps.
15. The end result of iron deficiency is Nutritional Anaemia.
16. A Haemoglobin level of 10 to 11 g/dl has been defined as early anaemia, a level below 10 g/dl as marked anaemia.
17. The best sources of iodine are sea foods(e.g. sea fish, sea salt) and cod liver oil.
18. Table 15 page 662 K. Park Ed 24
19. Fluorine; two-edged sword.... prolonged ingestion — dental and skeletal fluorosis, and inadequate intake with dental caries.
20. Zinc deficiency has been reported to result in growth failure and sexual infantilism in adolescents, and in loss of taste and delayed wound healing.
21. Neutropenia is best documented abnormality of copper deficiency.
22. Milk is good source of all vitamins except vitamin C.
23. Egg contain all the nutrients except carbohydrates and vitamin C.
24. Pregnant and lactating mothers;
25. Energy supply
26. Salt intake should be reduced to an average of not more than 5 g/day.
27. Measuring weight and height is the most common way of assessing malnutrition in a given population. Such use of measurements of dimensions of the human body is known as anthropometry.
28. Severe acute malnutrition is defined by very low weight-for-height/length (Z-score below -3SD of the median WHO child growth standards), a mid-upper arm circumference <115 mm, or by the presence of nutritional edema.

29. Main symptoms of marasmus are severe wasting, with little or no Edema, minimal subcutaneous fat, severe muscle wasting and non-normal serum albumin levels.
30. The first indicator of PEM(protein energy malnutrition) is under-weight for age.
31. An arm circumference exceeding 13.5 cm is a sign of a satisfactory nutritional status, between 12.5 and 13.5 cm it indicates mild-moderate malnutrition and below 12.5 cm, severe malnutrition.
32. Children of 6-10 years of age are to be provided 30 mg elemental iron and 250 mcg. of folic acid per day for 100 days.
33. Weight of evidence by epidemiologists generally supports Hypothesis that fibre protects against colon cancer.
34. Urinary iodine is checked for iodine deficiency.
35. Methylene blue reduction test is an indirect method for detection of microorganisms in milk.
36. Phosphatase Test is widely used to check the efficiency of pasteurization.
37. Salmonella can penetrate a cracked shell and enter the egg.
38. Ventilators 2% of the floor area in addition to smoke pipes.
39. Endemic ascitis (pyrrolizidine alkaloids)
40. The infections which are likely to be transmitted by the food handlers are diarrhoea, dysenteries, typhoid, and paratyphoid fevers, enteroviruses, viral hepatitis, protozoal cysts, eggs of helminths, strepto and staphylococcal infections and salmonellosis.

Zoonoses

1. Rabies, also known as hydrophobia.
2. Causative agent of rabies is Lyssavirus type 1 is a bullet shaped neurotrophic RNA containing virus.
3. The incubation period of lyssavirus in dogs is 20-60 days.
4. Dx: Rabies can be confirmed in patients early in the illness by antigen detection using immunofluorescence of skin biopsy, and by virus isolation from saliva and other secretions.
5. Prevention of Human Rabies: a) post-exposure b) pre-exposure c) post-exposure treatment of persons who have been vaccinated previously.
6. Table 1 page 296 K.Park Ed 24
7. A booster would be recommended only if rabies virus neutralising antibody titiers falls to <0.5IU/ml.
8. Yellow fever is transmitted to man by certain culicine mosquitoes. The causative agent is Flavivirus fibricus (group B arbovirus) is a member of togavirus family.
9. The incubation period in yellow fever is 3-6 days.(6 days recognised under International Health Regulations).
10. For International use, the approved vaccine for Yellow fever is 17D vaccine.
11. Surveillance of Aedes mosquitoes;
12. The validity of international certificate of yellow fever vaccination begins 10 days after the date of vaccination and extends up to 10 years. Re-vaccination performed before the end of the validity of the certificate renders the certificate valid for a further period of 10 years starting on the day of revaccination. If the person does not have certificate, then he/she is placed in quarantine for 6 days.
13. Brucellosis is caused by different species of the brucella group of organisms and characterised by intermittent or irregular febrile attacks, with profuse sweating, arthritis and an enlarged spleen.
14. Human brucellosis is predominantly a disease of adult males, Farmers, shepherds, butchers and abattoir workers, veterinarians and laboratory workers.
15. Brucellosis most commonly occurs but direct contact with infected tissues, blood, urine,

vaginal discharge, aborted foetuses & especially placenta.
16. The incubation period of brucellosis is highly variable. Usually 1-3 weeks, but may be as long as 6 months or more.
17. Human live vaccine of B.abortus strain 19BA is for brucellosis.
18. Plague is caused by Y.pestis, involving rodents and fleas.
19. Flea indices:
20. Incubation period for the adult tapeworm is from 8 to 14 weeks.

Environment & Health

1. The basic physiological requirements for drinking water have been estimated at about 2 L per head per day.
2. Daily supply of 150 to 200 L per capita is considered as an adequate supply to meet the needs for all urban domestic purposes.
3. The safe yield is generally defined as the yield that is adequate for 95% of the year.
4. Rainwater is the purist water in nature.
5. Gaseous sulphur and nitrogen oxides react with atmospheric water forming dilute solution of sulphuric acid and nitric acid. This precipitation of these is there acids (acid rain)
6. Sanitary well should be located not less than 15 m/50 feet from likely sources of contamination.
7. The area within 15 m of tube wells should be kept free from pollution with liquid and solid wastes.
8. The presence of fluoride at about 1 mg/L in drinking water is known to protect against dental carries.
9. High nitrate content of water is associated with methaemoglobinaemia.
10. The optimum period of storage of river water is considered to be about 10 to 14 days.
11. The Vital Layer is the “heart” of slow sand filter.
12. Flocculation is done for 30 mins in rapid sand filtration plant.
13. When working ideally, slow sand filters have been shown to reduce the total bacterial count 99.9 to 99.99% and E. coli by 99 to 99.9%.
14. The disinfecting action of chlorine is mainly due to hypochlorous acid.
15. The point at which the chlorine demand of the water is met is called the “break point.”
16. Disinfecting large bodies of water chlorine gas is the first choice because it is cheap, quick in action, efficient and easy to apply.
17. The minimum recommended concentration of free chlorine is 0.5 mg/L for one hour.
18. Bleaching powder contains about 33% of available chlorine.
19. Bleaching powder when mixed with excess of lime, it retains its strength; this is called “stabilised bleach.”
20. The principal in chlorination is to ensure a free residual chlorine of 0.5 mg/L at the end of one hour contact.
21. The need of disinfecting Wells on a mass scale arises during epidemics of Cholera & gastroenteritis.
22. The most effective and cheapest method of disinfecting Wells is by bleaching powder.
23. Estimate the chlorine demand of the well water by “Horrock’s Apparatus.”
24. Water with the turbidity of more than four nephelometric turbidity units(NTU) is usually noticeable to the naked eye.
25. An acceptable pH drinking water is between 6.5 and 8.5.
26. In some instances water hardness in excess of 500 mg/L is tolerated by consumers.
27. Typical example of faecal group E. coli and of the non-farcal group is klebsiella aerogenes of coliform group.

28. In doubtful cases the finding of faecal streptococci in water is regarded as important confirmatory evidence of recent faecal pollution of water.
29. The presence of spores of clostridium perfeingens in natural water suggests that faecal contamination has occurred, and their presence, in the absence of coliform group suggests the faecal contamination occurred at remote time.
30. Placental transfer of lead occurs in humans as early as 12th week of gestation and continues throughout development.
31. The proposed guideline values are: Bq(becquerel= 1 disintegration/second Gross alpha activity 0.5 Bq /L. Gross beta activity 1.0 Bq /L.
32. E. coli is almost the only coliform organism which is capable of producing gas from lactose at 44°C.
33. The hardness in water is caused mainly by four dissolved components: 1) calcium bicarbonate 2) Magnesium bicarbonate 3) calcium sulphate and 4) magnesium sulphate.
34. Hardness is classified as carbonate and non-carbonate. The carbonate hardness which was formerly designated as " temporary" hardness is due to the presence of calcium and magnesium bicarbonates. The Non-carbonate Hardness formerly designated as "permanent" hardness is due to calcium and magnesium sulphates, chlorides and nitrates.
35. One mEq/L of hardness– producing ion is equal to 50 mg $CaCO_3$ (50 ppm in 1 L of water.)
36. Water may contain microscopic organisms such as Algae, fungi, Yeast, Protozoa, rotifers, crustaceans, minute worms etc. These organisms are collectively called "Plankton."
37. Drinking water should be moderately hard. Softening of water is recommended when the hardness exceeds 3 mEq/L(150mg/L)
38. The net thirds of them all along partners are; Temporary hardness: a) boiling b) addition of lime c) Additional sodium carbonate d) Permutit process. Permanent hardness: a) Additional sodium Carbonate b) Base exchange process.
39. In the clark's method of softening water, ounce of lime is added to every 700 gallons of water for each degree(14.25ppm) of hardness.
40. There is inverse statistical association between the hardness of drinking water and the death rate from cardiovascular diseases.
41. Fluorine is one of the constraints naturally present in the water supplies.
42. The recommended area is 2.2 m^2/24 $ft.^2$ per swimmer.
43. Chlorination is the most widely used method of pool disinfection. Continuous maintenance of the 1.0 mg/L(1 ppm) of free chlorine residual provides adequate protection against bacterial and viral agents. The pH of water is kept between 7.4–7.8
44. Horrock's water testing Apparatus Is designed to find out the dose of bleaching powder required for disinfection of water.
45. Approximate dose-0.7 mg of applied chlorine for little water.
46. An average person at rest gives of 0.7 $ft.^3$ of carbon dioxide per hour; this may increase up to 2 $ft.^3$ during physical activity.
47. The most important changes that occur due to human occupancy are the physical changes.
48. The problems of ventilation are physical not chemical; cutaneous not respiratory.
49. Pollutants which are associated with greenhouse warming affects are carbon dioxide, nitrous oxide and methane.
50. The combination of smoke and fog is called "Smog."
51. Lead stored in bone may be remobilised into the blood during pregnancy, thus exposing the foetus.
52. The best indicators of air pollution are sulphur dioxide, smoke and suspended particles.
53. An illumination of 15 to 20 foot candles(1 foot candle = 10.76 Lux) is accepted as a basic

minimum for satisfactory Vision.
54. Light measurement units
55. The illumination requirements vary from as little as 5 candles in stairways & corridors to 200 footcandle in some industries.
56. Maximum recommended noise is 85 dB.
57. Auditory Fatigue; it appears in the 90 dB region and greatest at 4000 Hz.
58. Temporary hearing loss results from a specific exposure to noise; the disability disappears after a period of time up to 24 hours following the noise exposure.
59. 100 dB may result in a permanent hearing loss.
60. Community Noise levels
61. It is estimated that the total natural radiation to which the average person is subjected comes to approximately 0.1 rad a year.
62. The Potency of radiation is measured in three ways; 1) Roentgen 2) Rad 3) Rem
63. Exposure to high doses of radiation over a short period of time producing short term effects and involving whole body response is called “acute radiation syndrome.”
64. The amount of radiation received from outer space and background radiation has been estimated to be 0.1 rad a year.
65. Workers must wear a film badge or dosimeter which shows accumulated exposure to radiation since last time the instrument was charged.
66. Radiation protection is the youngest branch of hygiene in his called radiation-hygiene.
67. It is recommended that the genetic dose to the whole population from all sources and additional to the natural background radiation should not exceed are 5 rems over a of 30 years.
68. A major component of emission of carbon dioxide is from the conversion of fossil fuels.
69. The site of house should be elevated from its surroundings so that it is not subject to flooding during rains.
70. The floor area available in the living rooms per person should not be less then 50 $ft.^2$; the optimum is 100 square feet.
71. The window area should be 1/5th of the floor area. Doors and windows combined should have 2/5th of floor area.
72.
73. Baby under 12 months is not counted in floor space standards; children between 1 to 10 years counted as half a unit.
74. Controlled tipping or sanitary landfill is the most satisfactory method of refuse disposal where suitable land is available.
75. Manure pits : 15km from house (50km from water)
76. Burial: suitable for small camps. A trench 1.5 meter wide and 2 metre deep is excavated, and at the end of each day that refuse is covered with 20 to 30 cm of earth.
77. Septic tank is a satisfactory means of disposing excreta and liquid waste dwellings, small groups of houses and in institutions which have adequate water supplies but do not have access to a public sewerage system.
78. Aqua Privy; The capacity of 1 m^3 (35 $ft.^3$) is it recommended for a small family, allowing 6 years or more for cleansing purposes.
79. Sullage; waste water from sink, showers etc.
80.
81. Nearly 50 to 70% of the solids settle down under the influence of gravity.
82. The heart of activated sludge process is the alienation tank.
83. Itch-mite transmits scabies.
Disaster Management

1. A disaster can be defined as “any occurrence that causes damage, ecological destruction, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area.
2. A “hazard” can be defined as any phenomenon that has the potential to cause disruption or damage to people and their environment.
3. Types of disasters: 1. Meteorological (storms, hurricanes, cyclones, cold spells, heat waves, draught, smog) 2. Topological (floods, avalanches, landslides) 3. Telluric & Tectonic (earthquake, volcanic eruptions) 4. Accidents (Dams, tunnels, building structure failure) 5. Atomic explosions
4. Morbidity which results from a disaster situation can be classified into four types; a) Injuries b) Emotional stress c) Epidemic of disease d) Increase in indigenous diseases
5. Three fundamental aspects of disaster management are 1) disaster response 2) disaster preparedness 3) disaster mitigation. These three aspects of disaster management correspond to different phases in the so-called “disaster cycle”as shown in the figure 1 page 833 Ed 24 K.park
6. Most immediate help comes from the other injured survivors.
7. Difference between triage in mitigation?(OSPE)
8. The principle of “first come” , “first treated” , is not followed in mass emergencies. Triage consists of rapidly classifying the injured on the basis of severity of their injuries and the likelihood of their survival with prompt medical intervention.
9. Triage Four colour code system; Red indicates high priority treatment or transfer, Yellow signals medium priority, Green indicates ambulatory patients & Black for dead or moribund patients.
10. Immediately following the disaster, the most critical health supplies are those needed for treating casualties and preventing the spread of communicable diseases.
11. Leptospirosis cases have been reported following large floods.
12. The most commonly reported disease in the post-disaster period is outbreak of gastroenteritis. Anthrax has been reported occasionally.
13. It should always be kept in mind during the planning phase that the most important factor for successful disaster management is communication.
14. The recent occurrence of anthrax in USA is one example of bio-terrorism disaster.
15. Disasters in Pakistan; • Flood (July/August 2010) • Earthquake Muzaffarabad (October 8,2005) • Draught (March 2000) • Flood (March 3,1998)

*Mental Health & Drug Addiction *

1. Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
2. Characteristics of a mentally healthy person; a) he feels comfortable about himself b) the mentally healthy person feels right towards others c) the mentally healthy person is able to meet the demands of life.
3. Schizophrenia(split personality) in which the patient lives in dream world of his own.
4. Manic Depressive psychosis in which the symptoms vary from heights of excitement to depths of depression.
5. Neurosis or Psychoneurosis: Patient is not “insane” but exhibits symptoms such as morbid fears, compulsions and obsessions.
6. Drug Abuse is defined as self-administration of a drug for non-medical reasons, in quantities and frequencies which may impair an individual’s ability to function effectively, and which may result in social, physical or emotional harm.
7. Amphetamines — Superman drugs.

8. Cocaine produces no tolerance, no physical dependence, no withdrawal symptoms.(reverse of Amphetamines)
9. Barbiturates(pentobarbital, secobarbital) — Sleeping pills — addiction to barbiturates is one of the worst forms of sufferings.
10. Alcohol is the only drug whose self-induced intoxication is socially acceptable.
11. Weekly limit of alcohol intake is 21units/week & a "unit" is 8 grams or 10 millilitres of alcohol.
12. The most widely used drug today is Cannabis.
13. College OSPE
14. Osteoporosis is accelerated with tobacco use in women.
15. Intrauterine growth retardation and low-birth-weight babies(200 grams less than those of non-smokers) are known out-comes of smoking during pregnancy.
16. Withdrawal symptoms of smoking may continue for 4-6 weeks, and craving may continue for many months.
17. Smokeless tobacco: pan masala, guthka, khaini, and chewing tobacco with areca nuts.
18. Oral cancer, lip cancer and tongue cancer are caused by smokeless tobacco.
19. Treatment of drug addicts cannot take place unless the individual attends for treatment.
20. Caffeine is one of the most commonly used drug worldwide.
21. TFI — Tobacco Free Initiative-Pakistan

Communication for Health Education

1. Communication Process
2. Social and cultural barriers can present serious problems to achievement of health behaviour change.
3. When persuasive communication is deliberately employed to manipulate feelings, attitudes and beliefs, it becomes "propaganda" or "brain washing".
4. Alma-Ata Declaration; "a process aimed at encouraging people to want to be healthy, to know how to stay healthy, to do what they can individually and collectively to maintain health, and to seek help when needed."
5. The target population must have access to proven preventive measures or procedures.
6. Primary health care approach starts from people with their full participation and active involvement.
7. Motivation 3 stages;
8. Motivation
9. Demonstration method has high motivational value.
10. For effective group discussion, the group should compromise not less than 6 and not more than 12 members.
11. In Panel discussion, 4 to 8 persons who are qualified to talk about the topic sit and discuss a given problem.
12. A Symposium is a series of speeches on a selected subject.
13. Many values in a situation cannot be expressed in words, and the communication can be more effective if the situation is dramatised by the group; this is called "Role playing or socio-drama." And the size of group is thought to be best at about 25.

International Health

1. The constitution came into force on 7th April,1948 which is celebrated every year as "World Health Day".
2. Two major policy developments have influenced the WHO. 1st The Alma-Ata Conference in 1978 on Primary health care, 2nd the Global Strategy for Health for All by 2000 and more recently Millennium Development Goals.
3. WHO now has 194 member states and 2 associate members.

4. The Executive Board of WHO now has 34 members.
5. WHO Regional Organisations
6. The UNICEF is promoting a campaign known as “GOBI” for child health revolution. G= Growth monitoring O= ORS B= Breast feeding I= Immunisation against measles, diphtheria, polio, pertussis, tetanus & tuberculosis.

Primary Health Care(PHC)

1. Primary health care is essential health care made universally accessible to individuals and families in the community by means acceptable to them through their full participation and at a cost that the community and country can afford.
2. Principles of Primary Health Care(PHC); a) Equity... call for acc. to need of person b) Community participation c) Intersectoral coordination d) Appropriate Technology...4A’s available, affordable, accessible & acceptable
3. The fundamental principle of PHC is the participation of the community at all stages.
4. Health for All by the year 2000 (HFA) held in year 1978.
5. Key to achieve HFA .... Primary health care
6. 5-10 BHU’s(basic health units) are linked to RHC(rural health Centers) and RHC is interlinked to THQ(tehsil headquarters hospital).
7. Medicolegal e.g autopsy is done at level of RHC.
8. There should be at least 2 rooms for a family of 5 persons.
9. In selective approach, measles & DPT vaccination is done for children over 6 months old.
10. UNICEF proposed a selective approach with emphasis on mother and child health according to “GOBI-FFF” which indicates: G= Growth monitoring O= ORS B= Breast feeding I= Immunisation F= Family planning F= Female Education F= Female nutrition
11. Hepatitis B vaccine is done before joining any profession.

Arthropod-borne Infections

1. The following host factors contribute to more severe disease(dengue) and its complications: Infants & elderly, Obesity, pregnancy, peptic ulcer disease, woman who are in menstruation or have abnormal bleeding, haemolytic disease such as G6PD, thalassemia & other haemoglobinopathies, congenital heart disease, chronic diseases such as diabetes mellitus, hypertension, asthma, ischaemic heart disease, chronic renal failure, liver cirrhosis and patient on steroids or NSAIDs treatment.
2. DHF(Dengue Hemorrhagic fever) grade 3 is having weak rapid pulse, pulse pressure is equal to or less than 20 mmHg or high diastolic pressure, hypotension with the presence of cold clammy skin and restlessness.
3. Border malaria; these are the high malaria transmission valves along to international borders and state borders.
4. Infant Parasite Rate; it is defined as the percentage of infants below the age of one year showing malarial parasite in the blood films.It is regarded as the most sensitive index of the recent transmission of malaria in the locality.
5. Antimalarials that have to be taken daily e.g. doxycycline should be started the day before arrival in the risk area.
6. Source reduction; Whenever predictable measures for the improvement of environment by the permanent reduction of sources should be instituted.
7. Filaria Survey is Test to be done in low rate of filariasis.
8. Xenodiagnosis; the mosquitos are allowed to feed on the patient, and then dissected 2 weeks later. Where other techniques may fail this may succeed in detecting low-density microfilaraemia.

*Hospital Waste Management *

1. Incineration, used to be the method of choice for most hazardous health care wastes.
2. Waste types not to be incinerated are: a) Pressurised gas containers b) Chemical waste c) silver salts and Photographic or radiographic waste d) Halogenated plastics such as PVC e) waste with high mercury or cadmium content, such as broken thermometers, used batteries & lead-lined wooden panels f) sealed ampules or ampules containing heavy metals.
3. Rotary kilns operating at high temperatures capable of causing decomposition of genotoxic toxic substances and heat resistant chemicals.
4. Sanitary landfills are designed to have at least four advantages over open dumps. 1)Geological isolation of waste from the environment 2) appropriate engineering preparation before the site is ready to accept waste 3) staff present on the side to control operations & 4) organised deposit and daily coverage of waste.
5. Inertization involves mixing waste with cement & other substances before disposal. Typical proportion of the mixture is 65% pharmaceutical waste, 15% lime, 15% cement and 5% water.

Epidemiology of communicable diseases

{Respiratory Infections, Intestinal Infections, Arthropod-borne Infections & Zoonoses}

1. The world health assembly confirmed global eradication of smallpox in May 1980.
2. In smallpox the distribution of rash is centrifugal while the distribution of rash in Chickenpox is centripetal.
3. Chronic Carriers states are absent in case of measles, pertussis(whooping cough) & polio.
4. One attack of measles confers life-long immunity.
5. Koplik's spots are seen in measles.
6. Pneumonia is the most common life-threatening complication of measles.
7. In measles the age of immunisation can be lowered to 6 months from 9 months age if there is measles outbreak in the community.
8. The classic triad of congenital defects in rubella are deafness, cardiac malformations and cataracts.
9. Pregnancy is considered a contraindication to the rubella immunisation.
10. Incubation period of influenza virus is 18 to 72 hours.
11. Inactivated Influenza vaccine should not be administrated to people who have a severe allergic to chicken eggs.
12. Nonimmune individuals are not protected by a high level of population immunity.
13. dT vaccine is given in diphtheria-tetanus, adult type.
14. Incubation period of B.pertussis is usually 7 to 14 days but not more than 3 weeks.
15. Contraindication to pertussis vaccination are anaphylactic reactions and encephalopathy or strong family history of epilepsy.
16. In meningococcal meningitis most secondary case occur within the first 72 hours after presentation of the index case.
17. Fast breathing is present when the respiratory rate is 60 breaths/min or more in a child less than two months of age.
18. Cotrimoxazole is the drug of choice for the treatment of pneumonia.
19. Pneumonia is a serious complication of measles and the most common cause of death associated with measles.
20. Prevalence is defined as the number of TB cases(all forms) At a given point in time. It is the best available practical index to estimate the case load in a community.
21. The tuberculin test is the only means of estimating the prevalence of infection in the population.
22. See Page 195 K.park 24Ed table
23. Ethambutol is bacteriostatic drug and used in combination to prevent the emergence of

resistance to other drugs.
24. Most outbreaks of paralytic polio are due to type-1 virus.
25. See Page 222 K.park 24Ed table 2
26. There is no vaccine for hepatitis C.
27. Diarrhoea is second most common cause of death in children after pneumonia.
28. See table 2 at page 237 K.park 24Ed
29. Transmission of Cholera occurs from man-to-man via (a) faecally contaminated water (b) Contaminated food and drinks.
30. The typhoid fever the ascends in a step-ladder fashion.
31. Food is most frequently responsible for botulism are home preserve foods such as home-canned vegetables, smoked or pickled fish.
32. In staphylococcal food poisoning the incubation period is short because of “preformed” toxin.
33. Ascaris is Cosmopolitan in distribution. It is the most common helminthic infestation.
34. Egg production is very heavy- An estimated 240,000 eggs per day by each female of Ascaris lumbricoides.
35. Roundworms rob man of his food and may possibly compete for Vitamin A in intestine.
36. The WHO definition of heavy infection of roundworm is equal to or greater than 50,000 eggs per gram of faeces.
37. Hookworm infection is an occupational disease of the farming community.
38. DHF(Dengue Haemorrhagic Fever) grade III is signs and symptoms of grade I and grade II along with weak rapid pulse, pulse pressure equal to or less than 20 mmHg or high diastolic pressure, hypotension with the presence of cold clammy skin and restlessness.
39. Border Malaria are the high malaria transmission belts along the international borders and state borders.
40. Incubation period for the quartan malaria is 28 (18-40) days.
41. Infant Parasite Rate: It is defined as the percentage of infants below the age of one year showing malaria parasites in their blood films. It is regarded as the most sensitive index of the recent transmission of malaria in the locality.
42. Antimalarials that have to be taken daily e.g. doxycycline should be started the day before arrival in the risk area.
43. Source reduction : Whenever predictable, measures for the improvement of the environment by the permanent reduction of sources should be instituted.
44. Test to be done in law rate of Filiriasis Area is Filaria Survey.
45. Xenodiagnosis may succeed in detecting low density microfilaraemia when other techniques may fail.
46. Rabies is also known as hydrophobia.
47. Rabies can be confirmed in patients early in the illness by antigen detection using immunofluorescence of skin biopsy and by virus isolation from saliva and others secretions.
48. Rabies booster would be recommended only if rabies virus neutralising antibodies titers falls to less than 0.5 international units per millilitre. (<0.5IU/ml)
49. Yellow fever is transmitted to Man by culicine mosquitoes. (Aedes aeygpti)
50. Incubation period of yellow fever is 3 to 6 days.
51. The validity of international certificate of vaccination begins 10 days after the date of vaccination and extends up to 10 years. Re-vaccination performed before the end of the validity of the certificate renders the certificate valid for a further period of 10 years starting on the day of revaccination.
52. Aedes aegypti index; This is a house index and is defined as “The percentage of houses in

their premises, in a limited well-defined area, showing actual breeding of Aedes aegypti larvae." The index should not be more than 1% and towns and seaports in endemic areas to ensure freedom from yellow fever.
53. Brucellosis is most commonly infection occurs by direct contact with infected tissues, blood, urine, vaginal discharge, aborted foetuses and especially placenta.
54. Human live vaccine of B. abortus strain 19-BA is for Brucellosis.
55. Cheopis Index; It is the average number of X. cheopis per rat. It is a specific flea index.
56. Incubation period for the adult tapeworm is from 8 to 14 weeks.

Mental Health & Drug Abuse

1. Manic-depressive psychosis in with the symptoms are very from heights of excitement to the depths of depression.
2. Paranoia which is associated with undue and extreme suspicion and a progressive tendency to regard the whole world in a framework of delusions.
3. The most widely used drugs today is cannabis.
4. Of all the drugs, alcohol is the only drug whose self-induced intoxication is socially acceptable.
5. Osteoporosis is accelerated with tobacco use.
6. Intrauterine growth retardation and low-birth-weight babies are known outcomes of smoking during pregnancy.
7. Withdrawal symptoms may continue for 4-6 weeks and craving may continue for many months.
8. Treatment cannot take place unless the individual attends for treatment.
9. Smokeless tobacco can cause mouse cancer.