

1. Clinical Pharmacology chart – 1 = 2 marks
2. Interpretation of experimental chart -1 = 3 marks
3. Interpretation of data (providing lab: reports) -1 = 1 mark
4. Criticize and rewrite informed consent form – 1 = 3 marks
5. ADR (clinical problem) -1 = 1 mark

OR

6. Give an irrational prescription with wrong dosage, wrong route, wrong frequency and inadequate supportive drugs. Exercise to correct the mistakes and form a rational prescription-1=3marks

OR

7. Demonstrate route of administration (loading syringe, cleaning, different routes IM.IV.SC etc) or demonstrate use of Inhaler or use of eye drops, OC etc)
- 1= 3 marks

Total = 10marks

VIVA VOCE

Total 4 stations each student to be examined by all the four examiners Total 15 marks

COMMUNITY MEDICINE

A. VISION

To develop a group of medical graduate who will be proactive in identifying and responding to public health challenges the society is facing.

B. MISSION

To bring out a group of Medical Graduates who can practice the science of medicine with Social responsibility and social accountability and provide cost effective, value based comprehensive health care.

C. GOAL

To equip the students to function efficiently and effectively as first level physicians in the community in accordance with the committed vision and mission of community medicine.

D. DEPARTMENTAL OBJECTIVES

D.1. GENERAL OBJECTIVE

To train Medical Students with knowledge, attitude and skills required to become doctors with empathy, and, who can effectively function as healthcare providers, decision makers, communicators, community leaders and managers in rural and urban settings.

D.2. SPECIFIC OBJECTIVES

D.2.1. KNOWLEDGE

1. To identify the multi-factorial determinants & dimensions of health and disease, dynamics of community behaviours and human society
2. To understand the structure and process of the health care delivery system

3. To identify the health needs of the community in general and vulnerable groups in particular
4. To understand the science of applied epidemiology and biostatistics and describe their application to health and disease in the community or hospital situation
5. To understand the environmental and occupational factors in health and disease
6. To identify the role of nutritional factors in health and science
7. To understand the concept of heredity and inheritance in relation to individual and community health
8. To understand the objectives, strategy, implementation monitoring and evaluation of all National Health Programmes (NHP)
9. To understand the population dynamics and their impact on health and disease
10. To enumerate the principles and components of primary health care and national health and related policies to achieve millennium development goals (MDG)
11. To understand the principles and techniques in health management and health economics
12. To understand the social dynamics and social factors in relation to health and disease
13. To understand the Gender issues in health and diseases
14. To understand the Developmental Health Interface & health of populations.

D.2.2. ATTITUDE

1. To see “the human being in disease, “not the disease in Human being” and provide health care in an environment of care and compassion
2. To safe guard human dignity, equity and solidarity adhering to professional ethics.
3. To acknowledge and respect the differences in the needs, values and cultures of different communities.
4. To assume social responsibilities at all times and take initiative in times of natural disasters, calamities and accidents.
5. Readiness to work in rural, tribal, urban slum areas and other constrained situations where services are most needed.

D.2.3. SKILLS

1. To diagnose and manage common health problems and emergencies using drugs rationally.
2. To identify community Health problems, prioritize them and chalk out solutions with local resources and community participation.
3. To deliver evidence based, need oriented, primary health care in a competent manner in diverse settings.
4. To work effectively as a health care team member with the community hand in hand with various sectors to bring about health promotion.
5. Use epidemiology and biostatistics as scientific tools to study the phenomenon of

health and disease and make rational decisions relevant to community and hospital situation.

6. To collect, compile, analyze and interpret health related data for disease surveillance and health promotion initiatives.
7. To communicate effectively and appropriately with people at large and patients and their families in particular
8. To impart health education using appropriate tools and educational methods with special reference to national health issues.
9. To implement, monitor and evaluate National Health Programmes.
10. Be capable of syntheses between cause and illness in the environment of community and individual health, and respond with leadership qualities to institute remedial measures for these.
11. To manage human resources, money, material, time and information required for delivering health care

D.3. INTEGRATION

Horizontal as well as vertical integrated teaching are conducted with in-house sister departments and extramural organizations (Government and non-Government) which are involved in the delivery of primary health care, implementation of National Health Programmes and/or running social welfare institutions.

Course Details

Duration of the course - First Semester, Third to Seventh semesters (330 hours)

Lectures - 130 hours –(Phase I – 30 hours, Phase II – 100 hours)

Practicals - First phase- 30 hours

Second phase-170 hours

COURSE CONTENTS

I. CONCEPT OF HEALTH & DISEASE

- 1 Definition, concepts & evolution (history) of Public Health
- 2 Definition of health, holistic concepts of health including the concept of spiritual health, appreciation of health as a relative concept, dimensions & determinants of health.
 - Disease as an experience - Patient as a person with physical, emotional, psycho-social and spiritual concerns
 - How to recognize the role of patient-family unit as important in healthcare inputs
 - Quality of Life - What does quality of life mean? Examples of it being subjective
 - Subjectivity of symptoms - example pain

3	Characteristics of agent, host and environmental factors in health and disease and the multi factorial etiology of disease.
4	Understanding the concept of prevention & control of disease.
5	Understanding the natural history of disease and application of interventions at various levels of preventions
6	Introduction to various health indicators
7	Health profile of India-already in Chapter XIV
II	SOCIAL AND BEHAVIORAL SCIENCES
1	Concept of Sociology& Behavioral Science, Clinico-socio-cultural and demographic evaluation of the individual, family and community.
2	A ssessment of barriers to good health and health seeking behavior
3	Role of family in Health and Disease
4	Socio-cultural factors related to health and disease in the context of urban and rural societies
5	Assessment of socio-economic status, effect of health and illness on socio economic status
6	Doctor-patient relationship
7	Social Psychology, Community Behavior and community relationship, hospital sociology and psychology
8	Social security-Health Insurance: Organized sector, unorganized sector, special groups (Eg: elderly)
9	Impact of urbanization on health and disease-will be covered in chapter XIII
10	Poverty link to health and disease and poverty alleviation programmes Household Poverty in India caused by Healthcare expenditure. Current status of Health Insurance in India
11	Intelligence – IQ and EQ
12	Personality – Types, Interpersonal relationships

- 13 Attitude, Behaviour, habits
- 14 Emotions, Frustrations, role of emotions in health & coping with emotions
- 15 Conflicts-internal, interpersonal & conflict resolutions, defence mechanisms
- 16 Stress & coping skills – integrated (Psychiatry)

17	Ethics Confidentiality, Autonomy, Privacy, Human rights aspects of patient care
18	Learning – Types and skills
19	Development & Health interface-Poverty & Health, Health of the marginalized, Sustainable & inclusive development
20	Gender & Health including gender based violence, Epidemiology of violence and its prevention and control Life skill education
III	ENVIRONMENT AND HEALTH
1	Water: Concepts of safe and wholesome water, sanitary sources of waterborne diseases, water purification process. Water quality standards.
2	Physical, Chemical & bacteriological standards of drinking water quality and tests of assessing bacteriological quality of water.
3	Health hazards of air, water, noise, radiation pollution.
4	Concepts of water conservation, rainwater harvesting & Global warming.
5	Concepts of solid waste, human excreta and sewage disposal.
6	Awareness of standards of housing and its effect of housing on health.
7	Role of vectors in the causation of diseases.
8	Identifying the features of vectors and their control measures.
9	Life cycles of vectors and advantages and limitations of various vector control measures.
10	Mode of action, application cycle of commonly used insecticides and rodenticides.
11	Urban waste management.
12	Recent and emerging issues in environmental health a. Stockholm b. Basel convention c. Kyoto Protocol. etc
13	Radiation Prevention and Control
14	Newer methods of solid & liquid waste disposal <ul style="list-style-type: none"> • Composting • Solar (Renewable source of energy) • e-waste

C NGE. (INFORMATION, EDUCATION, COMMUNICATION)**IV. HEALTH PROMOTION AND EDUCATION/COMMUNICATION OR BEHAVIOURAL CHANGE. (INFORMATION, EDUCATION, COMMUNICATION) ----**

- a. Understand the concepts of health Promotion and education, IEC, Behavioural change communication, Counselling
- b. Principles & methods of health promotion and education.
- c. Barriers of effective communication and methods to overcome them.
- d. Various methods of Health education with their advantages and limitations.
- e. Organizing health promotion and education activities at individual, family and community settings.
- f. Evaluation of health promotion and education programme.

V. NUTRITION

- 1 Common sources of various nutrients and special nutritional requirements according to age, sex, activity, physiological conditions
Real life knowledge on which Indian dietary component, fruits, vegetables, grains, grams have high sodium, high potassium, high fiber, high protein

Introduction to current evidence on health impact of red meat, refined oil, white sugar, caffeine containing soft drinks, artificial tastes, flavours, dairy products, GM foods,
- 2 Nutritional assessment of individual families and the community by using appropriate method such as; anthropometrics, clinical examination 24 hour dietary recall and other methods of diet survey etc.
- 3 Plan and recommend a suitable diet for the individual and families as per local availability of food and economics status etc.
- 4 Common nutrition related health disorders (like protein energy, malnutrition, obesity, childhood obesity, Vitamin A deficiency, anaemia, iodine deficiency, fluorosis, food toxin diseases) and their control and management.
- 5 Food fortification, additives and adulteration food hygiene.
- 6 Social and cultural factors in nutrition and Health.
- 7 Important National nutritional programmes.
- 8 National Nutrition policy.
- 9 Nutritional surveillance, education and rehabilitation.
- 10 New WHO Growth Charts.
- 11 Principles of Therapeutic Diet
12. Food plate

VI. OCCUPATIONAL HEALTH

- 1 Relate the history of symptoms with specific occupations including agricultural related

- occupation.
- 2 Employees State Insurance Act.
- 3. Specific occupational health hazards, their risk factors and its preventive measures.
Primary Secondary and tertiary prevention including personal protective devices
- 4. Concepts of ergonomics.
- 5. Diagnostic criteria of various occupational related diseases.
- 6 Other legislations related to occupational health.
- 7 Digital Health Computer associated Illness.
- 8 Occupational health in unorganized sector
- 9 Integrated learning on non-pharmacological management of pain Visit to
PMR department

VII. BIO-STATISTICS

- a. Collection, Classification, analysis, interpretation and presentation of statistical data.
- b. Application of Statistical methods in various study designs.
- c. Common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion.
- d. Apply common tests of significance in various study designs

VIII. BASIC EPIDEMIOLOGY

- 1 Epidemiology: definition, concepts, uses and its role in health and diseases.
- 2 Use of basic epidemiological tools to make a community diagnosis of the health situation, in order to formulate appropriate intervention measures.
- 3. Definition of the terms used in describing diseases transmission and control.
- 4 Modes of transmission and measures for prevention and control of communicable and non-communicable diseases.
- 5 General Principles of prevention and control of communicable, non communicable diseases and other health conditions of public health importance.
- 6 Principle Sources of Epidemiological data.
- 7 Definition, Calculation and interpretation of morbidity and mortality indicators standardization (Direct & Indirect)
- 8 Screening of health related attributes & issues need, uses and evaluation of screening tests.
- 9 Investigation of an epidemic of communicable disease and to understand the principals of control measures.
- 10 Epidemiological study design & Research Methodologies
- 11 Concepts of association, Causation and biases
- 12 Application of computers in epidemiology
- 13 Use of principles of epidemiology in practice of medicine
- 14 Introduction to Evidence based medicine
- 15 Use of diagnostic tests

IX. EPIDEMIOLOGY OF SPECIFIC DISEASES: COMMUNICABLE & NON COMMUNICABLE

Communicable and non-communicable diseases of public health importance, relevant to the region, for which National Disease control/Eradication Programmes have been formulated.

Communicable Diseases: Intestinal infections: Poliomyelitis, Viral hepatitis, Diarrhoea, Cholera, Helminthiasis, typhoid, Amoebiasis & Giardiasis, Food Poisoning.
Respiratory Infections: Acute Respiratory infections, Measles, Diphtheria, Whooping cough, Tuberculosis, SARS, Influenza, Meningococcal meningitis, Mumps.
Vector borne infections: Malaria, Filariasis, KalaAzar, Dengue, Yellow Fever, Chikungunya fever. Surface infections:
Sexually transmitted diseases, Syndromic approach, HIV & AIDS, Tetanus, Leprosy, scabies, Pediculosis. Zoonosis: Rabies, Japanese encephalitis, Plague, Kyasanur Forest Disease, Leptospirosis, Anthrax.
Hospital Acquired Infections
New Emerging Diseases
Zika Virus, Ebola Virus
Investigation of food poisoning outbreak

Non Communicable Lifestyle Diseases: Coronary heart diseases, Hypertension, Stroke, Rheumatic heart disease, Cancers, Obesity, Diabetes, Blindness, Injury and Accidents.

- 1 Extent of problem, epidemiology and natural history of diseases
- 2 Public health importance of particular diseases in local area.
- 3 Influence of social, cultural and ecological factors on the epidemiology of particular diseases
- 4 Diagnosing diseases by clinical methods, using essential laboratory techniques at primary care level.
- 5 Treatment of a case, as per National programme guidelines, and also follow up of case
- 6 National health programme for health diseases.
- 7 Understand the principles of measures to control a diseases epidemic
- 8 Principles of planning, implementing and evaluating control measures for diseases at community level bearing in mind the public health importance of the diseases.
- 9 Training of health workers in diseases surveillance, control and treatment, health education.
- 10 Management information system in a particular diseases
- 11 Prevention and control of new emerging diseases and life style related health problems.
- 12 International classification of diseases.

X. DEMOGRAPHY AND VITAL STATISTICS

- 1 Concepts of demography, demographic cycle, Vital Statistics.
- 2 Definition, Calculation and interpretation of demographic indices like birth rate, death rate, fertility rates.

- 3 Population dynamics of India.
4. Population control measures. Family planning methods including NSV and emergency contraception
5. National population Policy.
6. Sources of Vital Statistics like census, SRS NFHS, NSSO etc.

XI. REPRODUCTIVE AND CHILD HEALTH

1. Current statistics of reproductive and child health.
2. Screening of high risk groups and common health problems.
3. Local customs and practices during pregnancy, child birth, **lactation and** child feeding practices.
4. IYCF (Infant and young child feeding practices)
- 5.
6. Organization , implementation and evaluation of reproductive child health (RCH)
7. components, including child survival and safe motherhood(CSSM), Universal immunization Programme(UIP), Integrated child development services scheme (ICDS), integrated management of Neonatal and childhood illness (IMNCI), Janani Suresh Yojna (JSY)& Accredited Social Health Activist (Asha) under national rural health mission(NRHM) and other existing Programmes.
6. Various Family Planning methods, their advantages and Shortcomings.
7. Medical Termination of Pregnancy and Act(MTP Act) & Pre Natal Diagnostic Test Act (PNDT Act)
8. Adolescent Health
9. Handicapped Child. Community based Rehabilitation
10. Organizations, technical and operational aspects of the National family welfare Programme.
11. MCTS(Mother and Child Tracking System)

XII. SCHOOL HEALTH

1. Objectives and components of school Health programme
 - a. Periodic Medical Examination of the children and the teachers
 - b. Immunization of the children in the school.
 - c. Health promotion and education
 - d. Mid-day meals.
 - e. WIFS(Weekly Iron and Folic Acid)

XIII. URBAN HEALTH

1. Common health problems (Medical, Social, environmental, Economical, Psychological) due to Urbanization of Urban Slum dwellers
2. Organization of health services in urban slums
3. National policy on urban health.

XIV. HEALTH CARE SYSTEM IN INDIA

1. Concepts of Primary Health care and Comprehensive Health care.
2. Health profile of India
3. Health Care Delivery System in India and Infrastructure at peripheral, Primary, Secondary and tertiary care level
4. Job responsibilities of different category of workers in health System
5. Voluntary Health agencies working in India.

XV. HEALTH PLANNING, MANAGEMENT AND ADMINISTRATION

1. Concepts of Planning, Management, Public Health administration. Seminar on India's National Policy – NPCDCS, elderly health, mental health and on Palliative Care
2. Components of health planning activity.
3. Classification and Understanding of various qualitative and quantitative Health management techniques.
4. Overview of administration at village, block, district, state and central level in India.
5. Integrated Disease Surveillance Project (IDSP)
6. Health Related Millennium Development Goals and sustainable development goals
7. National health Policy & National Rural Health Mission (NRHM)
8. Concepts of Health Economics + Health Planning and management.
9. Concepts, Scope and methods of Health Audit.
10. Role of Planning Commissions and Five year plan in development of health sector in India
11. Various health committees of government of India and their important recommendations
12. Decentralization and PRI Institutions.
13. Inventory Control

XVI. DISASTER MANAGEMENT

1. Principles of disaster preparedness and application of these in disaster management.
2. Bio-terrorism
3. Pandemic Preparedness

XVII. LEGISLATION AND PUBLIC HEALTH

(Recent Amendments to be included)

1. Census act 1948
2. Registration of Birth and Death Act 1969
3. The Epidemic Diseases Act, 1897.
4. The Transplantation of Human Organs Act, 1994
5. The prevention of food Adulteration Act 1954(FSSAI)

6. The International Health Regulations
7. The Cigarettes and Other Tobacco product Act 2003
8. The Narcotic and Psychotropic substance Act 1958
9. The Medical Termination of Pregnancy Act 1971 (MTP Act)
10. The Dowry Prohibition Act
11. The Immoral Traffic (Prevention) Act 1956
12. The Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994
13. The Juvenile Justice Act 2000
14. Child Labour (Prohibition and Regulation) Act 1986
15. The Persons with Disabilities (Equal opportunity, Protection of rights and full participation) Act 1995
16. The Factories Act 1948
17. The Employees State Insurance Act 1948
18. The Environment (Protection) Act 1986
19. The Bio-Medical Waste (Management and Handling) Rules 2000
20. The Consumer Protection Act 1986

XIX. INTERNATIONAL HEALTH

1. Role of various multilateral, bilateral international health organizations like WHO, UNICEF etc.
 - . WHO Resolutions – on Non-communicable diseases, palliative care
 - Sustainable Development Goals as relevant to India
2. Organizational structure of these organizations
3. New International health Regulation (IHR)

XX. HEALTH CARE WASTE MANAGEMENT

1. Classification/Category, sources, health hazards and treatment of Bio-Medical Waste.
2. Application of these principles in different setting of health care delivery system.
3. Safe Injection Practices
4. Universal Precautions

XVIII. HEALTH CARE OF ELDERLY

National Policy

1. Health problems of Aged
2. Preventive Geriatrics – Prevention of falls
3. Care of Aged

XIX. MENTAL HEALTH AND BEHAVIORAL PROBLEMS

1. Importance of mental health care in primary care settings.
2. Comprehensive Mental Health Care at primary care settings.
3. Common Mental Health disorders.

4. Substance use disorders Tobacco, Alcoholism and Drug Addiction- and prevention
5. Gender Issues and Women Empowerment
6. Gender Based Violence, Domestic Violence, Epidemiology Prevention and Control
7. Suicides

XX. DEVELOPMENT AND HEALTH INTERFACE

- 1) Poverty and Health (Evidence based learning – to show real data)
- 2) Poverty and Health
- 3) Poverty Alleviation Programme
- 4) Health of the marginalized –eg. Transgender, Tribals
- 5) Sustainable and inclusive Development
- 6) . Universal health Concept in India, Sustainable Development Goals

XXI. GENETICS

1. Epidemiology of Genetic Diseases
3. Screening of Genetic Diseases
4. Prevention and Control of genetic Diseases

XXII. DISABILITY

1. Types of Disability

Paraplegia/ Quadriplegia – as a seminar – prevention, and care of those who have irreversible paraplegia

Physical, emotional concerns and management

Assisting in Economic self sufficiency – as a social health concern of the doctor

Role of Medical Social Workers

– working as Multi disciplinary Team for total care

2. Rehabilitation-- Clinical and community level.

3. Palliative Care

Concept, need in the country, relevance Applicability in chronic disease

Concept of Non-abandonment if disease is not curable

- 2 levels – Palliative care Approach, generalist Palliative Care, Specialist Palliative Care

-Where, How Palliative Care is to be delivered

Concept of Home based care

SKILLS

The student should be able to do:

1. Elicit Clinico-social history. Describe agent , host and environmental factors in determining health and disease.
2. Identify, prioritize and manage common health problems of community.
3. Apply elementary principles of epidemiology in carrying out simple epidemiological studies.
4. Work as a team member in rendering health care.
5. Carry out health promotion and education effectively in the community.

Skills in relation to specific topics

1. Communication:

Should be well versed with the art of interviewing techniques to elicit the desired information

& with art of counseling to counsel. The student should be able to communicate effectively with family members at home, patients at clinics or at home; and community. The student should also be able to communicate with individuals, family or a group for health promotion and education, and also with peers.

- Basic Communication Skills
- Importance of good communication skills
- Barriers – for the Patient and for the doctor
- Active listening
- Basic Clinical communication skills
- Examples of good and poor communication as Role Play - affecting diagnosis and management

In 3rd Professional Year

- The stepwise breaking of Bad News

Handling Collusion

2. Team Activity

Work as an effective member of the team; in planning and carrying out field work like school health, conduct health camps ,investigation of epidemic etc.

3. Environmental Sanitation:

Able to assess environmental risk factors plan and suggest action
Able to collect water and stool samples for microbiological analysis
Able to identify insects of public health importance, able to use effective insecticides.
Purification of water-small scale.
Vector Survey and control measures.
Newer methods of solid & liquid waste disposal

- Composting
- Solar (Renewable source of energy)
- e-waste

4. Communicable and Non-Communicable disease.

- Eliciting Clinico-social history and examining the patients for diagnosis and treatment.
- Assessing the severity and /or classifying dehydration in diarrhea, upper respiratory tract infection, dog bite, leprosy, classify tuberculosis (Categorization) and STD.
- Fixing, Staining and examining peripheral smear for malaria, sputum for AFB, hemoglobin estimation, urine and stool examination.
- Adequate and appropriate treatment and follow up of public health diseases and of locally endemic diseases. (The Integrated Care Model of WHO for chronic conditions – 5 As – Assess, Advice, Agree, Assist, Arrange)
- Advice regarding prevention and prophylaxis against common and locally endemic diseases.
- Use of proper screening methods in early diagnosis of certain diseases, applicable at primary care level.
- Able to detect outbreak in early stage, spot mapping, investigation of outbreak, notification of notifiable diseases.
- Surveillance skills development, calculating various health indicators and their interpretations.

5. Reproductive and Child Health:

- Antenatal-examination of women, application of at risk approach in antenatal care.
- Intranatal care –conducting a normal delivery, referral indications.
- Postnatal –assessment of new-born and mother, promotion of breast feeding, advice on weaning and family planning.
 - Preventive oncology in women and barriers
- Immunization-able to immunize the eligible using desired routes, for providing vaccines.
 - Adverse Event Reporting
- Contraception-able to advice appropriate method.
- Able to insert any Intra Uterine Device (IUD) Condom demonstration.

6. Statistics:

- Able to draw sample using simple sampling techniques.
- Apply appropriate test of significance.
- Calculation of various health indicators and presentation of data

7. Nutrition:

Conduct complete nutritional assessment of individual using clinical, anthropometric and diet survey tools.

Ability to use and interpret road to health card.

Advise appropriate balance diet and suggest any dietary modification.

Nutritional promotion and education to specific groups and related to specific nutritional diseases.

Prescribe a therapeutic diet.

8. Occupational health:

Screening of workers for any occupation related health problem.

9. Managerial Skills:

Able to make community diagnosis and take remedial measure for improving health of community.

Organize antenatal, under five clinics, health education camps.

Ability to manage Health Management Information System, including maintenance of health records at primary care level.

Able to show effective leadership, supervision skill not only at primary care level but also in inter-sect oral coordination.

Ability to manage money, material and manpower at primary care level.

Ability to do cost effective analysis as per primary care needs. Ability to implement cost containment measures in public health

Community Participation and cooperation skills. Community engagement, community ownership for effective health care – models in India – in preventive health, in self –help healthcare initiatives

10. Basic Laboratory investigation at primary care level

Hemoglobin estimation

Urine examination for normal and abnormal constituents.

Thick and thin blood smear for malaria parasite examination

Peripheral smear for type of anemia

Acid fast staining

Estimation of chlorine demand and residual chlorine.

Identification of life cycle stages of various insects of public health importance

11. Minor surgical procedures at primary care level

All type of injection techniques

Universal precautions and safe injection practices (use of AD syringes)

Common wound dressings

Incision and Drainage of abscess under local anesthesia.

Suturing of wounds

12. First Aid, Initiation of emergency care, Triage and referral

13. Transportation of injured and seriously ill patients from site of first contact.

14. Participatory Rural appraisal

Social Mapping

Focus group Discussion

Key informant Interview. . Local self governance bodies, Village Health, Sanitation, Nutrition committees, recognizing local resources – dais, elders, ASHA workers, teachers, postman [who knows to read things out]

15. Health Education

Health Education to various groups (individual and group Assignments).

16. Animal bite Management.

E. DETAILS OF INTERACTIVE LECTURES

TOPICS

1. Introduction

Objectives of Medical education need for value based medical education history of medicine with reference to community medicine

Concept of Health

Concept of Diseases

Concept of control & prevention

Learning –Type & skills-How to learn effectively

Intelligence-IQ, EQ

Personality-Type interpersonal relationships

Attitude, Behaviour, Habits

Emotions, Frustrations, role of emotions in health & coping with emotions - 1hr

Conflicts-internal, Interpersonal & conflict resolutions, defence mechanisms - 1hr

Stress & coping skills-Integrated (psychiatry). Burn out and self care

Ethics

Gender Health Including Gender Based Violence

Life Skill Education

2. Epidemiology

Epidemiology-Introduction, tools & Measures of
Mortality Standardization Direct & Indirect Measures
of Morbidity

Descriptive studies

Case control studies Cohort

studies Experimental studies

Association & Causation

Application of epidemiology

Screening for diseases

Infectious Diseases Epidemiology_ concepts

Dynamics of Diseases Transmission & Concepts of prevention & control

Investigation of an epidemic (integrated with Microbiology, Health services)

Introduction to Evidence based medicine/evidence pyramid in day today practice

Use of diagnostic tests

3. Communicable Diseases

Smallpox & Chicken pox

Measles, Mumps, Rubella

Diphtheria, pertussis, Meningococcal meningitis

ARI & ARI control Programme

TB-Epidemiology & Control

Poliomyelitis

Viral hepatitis

Typhoid fever, Cholera & ADD

Food poisoning & Food toxicants

Dengue fever, Chikungunya, Malaria

Filaria

Rabies

JE & KFD

Leptospirosis

Plague and Yellow fever

Leprosy

Trachoma & tetanus

STD-Syndromic approach

AIDS

Emerging & Re-emerging infections

Hospital acquired infections & Health Care Waste Management

Non Communicable Diseases

Coronary Heart Diseases & Rheumatic Heart Diseases

Hypertension & stroke

Cancers

Prevalence of Advanced cancer in the community and their needs

Diabetes mellitus & obesity

Blindness & control Programme

Accidents (Integrated)

Non-abandonment when disease is progressive

4. Demography & Family Planning

Demographic cycle, Trends & National population Policy

Family Planning Methods Including Non scalpel

Vasectomy, Emergency Contraception and MTP Act

5. Maternal and Child Health

Maternal health-ante, intra, postnatal care & problem (Integration with O &G)

Growth & Development/Growth Charts, WHO Growth Chart (Integration with Paediatrics)

Behavioural problems & Juvenile Delinquency

Indicators of MCH Care

Geriatric problems (Size, need for special care, National policy of elderly)

Special presentation of ailments, common issues and integrated care – rather than multi-speciality approach to care

Challenges of Poly pharmacy

Adolescent problems

6. Nutrition

PEM& Child hood obesity

Nutritional requirements-RDA-integrated (Biochemistry)

Nutritional Disorders-integrated (Biochemistry)

National Nutritional Programmes.

Nutritional status assessment & Surveillance

Ecology of malnutrition,

Food adulteration - PFA , FSSAI

7. Social science

Concepts in sociology ,

Family and cultural factors in Health & Diseases

Social problems-overview of Social security measures

8. Development and Health

Development and Health Interface

Poverty and health, poverty alleviation programmes
Health of Marginalized
Sustainable and Inclusive Development

9. Genetics

Epidemiology of Genetic Diseases
Screening of genetic diseases
Prevention and control of genetic disease

10. Mental and Behavioral Problems

Importance of mental health care in primary care settings
Comprehensive Mental Health Care at primary care settings.
Common Mental Health disorders.
Substance use disorder-Tobacco, Alcoholism and Drug addition

11. Gender and Health

Gender Issues and Women Empowerment
Gender Based violence, Domestic Violence -causes, Prevention and Control (Integrated Surgery, O&G, Legal and Police Department)

12. Environmental Health

- (1) Pollution- Air, Water and soil
- (2) Waste Disposal in urban & rural areas
- (3) Recent issues & advances in environmental health policies Eg. Basel Convention
Stockholm Convention
- (4) Emerging environmental health issues-eg: e- wastes

13. Occupational health

1. Occupational health problems
2. Prevention of occupational diseases and ergonomics

14. Communication process

Communication process, Types, barriers & Health Communication

- Reactions to loss and grief
- Respect; Being non-judgmental
- Basic Communication Skills

- Importance of good communication skills
- Barriers – for the Patient and for the doctor
- Active listening
- Basic Clinical communication skills

Examples of good and poor communication as Role Play - affecting diagnosis and management

Health education-Definition & Principles

15. Health Planning, Health System& Health economics

Health Planning & Planning Cycle

Health System& Health Care Delivery system

(Rural, urban, tribal) Health

Information system Health

committees

Concepts of health care-primary health care

Health care for all

National Health Policy, Millennium development goals

Seminar on India's National Health Policy – NPCDCS, elderly health, mental health and on Palliative Care

Universal health status in India

Sustainable Development Goals

Role of Voluntary agencies in Health, New International Health regulations Panchayati Raj

Management & Managerial Techniques

Health economics & cost containment issues health care Disaster management, Pandemic preparedness

Bioterrorism

16. National Health Programmes

Revised National TB Control Programme

National Anti-Malaria Programme

National Filaria Control Programme

(Mass Drug Administration & Morbidity Management)

National Vector borne disease control programme

National AIDS Control Programme

National Mental Health Programme & District Mental Health Programme

Evolution of Family Planning Programme & Reproductive & Child Health

Programme National Rural Health Mission and Indian Public Health Standards

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NPCDCS – National Program for Cancer, Diabetes, Cardiac diseases, Stroke

NPPC –National Program on Palliative Care

17. Legislation and Public Health

1. Census act 1948
2. Registration of Birth and Death Act 1969
3. The Epidemic Diseases Act, 1897.
4. The Transplantation of Human Organs Act, 1994
5. The prevention of food Adulteration Act 1954(FSSAI)
6. The International Health Regulations
7. The Cigarettes and Other Tobacco product Act 2003
8. The Narcotic and Psychotropic substance Act 1958

Recent Amendment – 2014 – Purpose for the amendment, Current procedure for accessing essential narcotic drugs [ENDs]

9. The Medical Termination of Pregnancy Act 1971(MTP Act)
10. The Dowry Prohibition Act
11. The Immoral Traffic (Prevention) Act 1956
12. The Prenatal Diagnostic Techniques (Regulation and Prevention of Mis use) Act 1994
13. The Juvenile Justice Act 2000
14. Child Labour (Prohibition and Regulation) Act 1986
15. The Persons with Disabilities (Equal opportunity, Protection of rights and full participation) Act 1995
16. The Factories Act 1948
17. The Employees State Insurance Act 1948
18. The Environment (Protection) Act 1986
19. The Bio-Medical Waste (Management and Handling) Rules 2000
20. The Consumer Protection Act 1986

PRACTICALS/FIELD VISITS

Practical should offer first-hand experience in the community through visits, mock sessions and hands-on exercises. Visits may be planned based on public health importance, relevance and feasibility. For each visit objectives may be specified and orientation given prior to the visit. Five minutes may be allotted for presenting report of previous day's activities, learning experiences and suggestions. Integrated and interactive team teaching may be employed wherever possible.

Phase I

30hrs

Visit to community and families

Following up one family with a patient with chronic disease for 1 year with at least 3 home visits and recorded interaction with family members– and submit a structured case reflection at the end of 6th semester - under physical, emotional, socio-economic and

spiritual concerns of that patient/family unit. All this is done with assigned mentorship.

Reflection and practice points
Visit to support and auxiliary health facilities
Identify a community Health Problem
Introduction to the Hospital system
Hands-on exercise on first aid

Phase II

170 hrs

Family studies – Community diagnosis
Basic clinical skills training-history taking skills Innovative
community based problem solving exercises
Biostatistics-hands-on exercises- central
tendency/dispersion/sampling/hypothesis/significance tests
Community interaction, identification and solving community health problems with
community participation
Entomology including field assignments –vector survey/control measures
Epidemiological exercises – Mortality, Morbidity, Risk/ Screening, including study
designs and standardization
Visit to public health institutions
Visit to social welfare organizations
Accompanied by Medical Social Worker team member
Implementation of National Health Programmes through CHC/ PHC and sub centre visits
Visits to institutions of public Health importance
Pain & palliative care centre
Supervised home based care visits with the palliative care
team Vocational Rehabilitation Centre
 Water works
 Anganwadi
 Analyst lab
 De addiction centre
 Food inspector's Office etc.
BCC (IEC) Strategies-individual & group
assignments Review of current health issues &
policies
Review of museum specimens, poster presentations
Participation in health related activities in the
community
Research methodology – Participation in workshop & Project work, computer skills, Nutrition
skills – Diet survey, balanced diet, Nutritional requirements, RDA, Nutritional disorders,
Community Nutrition programmes
Balanced diet and therapeutic diet
Food Hygiene

PFA act
Universal Precautions & Safe Injection Practices
Health Care Waste Management
Participatory techniques in health
Health Planning & Management exercises
Disinfection
Immunization agents & Immunity---Vaccines, Cold Chain
Hazards of immunization including adverse event reporting
Fertility related statistics and Family Planning methods, Growth charts
Art of Interviewing
Doctor-Patient relationship and Hospital sociology
Concept of therapeutic relationship

Rights and duties

Oath Sanitary well, well Chlorination Procedure
Purification of water – large and small scale
Water Quality Standards and surveillance
Sanitary Survey

METHODS OF ASSESSMENT

Modified essay question
Short answer questions
Problem solving exercises
OSCE, OSPE Epidemiological and statistical exercises
One Case reflection of a home bound patient's concerns and way forward evaluation
Analysis of ethical dilemmas of hospital based disease management – from clinical cases and approach to solving it

Actor patients – interviewing style, communication skills, Breaking bad news, Handling collusion

Records review
Research, Project Reports
Viva Voce

TEACHING LEARNING METHODS

Structured interactive sessions
Role play – for teaching good/ poor communication skills
Small Group discussion
Focus Group Discussion (FGD)
Participatory learning appraisal (PLA)

Institutional visits

Practicals including demonstrations

Problem based exercises

Video Clips

Written case scenario Self-learning tools. Choose movies with healthcare message

Interactive learning

E-modules

TIME OF EVALUATION

University examination of Community Medicine should be at the end of 7th Semester. Formative and summative assessment during internship so that we have a basic doctor, competent to provide comprehensive care.

LEARNING RESOURCE MATERIALS

Text books Reference books

Practical note books

Internet resources, Video films etc

SUGGESTED TOPICS FOR LEARNING THROUGH e-MODULES:

History of Medicine and Public Health

Environmental Health

Nutrition (Except public Health Nutritional Programme)

Epidemiological methods

Screening

Planning Cycle

Health management techniques

Entomology

Biostatistics

Demography

Disaster management

Biomedical waste management

International health

National Health Organizations

TOPICS FOR INTEGRATED TEACHING WITH DEPARTMENT OF COMMUNITY MEDICINE AS PARTICIPANT

Nutrition

Iron deficiency anemia

Communicable diseases with National Health Programmes like

- o -HIV/AIDS
- o -Tuberculosis
- o -Malaria

- o -Polio
- o -Diarrheal diseases
- o -Leprosy
- o -Zoonotic diseases

Lifestyle related diseases with preventive and palliative aspects like

- o Diabetes
- o Hypertension
- o Stroke
- o Obesity
- o Cancers
- o Jaundice

Alcoholism Death and Dying Geriatric Medicine

Adolescent Health

Rational Drug Use Contraception

Industrial health Ethical issues

Applied Epidemiology and statistics in clinical
medicine

TOPICWISE MARKS DISTRIBUTION IN COMMUNITY MEDICINE

	Paper I	Marks
1	Concept of Community Medicine	5
2	Sociology & Developmental Health Interface	5
3	Environment including entomology	10
4	RCH and Health of Elderly	10
5	Nutrition & Genetics	10
6	Basic Epidemiology & Screening	15
7	Demography , Biostatistics & Health Information System	5
	Total	60

	Paper II	
1	Communicable diseases including Emerging & re-emerging diseases	15
2	Non-Communicable diseases, Disability, Rehabilitation , Caring for the chronically ill – establishing continuity of care	10
3	Biomedical Waste management, Occupational Health	5
4	Health care delivery system & Urban health Disaster Management Health Planning, management& Financing	10
5	Mental & behavioral health problems Health Education	5
6	National Health Programs & NRHM	10
7	Health legislation & International Health Essential Medicines & Counterfeit Medicines , , Purpose of NDPS Amendment, implications	5
	Total	60

Each Paper should have:

- Structured essay one question: 10 marks
- Remaining structured short essay question: 50 divided marks
- Around 50 %problems based competency testing (Cognitive domain) in theory question paper
- Each paper shall be of 3 Hours duration

Distribution of Marks

1. Theory

Theory	Max.Marks
Theory Paper I	60
Paper II	60
Internal assessment	20
Oral	10
Total	150

2. Practical

Practical and oral should be conducted in one day

Exercise	Max.Marks
Epidemiological exercise	3
Statistics	4
Clinic social case study	8
OSCE	2
Spotting & OSPE	6
Diet prescription	3
Project	4
Internal assessment	20
Total	50

Grand Total (Theory & Practical) – 200

E. TEXT BOOKS RECOMMENDED:

Prescribed Books

- Park's Text book of preventive and Social Medicine, K. Park (23rd edn.) Banaridas Bhanot
- Textbook of Parasitology, Protozoology and Helminthology – Chatterji K D c.
- Introduction to Health Statistics – Swaroop S E & S. Livingstone Ltd.
- A treatise on Hygiene and Public Health – Ghosh B N Scientific Publising Company, Calcutta
- Text Book of Social & preventive medicine -Mahajan
- Epidemiology for undergraduates – Marina Rajan Joseph – Jaypee Publishers (2007) 1st edn.
- Syamalan's Statistics in Medicine (2006); National Health Programme by Jugal Kishore
- National Health Programme by D K Taneja
- Textbook of preventive & Social Medicine by Sunder lal, Adarsh,
- Pankaj j. Textbook of preventive & Social Medicine by T Bhaskar Rao k.
- Biostatistics by A Indrayan

- l. Methods in Biostatistics by B K Mahajan
- m. Textbook of Preventive & Social Medicine by Gupta & Ghai
- n. Text book of Preventive & Social Medicine by Gupta & Mahajan
- o. Essentials of Community Medicine by Suresh Chandra
- p. Introduction to Biostatistics by Sathya Swaroop
- q. Community Medicine with Recent Advances by AH Suryakantha
- r. Principles and Practice of Community Medicine by Dr. Asma Rahim
- s. Indian Primer to Palliative Care
- t. Community Medicine Simplified by Sreejith P S, Paras Medical Books

Reference Books:

- a. Preventive Medicine and Public Health Appleton Century Crofts – Maxcy, Kenneth F Rosenau
 - b. Preventive Medicine for the doctor in his community – Level H R & Clark E G; Mc Graw Hill Book Company
 - WHO Online resources
 - c. Theory & Practice of Public Health – Hobson W Oxford University Press
 - d. American P H Association Communicable Disease Control in man
 - e. Manson's tropical diseases – Wilcock's & Manson
 - f. Oxford test book of Public Health 4th edn.
 - g. Public Health & Preventive Medicine J M Last
- WHO online resources
- National health websites- mohfw, ncdc

OPHTHALMOLOGY

I. Goal

The broad goal of the teaching of students in Ophthalmology is to provide such knowledge and skills to the student that shall enable him/her to practice as a clinical and as a primary eye care physician: and also to function effectively as a community health leader to assist in the implementation of National Programme for the prevention of blindness and rehabilitation of the visually impaired.

II. Objectives

At the end of the course, the student shall be able to:

- 1. Identify common diseases of the eye
- 2. Diagnose and treat common diseases of the external eye-conjunctivitis, sty, extraocular foreign body, corneal abrasion, Vitamin A deficiency