

COURSE CONTENTS

I. CONCEPTS OF HEALTH AND DISEASE

1. Introduction to community medicine, Medicine in antiquity, evolution of community medicine.
2. Definition of health, Dimensions of Health, holistic concepts of health including concept of spiritual health, appreciation of health as a relative concept, determinants of health.
3. Characteristics of agent, host and environmental factors in health and disease and the multi factorial etiology of disease.
4. Understanding the natural history of disease and application of interventions at various levels of prevention.
5. Introduction to various health indicators.
6. Health profile of India.

II. SOCIAL SCIENCE AND HEALTH

1. Medical sociology, Clinico socio-cultural and demographic evaluation of the individual, family and Community.
2. Assessment of barriers to good health and health seeking behaviour.
3. Role of family in health and disease
4. Doctor-patient relationship.
5. Socio-cultural factors related to health and disease in the context of urban and rural societies.
6. Impact of urbanization on health and disease.
7. Social psychology, Community behaviour and community relationship, Hospital.
8. Psychology.

III. ENVIRONMENT AND HEALTH

1. Water: Concepts of safe and wholesome water, sanitary sources of water, water related diseases, water purification processes, water quality standards.
2. Physical and chemical standards of drinking water quality and tests for assessing bacteriological quality of water.
3. Concepts of water conservation and rainwater harvesting.
4. Health hazards of air, noise, radiation pollution. Concepts of solid waste , human excreta and sewage disposal.
5. Awareness of standards of housing and the effect of housing on health.
6. Role of vectors in the causation of diseases.
7. Identifying features of vectors and their control measures.
8. Life cycles of vectors and advantages and limitations of various vector control measures.

9. Mode of action, application cycle of commonly used insecticides and rodenticides.

IV. HEALTH PROMOTION AND EDUCATION

1. Understand the concepts of Health promotion and Education, IEC, Behavioural change communication
2. Principles & methods of health promotion and education.
3. Barriers to effective communication and methods to overcome them.
4. Various methods of health education with their advantages and limitations.
5. Organizing health promotion and education activities at individual, family and community settings.
6. Evaluation of health promotion and education programme.

V. NUTRITION AND HEALTH

1. Common sources of various nutrients and special nutritional requirements according to age, sex, activity, physiological conditions.
2. Nutritional assessment of individual, families and the community by using appropriate method such as: anthropometrics, clinical examination etc.
3. Plan and recommend a suitable diet for the individuals and families as per local availability of foods and economic status, etc.
4. Common nutrition related health disorders (like protein energy malnutrition, vitamin A deficiency anemia, iodine deficiency, flurosis, food toxin diseases) and their control and management.
5. Food fortification, additives, adulteration, and 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.

VI. OCCUPATIONAL HEALTH

1. Introduction of Occupational Health , occupational environment .
2. Specific occupational health hazards, their risk factors and its preventive measures.
3. Concepts of ergonomics
4. Employees state insurance scheme, Factories Act, Legislations related to occupational health.

VII. BIO-STATISTICS

1. Collection, classification, analysis, interpretation and presentation of statistical data ,Sources of vital statistics like census, SRS, NFHS, NSSO etc.
2. Application of statistical methods in various study designs.
3. Common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion.
4. Applying tests of significance in various study designs.

VIII. BASIC EPIDEMIOLOGY

1. Epidemiology: definition, concepts, uses and its role in health and disease.
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 disease 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. Principal sources of epidemiological data.
7. Definition, calculation and interpretation of morbidity and mortality indicators
8. Epidemiological study designs.
9. Concept of association, causation and biases.
10. Investigation of an epidemic of communicable disease and to understand the principals of control measures.
11. Need, uses and evaluation of screening tests
12. Application of computers in epidemiology

IX. EPIDEMIOLOGY OF COMMUNICABLE & NON-COMMUNICABLE DISEASES :

Communicable Diseases:

1. Intestinal infections: Poliomyelitis, viral hepatitis, Acute Diarrhoeal Diseases, Cholera, typhoid fever, food poisoning, Helminthiasis, Amoebiasis, Ascariasis, Hookworm infection, Dracunculiasis, etc.
2. Respiratory infections: Acute Respiratory infections, measles, Diphtheria, Whooping cough, Tuberculosis, measles, chickenpox, mumps, rubella, Influenza, Meningococcal meningitis, SARS.
3. Vector – borne infections: Malaria, Filariasis, Kala Azar, Dengue
4. Surface Infections: Sexually Transmitted Diseases, HIV & AIDS, Tetanus, Leprosy, Scabies, Pediculosis, Yaws, Trachoma, etc
5. Zoonosis: Rabies, Japanese encephalitis, Plague, Kyasanur Forest Disease, Chickungunya, JE, Yellow Fever, Rickettsial zoonoses, scrub typhus, murine typhus, tick typhus, Q fever, Tieniasis, hydatid disease, Leishmaniasis.

Non-communicable Diseases:

Coronary heart disease, Hypertension, stroke, Rheumatic heart disease, Cancers, Obesity, Diabetes, Blindness, Injury and Accidents.

Emerging diseases and reemerging diseases of public health importance.

X. DEMOGRAPHY AND FAMILY PLANNING

1. Concepts of Demography, Demographic cycle, Vital statistics.
2. Definition, calculation and interpretation of demographic indices like birth rate, death rate, fertility rates, etc.

3. Declining sex ratio and its social implication.
4. Population explosion, population dynamics of India.
5. Population control measures.
6. Various family planning methods, their advantages and shortcomings.
7. Medical Termination of Pregnancy and Act (MTP Act).
6. National Population Policy.

XI. MATERNAL AND CHILD HEALTH

1. Current status of Reproductive and Child Health.
2. Screening of high risk groups and common health problems.
3. Local customs and practices during pregnancy, childbirth and lactation, child feeding practices.
4. Reproductive child health (RCH) components, including child survival and safe motherhood, Universal Immunization Programme, Integrated Child Development Services Scheme (ICDS), Integrated Management of Neonatal and Childhood Illness (IMNCI) and other existing Programmes.
5. Organization, implementation and evaluation of reproductive and child health program components.
6. Adolescent health, etc.
7. Handicapped child.
8. Gender issues and Women empowerment.
9. Organizations, technical and operational aspects of the National Family Welfare Programme.
10. Geriatric Medicine.
11. School Health.

XII. 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 healthsystem
5. Voluntary Health agencies working in India.
6. Organization of health services in urban area.
7. Overview of administration at village, block, district, state and central level in India.

XIII. HEALTH PLANNING, MANAGEMENT AND ADMINISTRATION

1. Concepts of Planning, Planning cycle , Management, Public Health Administration.
2. Components of planning a health activity.
3. Classification and understanding of various Qualitative and Quantitative Health Management techniques.
4. National Health Policy & National Rural Health Mission (NRHM)
5. Concepts of Health Economics in health planning and management.

6. Concepts, scope and methods of Health Audit.
7. Role of Planning Commission and five year plans in development of health sector in India
8. Various health committees of Government of India and their important recommendations.

XIV. DISASTER MANAGEMENT

Principles of disaster preparedness and application of these in disaster management

XV. PUBLIC HEALTH LEGISLATIONS

1. Birth and Death registration act, PFA act, MTP act, CPA, Child labor act, prenatal diagnostic act, Human organ transplantation act.
2. Other public health legislations.

XVI INTERNATIONAL HEALTH

1. International health
2. WHO, UNICEF, FAO etc.
3. International Health Regulation (IHR)

XVII. BIO-MEDICAL WASTE AND ITS DISPOSAL

1. Classification/ Category, sources, health hazards and treatment of Bio-Medical Waste.
2. Application of these principles in different setting of healthcare delivery system.

XVIII. NATIONAL HEALTH PROGRAMMES

1. RNTCP.
2. National Vector borne disease control programme.
3. National Blindness control programme.
4. Integrated Disease Surveillance Project (IDSP)
5. National leprosy control programme.
6. National AIDS control programme.
7. Reproductive and Child Health.
8. National Iodine deficiency disorder control programme.
9. National cancer control programme.
10. National cancer control programme.
11. Health related Millennium Development Goals.

XIX. MENTAL HEALTH

1. Classification of mental illness ,preventive measures in mental health..
2. Alcoholism and drug addiction

XX GENETICS AND HEALTH

1. Chromosomal disorders, multifactorial disorders ,preventive and social measures in genetics.
2. Advance in molecular genetics.

FIELD VISITS FOR UNDERGRADUATE MEDICAL STUDENTS :

1. Sub centre, Primary Health Center and Community Health Center/ District Hospital, Rural Health Training Centre , Urban Health Training Centre.
2. Anganwadi Centre.
3. Water and sewage treatment plant.
4. Industry visit.
5. Infectious Disease Hospital.
6. DOTS Center.
7. Malaria Research Centre.
8. Urban Leprosy Centre.
8. School Health services.
9. Old Age Homes.

TOPICS FOR INTEGRATED TEACHING WITH DEPARTMENT OF COMMUNITY MEDICINE AS PARTICIPANT

1. Nutritional Disorders.
2. Communicable diseases of national importance.
3. Non Communicable disease of national importance.
4. Geriatric medicine
5. Adolescent Health
6. Rational drug use
7. Mother and Child Health
8. Industrial health
9. Ethical issues
10. Genetics
11. Mental Health
12. Disaster Management

RECOMMENDED BOOKS IN COMMUNITY MEDICINE:

1. Textbook of Preventive and Social Medicine by K Park .
2. Textbook of Preventive and Social Medicine by Gupta & Mahajan.
3. Textbook of Preventive and Social Medicine by Sunderlalal.
4. Textbook of Preventive and Social Medicine by J S Mathur.
5. Essential preventive medicine by Ghai.
6. An Introduction to Biostatistics by P S S Sundar Rao.
7. National Health Programme by Jugal Kishore.

8. Advanced text book on food & nutrition .Vol-I & II by Dr M S Swaminathan.
9. Community health education methods: A practical guide by Ben slay.
10. Basic Epidemiology by Beaglehole.