Goal & Learning Objectives of Community & Family Medicine

GOAL

The broad goal of the teaching of undergraduate students in Community & Family Medicine is to prepare them to function as community and first level physicians in accordance with the institutional goals.

LEARNING OBJECTIVES:

Broad learning objectives of teaching Community and Family Medicine to MBBS students can be broadly grouped in to the following areas:

- To prepare them to function as community and first level physicians in accordance with the institutional goals.
- To make the students aware of environmental, social, financial, personal, occupational issues of the patients and to inculcate in the students the habit of considering the above aspects while rendering patient care.
- To teach them practised techniques of prevention at Individual, National and International level for various health issues.
- To orient the students with Indian Health System, National Health Programmes and Policies and International Health Policies and Agencies.
- To teach research principles and methodologies so as to create scientific attitude

SPECIFIC OBJECTIVES

- (1) Knowledge: At the end of the course, the student shall be able to:-
 - Describe the health care delivery system and health information system of the country and the state and its functioning.
 - Describe the National Health Programmes relevant to the community, family and individual.
 - Enunciate the principles and components of primary health care and national health policies to achieve the goal of 'Health, for All'.
 - Outline the demographic pattern of the country, and appreciate the roles of the individual, family, community and social-cultural
 milieu in health and disease

- List epidemiological methods and describe their application to communicable and non-communicable diseases in the community or hospital situation.
- Understand and apply the biostatistical methods and techniques in research.
- Identify the environmental and occupational hazards and their control.
- Describe the importance of water and sanitation in human health.
- To understand the principles of health economics, health administration, and health education and communication in relation to community.

(2) Skills: At the end of the course, the student should be able to:

- Use epidemiology as a scientific tool to make rational decisions relevant to community and individual patient intervention.
- Collect, analyse, interpret and present simple community and hospital based data, family and community levels keeping in mind the existing health care resources and in the context of the prevailing socio-cultural beliefs;
- Diagnose and manage maternal and child health problems and advise a couple and the community on the family welfare planning methods available in the context of the national priorities. Also to manage all other patients reporting at primary level as per the standard treatment guidelines and the health resources available.
- Diagnose and manage common nutritional problems at the individual and community level.
- Plan, implement and evaluate a health education programme with skill to use simple audio-visual aids.
- Interact with, other members of the health care team and participate in the organization of health care services and implementation of national health programmes.
- Disaster preparedness skills
- Communication skills for counselling
- Practice and demonstrate the principles of waste management, i.e. solid waste, biomedical waste and other types of waste.
- Also to develop skills for:

- > assessment of risks for abuse, neglect, and family and community violence
- > reporting communicable disease
- > understanding population epidemiology, and the interpretation of public health statistical information
- > assessing and preventing environmental illness and injury
- > providing school health
- disease prevention through immunization strategies
- > community-based disease screening, prevention, health promotion
- > understanding factors associated with differential health status among subpopulations, including racial, geographic, or socioeconomic health disparities, and the role of family physicians in reducing such gaps
- > using community resources appropriately for individual patients who have unmet medical or social support needs
- > structured interaction with the public health system
- > occupational medicine including disability determination, employee health and job-related illness and injury
- > community health assessment
- developing programs to address community health priorities
- > community-based health education of children and adults
- (3) **Integration:** Develop capabilities of synthesis between cause of illness in the environment or community and individual health and respond with leadership qualities to institute remedial measures for this.
 - Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the
 existing health care resources and in the context of the prevailing socio-cultural
 - Paying attention to sociocultural aspects of patient care
 - Coordinating a community's health resources in the care of patients
 - Identifying and intervening in a community's health problem
 - Assimilating into a community and participating in its organizations

Topics in Community & Family Medicine divided into Must know, Should know & May Know

| To | pics | Must Know | Should know | May Know |
|----|--|---|---|---|
| 1. | Man and Medicine | Modern medicine Changing concepts in public health Family and community medicine | Rise of public health Germ theory of disease | History & evolution of medicine |
| 2. | Concepts of health & disease | Definition of health Various indices in measuring health & well being Concept of disease and causation Natural history of disease Iceberg phenomenon Concept of disease control and prevention Modes of intervention Community diagnosis | Various concepts of health Dimensions of health Determinants of health Health service philosophies | Responsibility of health Changing pattern of disease International classification of disease |
| 3. | Principles of epidemiology & Epidemiologic methods | Rest all in the chapter is Must know | Case definitions and treatments of AEFI Disinfection | Non Randomized trials |
| 4. | Screening for disease | Must know | | |
| 5. | Epidemiology of communicable diseases | Chicken pox, Measles, rubella, Mumps, Diphtheria, Pertussis, Acute respiratory infections, Tuberculosis, Meningococcal meningitis Polio, viral hepatitis A, B, Acute diarrheal diseases, Cholera, Typhoid fever, Dengue, Malaria Rabies, Plague Trachoma, Tetanus, Leprosy, STD, AIDS | Influenza, Viral hepatitis C, D, E, Food poisoning, Amebiasis, Ascariasis, Hookworm infection, Dracunculiasis Lymphatic filariasis, Japanese encephalitis, Taeniasis, Leishmaniasis | Small pox, SARS, Yellow fever, KFD, Chikungunya fever, Brucellosis, Leptospirosis, Salmonellosis Ricketssial zoonoses, Scrub typhus, Murine typhus, Tick typhus, Q fever, Hydatid disease, Yaws |
| 6. | Epidemiology of | Cardiovascular diseases, Coronary heart | Stroke, RHD, | |

| | chronic non- | disease, Hypertension, Cancer, Diabetes, | | |
|-----|-------------------------------|---|--------------------------------------|----------------------------------|
| | communicable | Obesity, Blindness, Accidents & injuries | | |
| | diseases | | | |
| 7. | Health programmes | National vector borne diseases control | Iodine deficiency disorders | National leprosy eradication |
| | in India | programme, | programme | programme |
| | | RNTCP, NACP, National programme for | National programme for prevention | National Mental health programme |
| | | control of blindness, Universal immunization | and control of cancer, diabetes, | |
| | | programme, National health Mission, RCH, | cardiovascular diseases and stroke, | |
| | | RMNCH+A strategy, IMNCI | IDSP | |
| 8. | Demography & | Demographic cycle, Recent demographic | - | MTP |
| | Family Planning | trends in India, Fertility related statistics, | | |
| | | Definitions used in demography, Family | | |
| | | planning methods- indications, | | |
| | | contraindications and adverse effects | | |
| | | Pearl index | | |
| 9. | Preventive medicine | Antenatal, intranatal and postnatal care, | Child health problems | Approaches to handicapped |
| | in obstetrics, | Neonatal care | School health service | children |
| | paediatrics & | Low birth weight- definition, causes and | Problems due to ageing process and | |
| | geriatrics | prevention, BFHI, Growth curves and their | long term illness | |
| | | interpretation, Indicators of MCH care, ICDS | Problems in adolescents | |
| 10. | Nutrition & Health | Supplementary action of proteins, Types of | Classification of foods, Vitamin B, | Other trace elements |
| | | fats and their role in health, Glycaemic index, | D, E deficiency | Community Nutrition programmes |
| | | dietary fibres, Vitamin A deficiency, Niacin | Nutritional profile of food items | |
| | | deficiency, Iron deficiency, Fluorine, Iodine | Food hygiene | |
| | | Nutritional requirements, RDA, Reference | Food toxicants, Food adulteration, | |
| | | Indian man & woman, Dietary goals, balanced | Food fortification | |
| | | diet, PEM, Endemic fluorosis, Lathyrism | | |
| | | Assessment of Nutritional status, | | |
| 11. | Medicine & Social | Family in health & disease, Behaviour and its | Social security | |
| | sciences | dynamics, Concepts in sociology, SES scale, | | |
| 12. | Environment & | Water related diseases, Methods of | Water quality criteria and standards | Light, radiation |
| | health | purification of water on small and large scale, | Standards and Types of ventilation, | |

| | Indices of thermal comfort | Noise pollution, Insecticides, anti- | |
|--------------------------|---|--------------------------------------|--------------------------------|
| | Air pollution, Housing standards, Solid waste | rodent measures | |
| | and excreta disposal methods, | | |
| | Medical entomology: mosquitoes, flies, | | |
| | sandfly, louse, fleas, mites, ticks | | |
| 13. Hospital waste | Category of biomedical waste disposal, | | |
| management | Safe injection practices | | |
| 14. Disaster | Disaster management cycle. | | |
| management | | | |
| 15. Occupational health | Occupational diseases and their causative | Lead poisoning, Occupational | |
| | factors, Pneumoconiosis, Prevention of | cancer, sickness absenteeism | |
| | Occupational diseases | ESI Act, Factories act | |
| 16. Genetics & Health | Eugenics, Euthenics, Preventive and social | | |
| | measures for genetic diseases | | |
| 17. Mental health | Alcoholism and drug dependence | | |
| 18. Health information | Sources of health information, Presentation of | | |
| & basic medical | statistical data, measures of central tendency, | | |
| statistics | measures of dispersion, Normal distribution, | | |
| | sampling, tests of significance, correlation & | | |
| | regression. | | |
| 19. Communication for | Communication process, health education, | Types of communication, Approach | |
| health education | Principles of health education, Methods in | to health education, Models of | |
| | health education, | health education, | |
| 20. Health planning & | Planning cycle, National health policy, Health | Management methods & | Evaluation of health services |
| management | system in India | techniques, Health planning in | |
| | | India | |
| 21. Health care of the | Levels of health care, Primary health care, | Health care delivery system | MDG, SDG |
| community | PHC, CHC, Subcenters as per IPHS | | |
| 22. International health | WHO, UNICEF, | UNDP, FAO, CARE, Red Cross | USAID, Colombo Plan, SIDA, |
| | | | DANIDA, Rockfeller foundation |
| 23. Family Medicine | Characteristics of Family Medicine | Periodic Health Review, Ethics in | Running a Practice, Care of |
| | Presentation of symptoms and diagnosis in | Family Medicine | psychiatric patients and their |

| family medicine, Emergencies in Family | Diagnostics in family practice: | relatives |
|--|-------------------------------------|-----------------------------------|
| Practice, Continuity of Care/ Medical record | interpreting ECG and X-rays | Practice management and audit |
| keeping / Doctor – Patient relationship, | Substance abuse disorders | Telephone consultations and home |
| Special categories of patients – e.g: | Palliative care | care |
| adolescent; disabled; elderly; | Teamwork and resources in the | Ethics of the consultation/ truth |
| patient with cancer; dying patient; | community | telling |
| bereavement, Referrals in Family Medicine, | Integrating hospital based medicine | |
| Family violence/ substance abuse/ child | to the primary care setting | |
| neglect, Care of the Elderly, Care of | | |
| Adolescents, | | |