Study Guide & Curriculum Map

Community Medicine
2021-2022

Community Medicine

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1. **Vision**

We promote health of communities through excellence in leadership, education and research for developing a responsive and sustainable

healthcare.

2. **Mission**

To prevent disease and injury, promote wellness; protect communities and environment for ensuring self-reliance and sustainable

behavior change.

3. **Objective**

To expedite the academic growth and development in undergraduate medical education.
To improve health standards of the community in this underdeveloped region of the world, focus
of Medical Education & Research will be on regional medical issues. Trained graduates will
successfully execute and streamline the Medical profession and will fill the vacuum in the growing
medical schools and industry. Development of human resource, research and technology in this
institute will ultimately help in the development of national economy.

4. **Overview**

All major topics will be covered in the form of lectures, CBL's and CPC's in three blocks. Total contact hours are 250 Hours

Summary of Contact Hours

CMH LMC Community Medicine Department following contact hours are being followed which are close to the total contact hours required by NUMS.

Sr. No	Subject	1st Year	2nd Year	3Rd Year	4th Year	5th Year	Total
1	Community Medicine	0	0	30	200	0	230
2	Research Methodology/EBM	10	10	30	50	0	100
Total		**10**	**10**	**60**	**250**		**330**

5. **Learning Strategies.**
a. Interactive lectures
b. Skill Lab
c. Case-based learning (CBLs)
d. Small group discussions
e. Field Visits
f. Tutorials

6. **Assessment**
a. There will be three end block exams taken at the end of block I, II& III Module. The syllabus for end block examination will be announced by the department at least 02 weeks prior to examination. End block exam will be conducted by the respective Department. Assessment tools to be decided by respective faculty. Schedule and date will be announced by the examination branch of respective institute.
b. Pre annual exam will be taken for both theory and practical after completion of the curriculum at the end before the annual NUMS examination. Pre-annual examination will be from whole syllabus. Table of specification for Pre annual exam is similar to annual exam. Schedule for Pre- annual exam (Theory and Practical) will be announced by the examination branch of respective institute
c. Marks of End block and Pre annual exams will contribute to internal assessment
d. Schedule for annual examination (Theory and Practical) will be announced by NUMS. Practical examination will be conducted by the department itself while theory part will be conducted by the examination cell NUMS.

7. <u>INTRODUCTION</u>

What is a Study Guide?

It is an aid to:
- Inform students how student learning program of the semester wise module has been organized
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules and regulations

The Study Guide
- Communicates information on organization and management of the module. This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teaching, clinical skills, demonstration, tutorial and case based learning that will be implemented to achieve the module objectives
- Provides a list of learning resources such as books, computer assisted learning programs, web-links, journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and semester examinations on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's achievement of objectives.
- Focuses on information pertaining to examination policy, rules and regulations.

Curriculum framework

Students will experience curriculum of 1st, 2nd & 3rd module.

Curriculum

Comprises of system-based modules such as statistical application in health and disease, infections, Behavioral Modification, Environment, Health Planning, which links basic science knowledge to clinical problems. Students will be able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples.

Case based discussions, computer based assignments, early exposure to clinics, community based learning in community medicine department is the characteristic of Public Health Prevention and Control Measures learned in the modular system.

Learning Methodologies

The following teaching / learning methods are used to promote better understanding:
- Interactive Lectures
- Flipped classrooms / Blended Learning
- Hospital / Clinic visits
- Small group discussion
- Problem based learning (PBL)
- Tutorials
- Field visits
- Self-directed study (SDL)

➢ **Interactive Lectures**

In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. students are actively involved in the learning process. Five minutes each group activity one after 20 minutes of lecture & one at the end of the lecture also makes lecture interactive.

➢ **Hospital Visits**

In small groups, students observe patients with signs and symptoms in hospital or clinical settings. This helps students to relate knowledge of basic and clinical sciences of the relevant module.

➢ **Small Group Discussion (SGD):**

This format helps students to clarify concepts acquire skills or attitudes. Sessions are structured around major Public Health Issues and topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

➢ **Case Based Learning:**

A small group discussion format where learning is focused around a series of questions based on a community medicine/Public Health Preventive and Control measures. Students' discuss and answer the questions applying relevant knowledge gained in lectures, tutorials, field visits and basic health sciences during the module.

➢ **Team Based Learning:**

Team-Based Learning is an evidence based collaborative learning teaching strategy designed around units of instruction, known as modules. In Community Medicine it includes community based learning and surveys.

➢ **Tutorial:**

Groups around 25 to 30 students are given a topic for self-study and discussion with the supervisor.

➢ **Flipped Classroom:**

➢ A flipped classroom is a is a "pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter". For example; apply concepts to field situations; after learning normal cardiac cycle (at their own) students are asked to: describe hemodynamics in VSD. What are possible consequences - volumes; pressures; Long-term complications?

- > **Blended Learning**; simply means traditional, F2F teaching with digital experiences (live or recorded). Include multimedia in the teaching session. Applicable in the classroom as well as in online teaching. Show the video ; questions based on the video.

A. Teaching Resources

DEPARTMENT INFORMATION

Faculty

Sr no	Name	Designation	College Ext	Email
1	Prof. Dr. M. Ashraf Chaudhry	HOD & Professor	455	drmachaudhry@gmail.com
2	Dr. Tahira Ahsan	Associate Professor	458	tahiraraza@hotmail.com
3	Brig Dr. Farid	Assistant Professor	202	
4	Dr. ShireenRafeeq	Assistant Professor	457	shireenrafeeq@gmail.com
5	Lt. Col. Khizar Iqbal Mufti	Demonstrator		
6	Dr. Fatima Arshad	Demonstrator	456	Doc.fatima42@gmail.com
7	Dr. Zainab Omer	Demonstrator	456	Zainabomer82@gmail.com
8	Bushra Amin	Biostatistician	456	bushradogar@outlook.com
9	Dr. Umar Siddiqui	Demonstrator	456	
10	Dr. Hamna Anwar	Demonstrator	456	

Offices

Sr. No.	No. of Offices Available
1	1 (HOD office)
2	1 (Associate Professor Office)
3	2 (Assistant Professor office)
4	1 (Conference /Tutorial Room)
5	1 (PA office)

B. **Supporting staff:** as designated by the college

C. **Infrastructure**
   a. Lecture Hall
   b. Tutorial Room
   c. Museum
   d. College Library

<table>
<tr><td colspan="6">BLOCK-I
Statistical Applications in Health and Disease</td></tr>
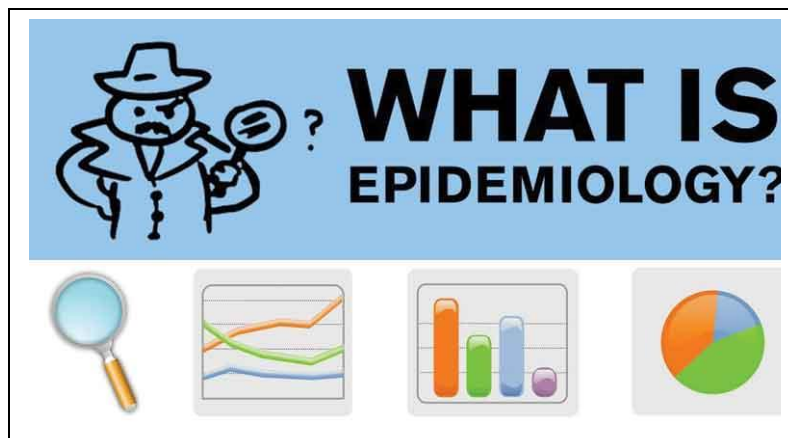<tr><td colspan="6">Code Y4B1</td></tr>
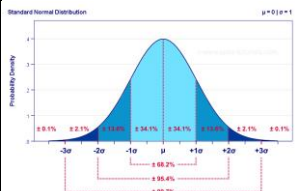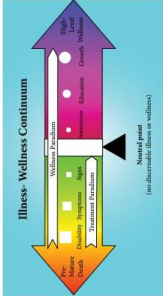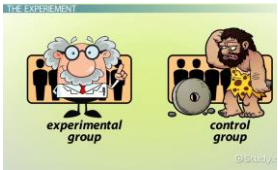<tr><td colspan="6">Duration 12 weeks</td></tr>
<tr><td colspan="6">At the end of contact session, learner should be able to:</td></tr>
</table>

SNo	Theme	Learning Outcomes		Course Content	%
		Knowledge	**Skills**	**Attitude**	
1	**Medical Ethics**	Relate ethical issues and dilemmas with medical teaching and service delivery in a given scenario	• Maintain confidentiality • Practice non- maleficence • Maintain Doctor-patient relationship/autonomy	• Importance of Medical Ethics • Principles of Medical Ethics • Violations to Medical Ethics in Pakistan • How to overcome these violations	3

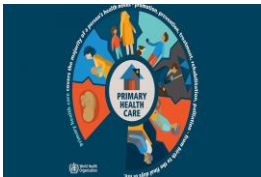| 2 | **General Epidemiology** | Describe different research designs used to collect, analyze and interpret results from epidemiological studies | • Application of concepts & aims of Epidemiology to clinical medicine this is not a skill
• Calculation and interpretation epidemiological rates and ratios for morbidity/mortality | • Aims of Epidemiology and their application to clinical medicine
• Predicting disease patterns according to concepts of epidemiological transition and polarization
• Calculation and interpretation of epidemiological rates and ratios for morbidity/mortality, fertility and migration statistics
• Classification of different study designs in epidemiology.
Calculating, analyzing and interpreting their | 25 |

				results. Merits & demerits of studies and differentiate them • Types of Bias and the techniques for its minimization in different study designs • Association ad causation	
3	**Biostatistics** 	• Identify various types of data. • Differentiate measures of central tendency and dispersion. • Interpret the normal distribution curve, skewed distribution, bi and poly-modal distribution &Standard Normal Curve • Classify and explain various sampling techniques • Differentiate between null and alternate hypothesis, recall steps of its testing and indicate probable errors • Interpret p-value	• Conceptualize, plan& present a supervised student research project • Use relevant statistical program and computer for data entry and analysis • Conduct health situation survey/house-hold survey • Demonstrate the sampling technique is this a psychomotor skill 	• Data, its various types and its classification, presentation, analysis and interpretation • Central tendency and dispersion of data set • Various distributions of data • Sampling and its various techniques • Normal distribution curve, skewed distribution, Standard Normal Curve • Statistical analysis (concept and application) • Null and alternate hypothesis, and recalling steps of its testing and indicate probable errors • Sample size • p-value	25
4	**Concept of Health and Disease**	• Define health and summarize its determinants and indicators. • Choose the most sensitive indicators by citing different examples		i) Definition of health, ii) Dimensions and determinants of health iii) Spectrum of health. iv) Indicators of Health. v) Responsibility for health.	7

		• Illustrate and describe theories of disease causation • Relate the concept of natural history of disease and iceberg phenomena and relate it with disease patterns in community. • Differentiate between disease control, elimination & eradication Interpret levels of prevention and intervention measures, with applied examples		vi) Concept of disease causation (all theories including ecological triad, (agent, host & environmental factors). vii) Spectrum of disease. viii) Iceberg phenomenon. viii) Natural history of disease. ix) Levels of prevention.	
5	**Research methodology**	• Apply basic biostatistics and epidemiological techniques to research community health projects • Draw conclusions from data • Prepare and present research report • Develop tool for data collection • Estimating the sample size • Apply ethical principles to resolve issues of service delivery in a given research • Formulate the research hypothesis/ research Question/ research objectives • Write references according to Vancouver style	☐ Formulate are search hypothesis ☐ Collect Sample from field ☐ Enter data on SPSS and Excel ☐ Run analysis on SPSS ☐ Search the literature ☐ Practice Ethics in general and specifically in conducting human Research, including informed consent and basic human right for accepting or declining to participate in research 	**i. Selection of research question according to WHO criteria.** **ii. How to write Title and Introduction, conduct literature review, compose study objective and select appropriate research methods including study variables and analysis plan.** **iii. Data entry and analysis using SPSS package.** **iv. Drafting a research article according to standardized scientific method.** **v. Ethics in research**	**5**

| 6 | Infectious Disease Epidemiology (General) | • Interpret various terms used to describe infectious diseases and relate levels of prevention and intervention measures, with applied examples.
• Identify and interpret various types of epidemics from the focus of disease spread and control
• Illustrate graphically and relate the natural history and progression of an epidemic type to stages of prevention
• Comprehend the objectives & logic in steps of investigating an epidemic
• Assess the level of care at primary, secondary and tertiary level as applied in real life setting.
• Recommend disease control measures | • Communicate effectively regarding preventive measures

Identify and suggest various methods of sterilization and disinfection in given situations. | • Infection, Contamination, Infestation, Pollution, Infectious disease, Contagious disease, Communicable disease, Host, Immune and Susceptible persons, Sporadic, Endemic, Epidemic, Pandemic, Exotic, Epizootic, Enzootic, Zoonosis, Nosocomial infection, opportunistic infection, Iatrogenic (physician-induced) infections, Surveillance, Eradication, Elimination
• Reservoir and source of infection, escape of organism, modes of transmission, entry into the body, susceptible host.
• Carrier state and its types (Incubatory, convalescent, healthy)
• Incubation period, latent period and generation time**.**
• Epidemic and its types, investigation of an outbreak or an epidemic

• **Sterilization & disinfection** Sterilization and disinfection methods and recommendations on identifying gaps | 13 |

7	Screening	• Comprehend Concept and importance of screening • Describe qualities of a good screening test • Apply knowledge for making smart choices • Discover relationship between screening and prevalence of disease • Comprehend effects of changing sensitivity and specificity on usefulness of screening • Understand and calculate accuracy of a screening test • Identify and correlate favorable characteristics of a disease that make screening useful and relevant for the disease • Identify different misinterpretations/ errors in the screening programs • Comprehend ethical concerns in carrying out screening programs		• Concept and importance of screening • Qualities of a good screening test • Relationship between screening and prevalence of disease • Effects of changing sensitivity and specificity on usefulness of screening • Accuracy of a screening test • Favorable characteristics of a disease that make screening useful and relevant for the disease • Different misinterpretations/ errors in the screening programs • Comprehend ethical concerns in carrying out screening programs	7
8	**Primary Health Care, Leadership, SDGs International health**	• Comprehend the changing concept of health Categorize health problems based on criteria of susceptibility to control	Assess the adequacy of level of health care at a given facility	i) Development of Public Health in Pakistan. ii) "Health for All", background, concepts and progress	13

	(Partners in Health),	☐ Explain the concept of 'Health for All,' Principles of Primary Healthcare and relate its components/elements ☐ Describe the Sustainable Development Goals (SDGs) and relate to national programs and developmental outcomes ☐ Describe the concept of leadership and identify the role of leadership in PHC ☐ Differentiate between comprehensive and selective PHC ☐ Describe current comprehensive and selective primary healthcare programs and apply principles of leadership to identify gaps and recommend reforms ☐ Identify and describe gaps in implementation of PHC		iii) "Primary Health Care": Concepts and progress. iv) Leadership in health vi) Sustainable Development Goals (SDGs) 2030) vii)Rural and Urban Health	
9	**HMIS**	• Identify existing sources of statistical data in Pakistan, Census and its types • Comprehend different stages of planning such as: situational analysis, establishment of objectives and goals, assessment of	• Collect relevant data • Learn to manage data as part of health information system(HMIS) • Evaluate adequacy of Health System (THQ) using checklist	• Characteristics elements, components, and uses of HMIS • Reason for failure of HMIS in Pakistan • Suggestions to improve HMIS in Pakistan	2

| | | resources, fixing priorities, outlining, programming and implementation, monitoring and evaluation
• Interpret questionnaire for service assessment/ health benefits
• Comprehend the rationale of devolution of power and the problems of healthcare system in Pakistan
• Identify current gaps post 18th Amendment and role of tertiary-care facilities in delivering healthcare at all levels | ☐ Communicate effectively the themes of various international days to individuals in hospitals and communities
☐ Prepare and disseminate health information related to specific recognized dates of public health importance
☐ Plan a seminar/symposium, invite interdisciplinary guest-speakers for specific days of public health importance | | |
| **End Block Assessment** | **End Block Assessment to be taken by concerned institute itself Assessment tools: MCQs & SAQs/SEQs/OSPE** | | | **100** |

Schedule of Field Visits

Visits in Block I
Visit to Basic Health Unit (BHU)
Visit to Rehabilitation Center

COMMUNITYMEDICINE -BLOCK II
(Infections and Behavioral Modification)

CODE: Y4B2

Duration: 10 weeks

At the end of this block, student will be able to:

S No	Theme	Learning Outcomes		Course Content	%
		Knowledge	**Skills**	**Attitude**	
1	**Emerging & re-emerging infections/Hospital acquired infections/** **Hospital waste management**	• Differentiate between emerging and re-emerging disease • Identify the causes and control of this emergence • Acquaintance with nosocomial infections, factors causing it and control measures • Comprehend the role of Hospital waste management in infectious disease control and select appropriate method.	Communicate effectively regarding preventive measures 		10
2	**Personal hygiene,** **Unsafe injections**	• Comprehend the concept of personal hygiene. • Define unsafe injections practices and suggest relevant control measures	• Educate community regarding unsafe injections practices and related hazards		**5**
3	**Travel medicine**	• Interpret the common health problems of travelers • Advice the travelers to prevent the travel related problems			1.5

4	**General Immunology**	• Define and explain immunology & its components • Describe pre-requisites of vaccination including cold chain, hazards, contra-indications &precautions • Justify the use of different types of vaccines in different scenarios • Define EPI and explain its component vaccines • Plan a vaccination schedule according to given scenario applying current protocols/evidence- based	• Follow the protocol for cold chain maintenance for different vaccines • Keep records for vaccination protocol • Administer polio vaccine • Check BCG scar • Advise mothers for vaccination in different situations	i) Immunizing agents iii) EPI schedule iv) Herd immunity v) Cold chain vi) Adverse effects following immunization and its investigation	5
5	**Communicable diseases including Parasitology& Entomology**	• Comprehend modes of disease transmission, interaction of agent host and environment in the pre & pathogenesis phases • Relate the natural history of disease in regard to incubation period, lab diagnosis and preventive measures • Suggest strategies for disease control and prevention for every specific disease and in different situations • COVID-19 present scenario preventive and control measures.	• Motivate people at risk for adopting primary preventive measures • Advise about preventive measures to control spread of infections • Practice personal protective measures when at risk • Prepare, administer and transfer the skills for homemade/prepared ORS according to protocol • Evaluate degree of dehydration on the	i) (Droplet, Gastrointestinal, Zoonotic, Arthropod borne, Zoonotic, Contact infections) ii) Reproductive tract infections, guideline for management of STIs. iii) Parasitology iv) Entomology 	45

			basis of history and clinical examination using algorithm/standards		
		• Compare and contrast the clinical presentations of specific diseases • Relate occupations with various diseases • Manage cases and determine need to refer • Classify arthropods of medical importance and relate their role in disease transmission • Recommend control measures for arthropods • Relate environment with specific vector breeding • Define and differentiate between terms used in medical Parasitology • Explain mode of transmission and recommend prevention and control measures for parasites of medical importance			
6	**Socialand Behavioral Sciences**	• Relate sociology, social sciences, epidemiology and clinical sciences • Relate the social evils of the society such as prostitution, delinquency, religious differences and food adulteration with individual and public health	• Conduct interview in any setting, using the correct technique. • Practice ethical communication methods	1) Definition & concepts in Sociology ii) Scope of Psychology (31 behavior, emotions, attitudes, learning, habits, personality, intelligence) iii) Social psychology (family, community, hospital sociology, social organization)	6

		• Relate the social structure of a hospital with doctor-patient &doctor-nurse relationship • Recommend solutions based on the application of bio-psycho-social model and theories of social behavior to prevent/decrease social deviances and evils		iv) Social problems(prostitution, delinquency,dowrysystem,drug addiction) v) Communityservices vi) Economics vii) Juveniledelinquency.	
7	**Mental health**	• Define and categorize mental health • Recognize characteristics of a mentally healthy person and warning signals of poor mental health • Identify common mental health problems (as pertains to symptomatic psycho-social aspects) of public health importance in Pakistan and relate their risk factors/causes • Recommend preventive measures against mental health problems according to given scenario • Enlist WHO criteria and recommendations to improve mental health in countries	• Communicate effectively and ethically with individuals regarding mental health issues • Identify clinically the warning signs and symptoms of mental health ; refer at appropriate time to relevant health professional(s)	i. Concept of mental health ii. Characteristics of mentally healthy persons. iii. Warning signals of poor mental health. iv. Common mental health problems, their causes, prevention and control. 	1.5

| 8 | Drug Addiction, Smoking | • Define and comprehend magnitude of drug abuse in Pakistan
• Relate factors and populations associated with high risk for drug abuse
• Differentiate the symptoms of different drug-related addictions
• Describe first-aid measures for different drug-related emergency health situations in a given scenario
• Apply three levels of prevention to decrease drug abuse in the country
• Comprehend magnitude of tobacco smoking globally as well as in Pakistan
• Describe hazards associated with tobacco smoking
• Recommend measures to control tobacco smoking in the country at all levels
• Formulate behavior modification plan for patient(s) to quit smoking in hospital settings | • Communicate effectively with individuals having addictions
• Educate and motivate individuals at-risk how to avoid and modify risk behaviors and seek professional help
• Educate parents on the sign and symptoms of drug abuse/addiction and when to seek professional help
• Educate and motivate individuals at risk to avoid and modify risk behaviors and seek professional help to quit smoking
• Educate parents on signs and symptoms of smoking addiction and when to seek professional help | i) Concept regarding attitudes, health and illness behavior.
ii) Drug abuse, addiction, dependence and their signs/symptoms, effects of toxicity
iii) Smoking: causes, risk factors, health impact
iv) Control of drug use and smoking according to three levels of prevention

 | 6 |

9	Health Education	• Define health education and describe its phases • Choose suitable method of health education for certain audiences • Recognize scope, stages approaches, principles and functions of health education • Identify and overcome barriers of health education and outline an ideal communication process for a given situation • Compose a health education message in given situation • Prepare a plan for health education intervention programs for different types of audience in a given scenario	• Educate various groups effectively • Use Role play as an educational and interventional tool • Advise paramedics and other auxiliary healthcare staff about infection control • To participate in health awareness campaigns pertaining to nationally and internationally recognized days for global public health and population issues	i) Concept, aims and objectives of health education ii) Approaches used in public health. iii) Contents, principles and stages of health education. iv) Communication methods, barriers, skills and channel of communication in health education. v) Planning, organizing and evaluating a health education programs. 	20
	End Block Assessment	**End Block Assessment to be taken by concerned institute itself Assessment tools: MCQs & SAQs/SEQs/OSPE**			**100**

Schedule of Field Visits

Visits in Block II
Visit to a Factory
Visit to Waste Management center

COMMUNITY MEDICINE - BLOCK III
Environment and Health Planning
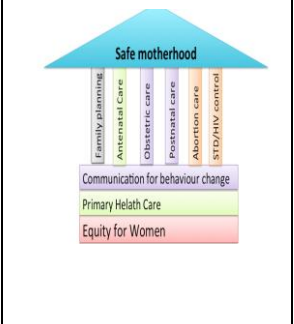
CODE: Y4B3

Duration: 10 weeks

At the end of this block, student will be able to:

S No	Theme	Learning Outcomes		Course Content	%
		Knowledge	**Skills**	**Attitude**	
1	**Demography, Family Planning**	• Relate fertility and population growth to epidemiological and demographic principles • Interpret pyramids of different countries, correlate demographic structure with population change and predict demographic trends • Relate population forces to the delivery of different services • Select Family planning methods according to the situations • Extrapolate the need for population control • Interpret/distinguish Demographic, fertility and epidemiological transition • Explain Demographic trap • Calculate demographic equation and indicators	☐ Motivate women & men (inclusive approach) regarding family planning approach and methods ☐ Communicate effectively ☐ Counsel patients on various contraceptive tools and methods 	ii) Demographic principles and demographic processes. ii) Basic demographic equation, arithmetic and geometric progression methods iii) Population dynamics (mortality, fertility, migrations) iv) Sex ratio, dependency ratio. v) Determinants of fertility, fertility related statistics, fertility trends. vi) Population pyramid and its interpretation. vii) Demographic transition, demographic trap and its public health importance. viii) Demographic and social implications of high population growth. ii) Census and its types ix) Social mobilization. x) Urbanization.	10

		• Outline strategies in health & social sectors applying multi-disciplinary approach and demographic principles		xi) Family planning	
2	MCH (**Reproductive Health, Preventive Pediatrics, Geriatrics**)	• Define and comprehend the rationale of Reproductive health. • Infer the logic behind application of different preventive measures in various phases of life to improve the Maternal Health • Appreciate the relationship between the Maternal Health status and the outcome of pregnancy • Determine the factors that contribute to increase MMR • Develop interventions to control MMR • Define infant mortality • Determine the factors which predispose to high infant mortality • Formulate interventions to prevent infant mortality in different situations • Recognize and compute different indicators which can be used for maternal and child healthcare and services • Describe the advantages and disadvantages of different types of feeding practices	• Create awareness among women regarding antenatal visits and postnatal follow-up • Perform antenatal checkups of women. • Educate the mothers about technique of breastfeeding and to advice to Tuberculous mother about lactation • Educate mothers about the steps of weaning • Educate mothers regarding EPI • Prepare home-made ORS • Advise pregnant women on Nutritional and immunization needs • Counsel women who give bottle feeding to their children • Weigh the baby and measure the height of children • Assess degree of dehydration • Motivate women to vaccinate their babies on national immunization days	i) Safe motherhood and its pillars, antenatal, intra-natal care, post-natal care, family planning and emergency obstetric care. ii) MCH problems, delivering MCH services, indicators of MCH care iii) Maternal mortality, causes and prevention. iv) Infant care, neonatal examination of infants at risk, growth and development (growth chart),feeding of infant (breast and artificial). v) Common causes of morbidity and mortality, their prevention and control. vi) Child care and under five clinics, Health promotion strategies. vii) Common ailments, home accidents, child mortality and prevention. viii) Strategic approaches of integrated management of childhood illness (IMCI) ix) Adolescent health. x) Reproductive tract cancers of men & women. Adolescent health.	18

Diagram labels (column 2): Safe motherhood — Family planning, Antenatal Care, Obstetric care, Postnatal care, Abortion care, STD/HIV control — Communication for behaviour change — Primary Helath Care — Equity for Women

		• Determine the conditions of concern prevailing in the mother during breastfeeding • Define geriatrics, describe problems and diseases of the old age • Identify risk behavior in old age people • Suggest preventive measures at different levels of prevention and indifferent scenarios • Formulate and suggest preventive measures for cancers of reproductive tract in individuals and populations at-risk	• Plot and interpret growth chart • Educate Traditional Birth Attendant for clean and safe delivery at First Level Care Facility Educate the individuals how to cope with different problems and diseases of old age		
3	**School and Dental Health Service**	• Define School health Services and recall objectives of school health • Identify the duties of school medical officer, functions of SHS and role of teacher • Identify and interrelate the common health problems of schoolchildren • Identify the deficient health services and physical environment in schools using standardized checklist Interpret the components of school health	• Provide First aid • Diagnose, treat & refer common ailments in school environment • Motivate students for maintaining healthful lifestyle • Inspect school and advise relevant modification(s) • Educate school children for healthful behavior	i) Common health problems of school children including physically challenged ii) Role of teachers and role of doctors in maintenance of health. iii) Procedures for determining health status of school age children. iv) Handicapped children. v)Healthful school Environment and hostels.	3
5	**Current Health Programs in Pakistan:**	• Interpret the concepts of international days celebrations		i) Expanded Programs on immunization (EPI).	3

			ii) Prime Minister Programs for Prevention and Control of Hepatitis iii) Rollback- Malaria Programs iv) National Program for Family Planning and Primary Health Care. "The lady workers Program" v) Enhanced HIV/AIDS Control Program. vi) National Tuberculosis Control Program vii) Improvement of Nutrition through Primary Health Care and nutritional education and public awareness. viii) National Program for prevention and control of Avian and Pandemic influenza. ix) Maternal Neonatal and Child Health care Program (MNCH). x) National Program for Prevention and Control of Blindness	
6	**Partners in Health**	list various health agencies and describe composition and relate functions of different International Health agencies WHO, USAID, UNICEF, UNFPA to national and international care	i) The public and private sector ii) Non-governmental Organizations and International agencies. iii) Community Mobilization. iv) Concept of leadership.	2

7	**Health System in Pakistan, Health planning and management**	• Define healthcare and health care system • Distinguish various levels of healthcare • Identify deficiencies in different health- care facilities • Differentiate different sectors of health system and functioning • Describe and relate the referral mechanism to various levels of healthcare facility • Describe medical team • Identify the causes of failure of adequate health-care delivery in Pakistan and give recommendations for improvement based on scenario		i. Various levels of healthcare ii. National health vision iii. The District Health System, in the context of devolution.	3
8	**Environmental Health**	• Relate the bio-psycho-social model with different types of environment • Relate the current environmental indicators to legislative guidelines and apply them for sustainable protection of environment in national, regional and global perspectives. • Outline modifications	Educate individuals/communities on preventive environmental measures to maintain good health • Calculate the amount of chlorine required to disinfect water • Calculate the amount of disinfectants for different reservoirs • Collect water samples from different sources • Practice through role play on how to prevent or reduce undue harmful	**i) Air:** composition of air and causes of air pollution, methods for air purification, diseases caused by impurities in air and their prevention. **ii) Water:** sources of water, daily water requirement. Water pollution its causes and prevention, purification of water. **iii) Water quality standards**, diseases due to polluted water. **iv) Waste disposal:** contents, hazards and	15

		for specific environments to prevent and control diseases • Relate role of environment to hospital infections • Relate physical hazards to various occupations or climatic conditions • Identify personal protective measures for individuals and groups facing specific environmental hazards Identify and employ protective measures against the high-risk physical environment in the healthcare profession	environmental exposure to themselves, patients and their attendants in given situation 	Safety measures for solid and liquid; domestic, industrial and hospital waste. **v) Climate:** climate and weather, global Environmental concerns. **vi) Green-house effect**, depletion of ozone layer, acid rains. **vii) Effects of extremes of temperature**, humidity and atmospheric pressure on human health and their prevention. **viii)Radiation:** sources, types, effects, hazards and prevention. **ix)Healthful housing.** Urban and rural slums. **x) Noise:** definition, acceptance level, causes of noise pollution, hazards to human health and their control.	
9	**Occupational Health** 	• Relate occupational health, occupational hygiene, ergonomics, occupational diseases &Injuries. • Relate occupational disease agents and factors (physical, chemical, biological, psychological, mental) with health • Identify factors or patterns in a patient's history that may indicate a work related contribution to ill health	• Motivate a worker to take preventive measures at workplace e.g. regular use of personal protective equipment • Counsel health workers regarding safe practices and hygiene • Observe and assess the standards being implemented for safety • Diagnose clinically common work-related symptoms and	i) Occupational Hazards ii) Ergonomics iii) Pneumoconiosis iv) Occupational poisoning e.g. lead, arsenic, dust etc. v) Sickness absenteeism vi) Hazards of industrialization vii) Preventive and control measures viii) Legislative measures	10

		• Identify occupational hazards and suggest relevant control • Interpret Standardized Mortality Rate (SMR) with respect to particular trade	disorders; refer to relevant specialist	ix)Socialsecurityservicesin Pakistan	
10	**Nutrition** 	• Define the terminologies used in relation to food & nutrition • Classify and comprehend the importance of different foods, minerals and vitamins • Describe a balanced diet chart • Relate the states which alter energy requirement of individuals • Identify the major nutritional problems of public health importance • Differentiate types of PEM and recommend preventive and corrective measures • Plan and assess the nutritional status of a community • Relate the epidemiological aspects of nutrition • Classify water-borne, meat-borne and milk- borne diseases • Identify & outline preventive measures for waterborne, milk	• Diagnose clinically the nutritional problems including iodine deficiency, anemia, fluoride deficiency, Marasmus & Kwashiorkor with their prevention on the basis of signs and symptoms according to relevant algorithm/standard • Assess anemia clinically • Assess nutritional status in a community by anthropometry • Inspect slaughterhouse, and observe characteristics of fresh meat, fish, eggs etc. • Advise on restructuring or modifying the energy requirements (through diet) in relation to physiological states • Communicate effectively, especially regarding behavior and life-style modification • Motivate and inform the individuals and community for prevention of obesity • Revise/restructure and communicate diet plan, nutritional and lifestyle modification	i) Concepts(nutrition, nutrient, food, diet). ii) Food groups, their functions and deficiency diseases. iii) Role of fiber in diet. iv) Balance diet, dietary goals (prudent diet). v) Malnutrition at all stages of life, its types, causes and prevention. vi) Common nutritional problems of public health importance, their prevention and control. vii) Dietary requirements of normal human being at different stages of life. viii) Food hygiene, pasteurization, fortification, additives, adulteration and preservation. ix) Food borne diseases/ Food poisoning. x) Assessment of nutritional status of a community.	17

		borne, meat-borne diseases. • Calculate the energy requirement and basal metabolic rate in a given scenario • Recognize/explain nutritional hazards to which populations are exposed in emergency situations • Classify biological and social epidemiology of obesity • Correlate Immediate and delayed adverse effects of nutritional deficits with health status • Calculate and interpret obesity among adults on the basis of BMI • Plan individual and community-based methods of prevention and control of obesity.			
11	**Non-communicable diseases**	• Classify biological and social epidemiology of different chronic non-communicable diseases and determine their risk factors • Formulate and suggest preventive measures for these diseases in individuals and populations at-risk • Relate different risk factors to particular patients and general population • Estimate the extent of damage to individuals and community in	• Revise/restructure and communicate diet plan, nutritional and lifestyle modification 	i) Hypertension / Stroke ii) Coronary heart disease iii) Cancers iv) Diabetes mellitus v) Rheumatic fever and heart disease vi) Blindness vii) Genetically transmitted disease	12

		terms of morbidity and mortality burden			
12	**Snake bite**	☐ Differentiate between signs and symptoms of different snake-bites ☐ Recommend preventive measures against snake bites in particular situations.	• Educate regarding snake-bite prevention	i) Snakebite Epidemiology, Personal protection and management ii) Types of snakes according to toxin production: hemolytic toxins, Musculo-toxins and neurotoxin	1
13	**Injuries and accidents**	• Categorize different types of accidents • Define and explain epidemiology and control of different types of accidents • Relate risk factors with types of accident	• Formulate a health education program for local school/ community/ hospital/ workplace on prevention of accidents and promotion of safety measures • Impart health education and knowledge for prevention of accidents and treatment of victims	i) Types, etiology, specific environments and at-risk populations ii) Preventive and safety measures	2
14	**Disaster management**	• Define, classify and differentiate between different disasters • List duties of a disaster & emergency- management health team and relate the role of medical officer in disaster setting • Advise on Rehabilitation and reconstruction • Manage disaster utilizing knowledge of disaster management (POSDCORB), disaster		i) Definition, classification of disasters: Natural disasters and Manmade Disasters ii) Magnitude and effects of disasters and public health consequences iii) Disaster preparedness and management	4

		impact and response, mitigation • Relate the application of National Disaster Management and Preparedness guidelines according to given scenario			
	End Block Assessment	**End Block Assessment to be taken by concerned institute itself Assessment tools:** **MCQs & SAQs/SEQs/OSPE**			**100**

Schedule of Field Visits

Visits in Block III
Visit to NGO
Visit to Family Planning Center
Visit to School

Learning Resources:

1. Park'sTextBookofPreventiveandSocialMedicine24[th]Edition,PublicHealth&CommunityMedicinebyMuhammad Iliyas8[th]Edition
2. Internet
3. Lecture Handouts
4. Material from Tutorial
5. CBL

Curricular Map

By the end of 4th year MBBS, students will be aware of the concepts of health and disease, health determinants and prevention & Control of Communicable and Non-communication diseases through understanding of health promotion, Biostatistics, Epidemiology & Research for preparation of Medical graduates.

Learning outcome

Staff

Faculty: Professor, Assoc Prof, Assistant Professor/Demos & Support staff

Student assessment

Cognitive: MCQs, SEQs,VIVA
Psychomotor: Household Survey & Visits
Affective: Direct observation, OSPE

Learning locations

CMH Lahore Medical College and Institute of Dentistry

Community Medicine

Education strategies

Lectures
Tutorial
SGDs
CBLs & Skill Lab
Community visit
Self-study
Assignments

Resources

Lecture hall
Museum
Tutorial Room
Library
CMS

Timeline

Duration: 36 weeks
Lecture: 4 per week
Tutorial 1 hr & 20 minutes x 4 per week

Content

Study guidelines as per NUMS, PMC & HEC

Texts Books for the 4th year MBBS

➢ Shah-Ilyas-Ansari-Irfan's Public Health and Community Medicine **8th Edition**

➢ Park's Textbook of Preventive and Social Medicine**24th Edition**

1

Reference Books for the 4th year MBBS

➢ Public Health & Preventive Medicine by Maxcy Rosenau-Last**15th Edition 2008**

➢ Basic Epidemiology by R. Bonita, R. Beaglehole & T. Kjellstrom**2nd Edition 2003**

➢ Essentials of Medical Statistics by Betty R. Kirkwood & Jonathan Sterne **2nd Edition 2003**

Theory

Marks of theory paper	= 120
Time Allowed	= 03 hrs
Internal Assessment (20%)	= 30

Total Marks (MCQs:40%+SEQs:40%+IA:20%) = 150

Pass Marks	= 75

Paper-1: (*Marks of MCQ component shall be rationalized to 40% weightage out of150)

80 x MCQs (1 mark each)	(80 Marks)	Time =80 min

Paper-2:

9x SEQs (7x6 Marks & 2x9 Marks)	(60 Marks)	Time = 100 min

*If a candidate obtains 70 marks is MCQs it will be rationalized as: (70/80*60=52.50)

Blocks	TOPIC	Number of MCQs (80)		Number of SEQs09 (7x6 Marks each, 2 x 9 Marks each)
		Recall (25%): 25	Application (75%):55	
Epidemiological perspective of Health and Disease	Medical Ethics	-	01	-
	General epidemiology	02	05	1
	• Biostatistics	01	05	1
	• HMIS	-	01	
	Concept of Health and Disease	-	01	-
	Research methodology	01	01	-
	Infectious disease epidemiology (General)	02	03	-
	Screening for disease	-	01	-
	• Primary Health Care	01	01	-
	• SDGs	01	01	
Communicable Diseases Prevention and Behavioral Modification	• Emerging & re-emerging infections	-	01	-
	• Hospital acquired infections	01	01	
	• Hospital waste management	01		
	• General Immunology	01		
	• Personal hygiene	-	01	-
	• Unsafe injections	-	-	
	Travel medicine	01	-	-
	Communicable diseases Prevention and Control (entomology, parasitology)	02	05	1
	Medical Sociology and Prevention of Mental and psychological illnesses	01	01	-
	Health Education	01	02	1
Non-communicable disease and population dynamics	Demography	-	02	1
	MCH (Reproductive Health, Family Planning Preventive Pediatrics, Geriatrics)	02	05	1
	Nutrition and health	-	03	-
	Non-communicable diseases	-	04	1

	Environmental Health	01	02	1
	School and Dental Health Service	01	01	-
Environment and Health Planning	Current Health Programs in Pakistan:	-	01	-
	• Partners in Health • International health	02	-	-
	Health System in Pakistan, Health planning management and leadership	01	02	1
	Occupational Health	-	02	-
	Snake bite	-	01	-
	Injuries and accidents	01	-	-
	Disasters management	01	01	-
TOTAL		**80 (80 Marks)**		**09 (60 Marks)**

Table of specifications for Pre-Annual/ Annual Professional Exam: Practical

Practical   = 120

Internal Assessment   = 30

Total marks   = 150

Pass Marks   = 75

Gen Viva Voce	Practical		Total
	OSPE	**Project/Research/Collective**	
60	40	20	**120**

BREAKDOWN OF VIVA

1. Total of four examiners = 15 marks with each examiner = 15x4 = 60
2. **OSPE:** Total 10 stations (4 marks each, 4 minutes)
   a. **Unobserved stations** –   8 x4 = 32 marks
   b. **Observed and interactive stations** - 2 x4 = 08 marks

4

INTERNAL ASSESSMENT - THEORY	
INTERNAL ASSESSMENT WEIGHTING: 20%	
Exam s	**Weightings**

Attendance in Lectures:
     a.   >90% = 30%
     b.   89-80% = 20%
     c.   79-70% = 10%
	10%

End of Block/ clinical rotation (theory) Examination	45%
Continuous assessment (average score of all tests attempted after every learning session during the academic year)	20%
Pre-Annual Exam	25%
Total	**100%**
INTERNAL ASSESSMENT STRUCTURE - PRACTICAL	
INTERNAL ASSESSMENT WEIGHTING: 20%	
Exam	**Weightings**

Attendance in Practicals:
     a.   >90% = 30%
     b.   89-80% = 20%
     c.   79-70% = 10%
	10%

*End of Block/ clinical rotation (OSCE) Examination	45%
*Continuous assessment of practical/ clinical skills and attitude	20%
Pre-Annual Exam	25%
Total	**100%**

Sample MCQ

1. **A person working in fields for forking hay was brought to the hospital with complaints of fever, malaise, cough and shortness of breath. The x-ray confirmed few fibrotic changes. What is likely diagnosis?**   **01**
a. Farmer's lung
b. Siderosis
c. Bagassosis
d. Byssinosis
e. Tobacossis
Answer (a)
2. **In pre-pathogenesis of disease, the most important mode of intervention is:**   **01**
a. Health education
b. Specific protection
c. Early diagnosis and treatment

d. Disability limitation
e. Rehabilitation
Answer (a)
3. The best epidemiological study to provide evidence of association is: 01
a. Cross sectional survey
b. Case series
c. Case control studies
d. Cohort studies
e. Randomized controlled trials
Answer (e)
4. Sensitivity of a screening test refers to: 01
a. True positive
b. True negative
c. False negative
d. False positive
e. Positive predictive value
Answer (a)
5. Rice water stools are seen in: 01
a. Salmonella food poisoning
b. Cholera
c. Bacillary dysentery
d. Amoebic dysentery
e. Botulism
Answer (b)

Sample SEQ

1. Under five mortality rate is very high in Pakistan. to address this issue, government of Pakistan is immunizing against the diseases starting from birth. Write in tabular form EPI schedule of Pakistan with its dosage, and route of administration. **07**

2. A forty year old pottery industry worker presented with complaints of fever and weight loss; he also complained about cough and blood stained sputum. X-ray confirmed fibrosis of lungs and Hilary lymphadenopathy:
a. Which factor in this particular trade has led to the development of this condition? **02**
b. Which measures do you recommend for prevention of this condition? **05**
3. The 20th century has been declared as "century of noise". Noise is resulting in many ill effects on health. Suggest measures to control this menace. **07**
4. Recently a violent storm struck Japan resulting in mass destruction of all types.
a. What type of disaster was it? **01**
b. What is meant by "Triage"? **06**
5. In a remote village, a Basic Health Unit (BHU) is present but it is not functional on account of non-availability of staff, so the village people go to a tertiary Care Hospital if the need arises.
a. Does this situation indicate integration of health system? **01**
b. List the services that should be provided at a BHU. **06**

STATIC STATION 1

Marks: 05   Time Allowed: 04 minutes

- **A man presented with fever, malaise and hemorrhagic rash on the skin; his blood pressure was low and pulse weak:**
  - A.   **Name the likely disease and given vector that transmits it.**
  - B.   **List personal protective measures against the bite of vector.**

STATION 2

- **Carefully examine the given diagram and answer the following questions:**
    - A.   **Name the levels of prevention at 1, 2 and 3.**
    - B.   **Given the interventions at the point 5 of the diagram in relation to AIDS.**

Stage of Disease

			Disability or Recovery
1	2	3	

Tissue changes   Prepathogenesis   ◄—— Pathogenesis ——►   Resolution or sequelae

Level of prevention

- Detection
- Early diagnosis
- Prompt treatment

5

Treatment and rehabilitation

Limitation of disability

Modes of intervention
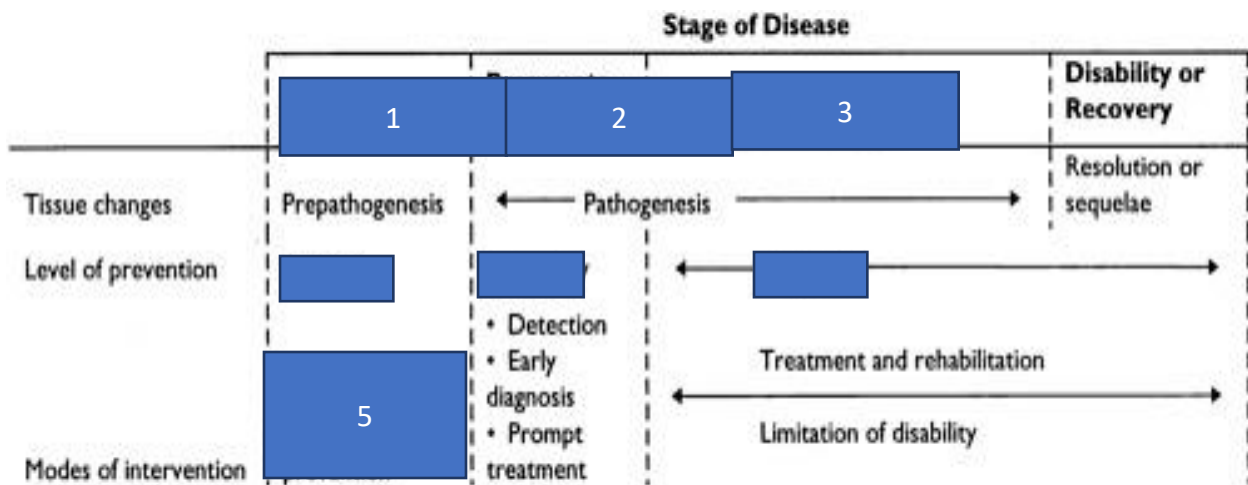
STATION 3

- **A woman brings her one month old baby for the first visit of postnatal period:**
  - A. **How will you immune the baby with the vaccine**
  - B. **What is herd immunity and which is the maximum level of herd immunity required to control the spread of polio in a community?**

STATION 4

- The BP apparatus was used to measure the BP of a 52 year old banker by one health provider. On another day, an aneroid BP apparatus was used instead by another health provider. The readings of the two instruments were different though both readings considered this man to be hypertensive.

    A. Name the biases involved in the measurement of BP in the above case.
    B. Name four modifiable risk factors of hypertension.

Interactive Station 5

- A well is present in a small village and the well water is being used for drinking and other household purposes:
  - **Educate the people regarding sanitary measures.**

LIST OF CBLs
FIRST MODULE

1. **Measures of mortality**

2. **Measures of Morbidity – Incidence and Prevalence**

3. **Study Design-I**

4. **Study Design-II**

5. **Measures of Central Tendency & Dispersion**

6. **Types & Presentation of Data**

7. **Investigation of Epidemic**

8. **Screening**

LIST OF CBLs
SECOND MODULE

1. **Immunization Schedule –EPI**

2. **Adverse Effects following Immunization**

3. **Respiratory Infections**

4. **Intestinal Infections**

5. **Zoonoses**

6. **Intestinal (worm) Infestation**

7. **Entomology-I**

8. **Entomology-II**

9. **Substance Abuse**

10. **Health Education and Communication Skills**

LIST OF CBLs
3RD MODULE

1. **Demography –I**

2. **Demography-II**

3. **Family Planning**

4. **Non-Communicable –I**

5. **Non-Communicable - II**

6. **Reproductive Health**

7. **Nutrition –I**

8. **Nutrition-II**

9. **Occupational Health**

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COMMUNITY MEDICINE
Model CBLs
CBL-1 Measures of Mortality

</div>

Introduction
The fundamental epidemiological measure is the frequency with which an event of interest (e.g. disease, injury or death) occurs in the population to be studied. The frequency of the disease, injury or death can be measured in different way, and it can be related to different denominator, depending upon the purpose of the research and the availability of data.

Learning Objectives By the end of the session, the students will be able to
1. Differentiate between Rate, Ratio and Proportion.
2. How to calculate rate, ratio and proportion.
3. How to calculate various mortality rates

Pre reading
- Preventive and Social Medicine by JE Park 24th Edition, Chapter 3
- Public Health and Community Medicine by Ilyas Ansari, 8th edition, Chapter 4

Note: Questions will be asked from whole content covered before CBL

Case Scenario No 1
The following table shows some results of 6th census of Pakistan 2017.

Administrative units	Households		Population -2017			
		Male	Female	Transgender	Total	
Pakistan	32,205,111	106,499,322	101,314,780	10,418	207,774,520	
Rural	20,012,797	67,300,171	64,886,593	2,767	132,189,531	
Urban	12,192,314	39,149,151	36,428,187	7,651	75,584,989	

Tasks:
1. Calculate sex ratio (male: female).
2. Calculate urban population percent in Pakistan.
3. If no of deaths in the year 2017 were app 1.5 million due to all causes, calculate crude death rate.

Case Scenario No 2
A hypothetical city X contains 100,000 people. Following table shows Tuberculosis(TB) cases and mortality due to TB .

Age group in Years	TB cases	Deaths due to TB	City X Population
<14	946	532	20,000
15-24	1499	807	25,000
25-44	5286	1397	35,000
45-64	4191	2871	13,000
65+	3147	2089	7,000
Total	15,069	7696	100,000

Tasks
1. Calculate the Age Specific mortality rate in people between 15 – 24 years of age for TB in City X per 1000 population.

2. Find out the Case Fatality Rate for TB in youngest and elderly groups. Comment on result.
3. Calculate mortality rate in young till age 24 due to TB.

Case Scenario No 3

The world population has reached **7.6 billion** and worldwide non-communicable diseases are on the rise. Globally of 56.4 million deaths, there were 15 million deaths due to heart diseases, 1.7 million deaths due to cancers and diabetes killed 1.6 million people in year 2015.

Tasks

1. Calculate the Mortality Rate due to Cancers globally.
2. Calculate Proportional Mortality rate for heart diseases.

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CBL- COMMUNITY MEDICINE
Adverse Events Following Immunization (AEFI)
CBL-2

</div>

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease. Immunization is a proven tool for controlling and eliminating life-threatening infectious diseases and is estimated to avert between 2 and 3 million deaths each year. It is one of the most cost-effective health investments, with proven strategies that make it accessible to even the most hard-to-reach and vulnerable populations. However:

- There is no such thing as a **"perfect"** vaccine which protects everyone who receives it and is entirely safe for everyone.
- Effective vaccines (i.e. vaccines inducing protective immunity) may produce some undesirable side effects which are mostly mild and clear up quickly.
- The majority of events thought to be related to the administration of a vaccine are actually not due to the vaccine itself - many are simply coincidental events, others (particularly in developing countries) are due to human, or programme error.
- It is not possible to predict every individual who might have a mild or serious reaction to a vaccine, although there are a few contraindications to some vaccines. By following contraindications the risk of serious adverse effects can be minimized.

Learning Objectives By the end of the session, the students will be able to:

4. Define AEFI
5. Categorize cause specific AEFI'
6. Interpret steps and actions required in an investigation of AEFI
7. Cautious to avoid serious reactions by following guidelines of administration of vaccines.

Pre reading:

- Preventive and Social Medicine by K Park 24th Edition, Chapter 4
  - ➢ Pre- CBL questions will be asked from the topic.

Scenario

During recent Measles vaccination campaign in KPK, a number of children who were vaccinated were fainted and then became unwell. There were 8 deaths confirmed due to serious complications following vaccination. All cases were reported from the same facility and similar illness was not reported in in others who didn't get the vaccine. EPI Manager reported that all cases got vaccine from the same lot and all measles vaccines were WHO prequalified.

Tasks
  a. How would you define and categorize the adverse events following immunization (AEFI)?
  b. What is the most probable error in the above scenario?
  c. What are the steps in investigation of an AEFI?
  d. What are the general precautionary measures adopted to prevent untoward events?

CBL – 3 COMMUNITY MEDICINE
DEMOGRAPHY

Demography is defined as the study of human populations: their size, composition, and distribution, as well as the causes and consequences of changes in these characteristics. The graphical representation of such changes in a country at one point in time can be done by population pyramid.

Learning Objectives:
Students must be able to understand
  - Features of population pyramid
  - Information obtained from population pyramid
 - Census, types, activities, uses.

Reading material:
  - Preventive and Social Medicine by JE Park 24th Edition, Chapter 9
  - Public Health and Community Medicine by Ilyas Ansari, 8th edition, Chapter 9

Note: Questions will be asked from whole Chapter of demography

Scenario 1:
Population pyramid is graphical representation of the age and sex composition of a specific population and visualize the demographic structure of a population. The age and sex structure of the population determines the ultimate shape of a population pyramid. Pakistan's latest estimated population is 207,774,520 making Pakistan the world's sixth-most-populous country. Attached below is the population pyramid of Pakistan.

Pakistan - 2018
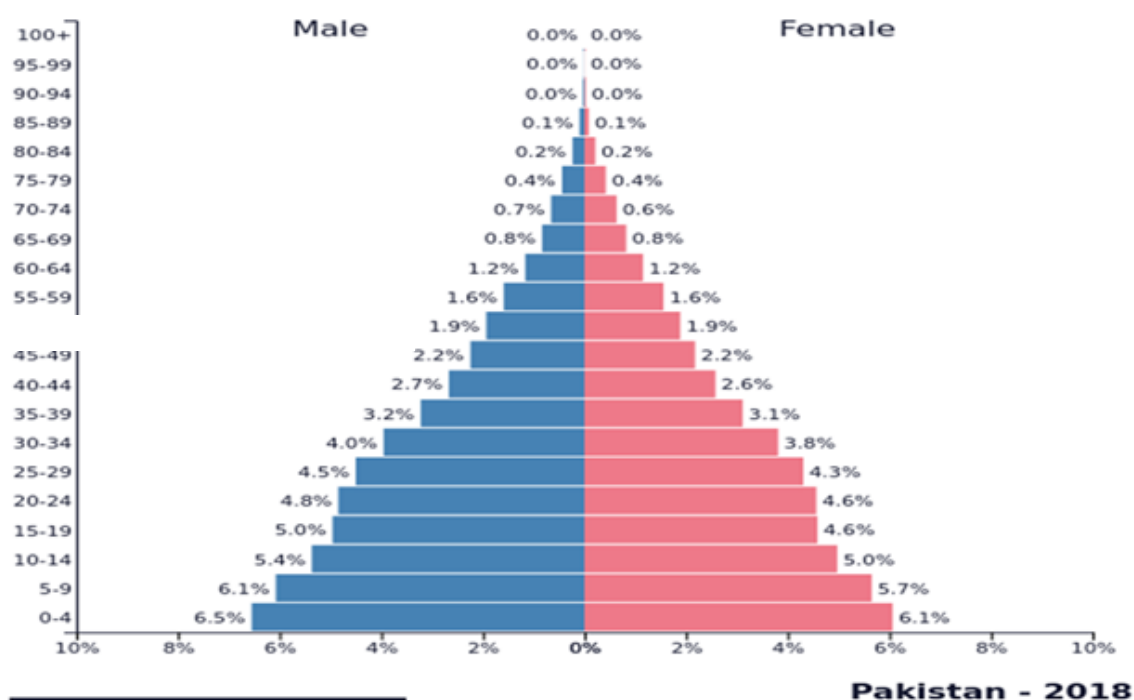
Tasks

1. Explain this population pyramid**.**
2. By looking at the pyramid what information you get about Pakistan's population?
3. Pakistan's pyramid corresponds to what stage of demographic transition? Justify your answer.

Scenario 2:

Census is a major source of Population Data. It is carried out every ten years. However the last census was conducted by the Pakistan Bureau of Statistics for the first time in 21st century, after 19 years in 2017, which was a detailed enumeration of the Pakistani population.

Tasks

1. What are different types of census?
2. What type of census is carried out in Pakistan?
3. What is the applicability of census?
4. What are different census activities?
5. What are different factors affecting Census activities?
6. What are other sources of population data?

Community Medicine (Lab/Museum)

Sr. No	Description	Available/Existing
1	Digital Technology	Available
2	Multimedia Projector/LED & One Computer +25 Chairs	Available
3	Computer for Research	Available
4	5 images/Illustrations or PowerPoint Slides	Available
5	Ice berg	Available
6	Pustule eruption in small pox and chicken pox	Available
7	Lifecycle of malaria parasite (P. vivax and Falciparum)	Available
8	Xerosis (Conjunctival) in vitamin A deficiency	Available
9	Lead line on gum	Available
10	Cutaneous Leishmaniasis, Ulcers on forearm and head	Available
11	Tick	Available
12	Flea	Available
13	Sand Fly	Available
14	House Fly	Available
15	Aedes Aegypti mosquito	Available
16	Anopheles mosquito	Available
17	Population Pyramid	Available
18	Coal Miners Lung	Available
19	Snow storm silicosis (lung)	Available
20	Ground Glass Anthracosis (lung)	Available
21	Bleeding Gums	Available
22	Rickets	Available
23	Poliomyelitis	Available
24	Measles	Available
25	Vaccine Vial Monitor	Available
26	Dental Fluorosis	Available
27	Spot Maps	Available
28	Bar Charts	Available
29	Histograms	Available
30	Frequency Polygon	Available
31	Normal Distribution Curve	Available
32	Marasmus/Kwashiorkor	Available
33	Goitre	Available
34	Functioning of Incinerator	Available
35	Food Pyramid	Available
36	Sustainable Development	Available
37	Models	Available
38	3 X Iceberg Phenomenon	Available
39	1 x Incinerator	Available

40	1 x Septic Tank	Available
41	1x Water Filtration Plant	Available
42	5 x mid arm circumference (MUAC)tapes (sets 100 each)	Available
43	Skin fold caliper	Available
44	Various Contraceptive Devices and oral pills	Available
45	50 x Growth Charts	Available
46	50 x Antenatal Charts	Available
47	3 x measuring tapes and 3 x weighing machines for BMI calculation	Available
48	10 x water purification tables	Available
49	1 x water testing kit for chlorine	Available
50	3 x EPI Vaccines	Available
51	Softwares fully functional and in use for research methods	Available
52	SPSS Latest version	Available
53	Microsoft Excel	Available
54	EPI Info	Available
55	WHO Sample size calculator	Available
56	Endnote x7	Available

CMH LAHORE MEDICAL COLLEGE
WEEKLY TRAINING PROGRAMME OF 4th YEAR MBBS 2021 - 2022

DAYS	DATE	0800 - 0850	0850 - 0940	0940 - 1000	1000 - 1050	1050 - 1140	1140 - 1150	1150 - 1250	1260 - 1330	1330 - 1350	1345 - 1500	1500 - 1515	1515 - 1715	1715 - 1815
MON	21 Jul 2021	ENT	PATHOLOGY	BREAK	COM MED	COM MED	BREAK	CLINICAL TRAINING SESSION I		BREAK	PRACTICAL PATHOLOGY (BATCH A)	BREAK	CLINICAL TRAINING SESSION II	SELF DIRECTED LEARNING
TUE	22 Jul 2021	MEDICINE	EYE	BREAK	PATHOLOGY	ENT	BREAK	CLINICAL TRAINING SESSION I		BREAK	MEDICINE (BATCH A) / PATHOLOGY (BATCH B) / COMMUNITY MEDICINE (BATCH A)	BREAK	CLINICAL TRAINING SESSION II	SELF DIRECTED LEARNING
WED	23 Jul 2021	SURGERY	GYNAE	BREAK	PATHOLOGY		BREAK	CLINICAL TRAINING SESSION I		BREAK	PRACTICAL PATHOLOGY (BATCH B) / COMMUNITY MEDICINE (BATCH B)	BREAK	CLINICAL TRAINING SESSION II	SELF DIRECTED LEARNING

DAYS	DATE	0800 - 0850	0850-0940	0940-1030	1030 - 1050	1050-1140	1140-1230	1230-1400	1400 - 1500	1500-1800	1715 1815
THU	24 Jul 2021	SURGERY	EYE		Break	PSYCHIATRY	PATHOLOGY	PAEDS/COM MED	COMMUNITY MEDICINE (BATCH A)	GYNAE / DSL COM MED	PATHOLOGY	DSL COMM. MED
FRI	25 Jul 2021	SURGERY	MEDICINE	PATHOLOGY	Break	PATHOLOGY		BREAK		SELF DIRECTED LEARNING	

Dated: 14-12-2021

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