



Student study guide

Health and illness in the community



Block HIC-208

2024-2025

Prepared by

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Basic Information about the Block

- **Title:** Health and illness in the community
- **Course code:** Block HIC-208
- **Program on which the course is given:** Bachelor of Medicine and Surgery (M.B. B.Ch.).
- **Elements (major or minor) of the program:** Undergraduate
- **Departments offering the course:** Public health and community medicine
- **Academic year/level:** 2nd year, 1st semester.
- **Date of specification approval:** 2024-2025
- **Credit points:** 7.5
- **Weeks:** 5 weeks
- **Lectures:** 40 hours
- **Practical:** 38 hours (20 hrs. practical notes and 18 hrs. field visits)
- . (20 hours for group discussions, 10 hrs. for seminars and 5 hours for formative assessment): 35 hrs
- **Student learning activities: 113 hours.**
- **Total:** 226 hours

Block Map

Block	Department	Points	Weeks	Code	Marks
Health and illness in the community	Public health and community medicine	7.5	5 weeks	HIC-208	113

NARS competencies covered by the block**NARS areas covered by the block**

The competency areas of the NARS- Medicine competency framework are

- 1- The graduate as a health care provider.
- 2- The graduate as a health promoter.
- 3- The graduate as a professional.
- 4- The graduate as a scholar and scientist.
- 5- The graduate as a member of the health team and a part of the health care system.
- 6- The graduate as a lifelong learner and researcher.

Sub competencies**Competency Area I: The graduate as a health care provider.**

- 1.1 Take and record a structured, patient centered history.
- 1.2 Adopt an empathic and holistic approach to the patients and their problems.
- 1.3 Assess the mental state of the patient.
- 1.4 Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.
- 1.5 Prioritize issues to be addressed in a patient encounter.
- 1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.
- 1.7 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.
- 1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.
- 1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
- 1.10 Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.

2 Competency Area II: The graduate as a health promoter

- 2.1 Identify the basic determinants of health and principles of health improvement.
- 2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.
- 2.3 Discuss the role of nutrition and physical activity in health.
- 2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

Competency Area III: The graduate as a professional

- 3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice,

demonstrating honesty, integrity, commitment, compassion, and respect.

3.2 Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.

3.3 Respect the different cultural beliefs and values in the community they serve.

3.4 Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.2 Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.

4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.

4.4 Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease

Block Aims

Overall Aim

This block aims to provide students with foundations of health and illness in the community; understanding of health and its determinants, comprehensive care through primary health care approach, the principles of epidemiology, management and communication. The course also emphasizes the primary health domains including: Occupational & environmental health, mother and child health, disease prevention & health promotion, and nutrition.

Intended Learning Outcomes of the Block:

By the end of the course, a student shall be able to:

- A1- Describe the concepts of health, define health and disease & describe the spectrum of health
- A2- Understand the basic determinants of health and disease & mention the three interacting ecological factors affecting the occurrence of disease
- A3- Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.
- A4- Explain theories of disease causation & Identify levels of prevention
- A5- Explain different methods for prevention and control in general and for some communicable and non-communicable diseases.
- A6- Explain different methods for some non-communicable diseases.
- A7- Describe what is epidemiology and its uses and the meaning of epidemic, endemic and pandemic
- A8- Identify the epidemiology of common communicable diseases
- A9- Describe Epidemiology of selected non-communicable diseases
- A10- Measure the burden of disease in a community.
- A11- Describe the principle of disease surveillance and its uses in the community settings.
- A12- Describe concepts of screening and evaluation of a screening test
- A13- Understand the concept of occupational health and health hazards
- A14- Describe preventive program for occupational health
- A15- Recognize the impact of environment on health
- A16- Identify the nature, health effect, sources environmental risks and preventive measures.
- A17- Recognize measures for infection control.
- A18- Identify rural health and health related problems and describe the rural health program.
- A19- Define nutrition and its commonly used term, understand the role of nutrition in health & identify nutrient sources, functions, requirements.
- A20- Recognize the nutritional determinants of disease & explaining malnutrition problems

- A21- List the methods of nutritional assessment of individuals and populations, their relevance, related strengths and weaknesses
- A22- Describe the care provided for special population groups
- A23- Identify health problems and health needs of adolescent age group and explain the components of their health program.
- A24- Describe the complementary role of maternal and child health within the context of reproductive health approach (RH), know maternal and child health problems, list the components of RH and its services and describe the MCH program.
- A25- Define fundamental terms of communication and health education
- A26- Know methods of health education, identification of behavior related health problems, identification of appropriate health messages, steps in planning and evaluation of health education program
- A27- Understand objectives and principles of communication and health education
- A28- Identify the communication process and barriers of communication
- A29- Identify management functions: planning, implementation and evaluation
- A30- Define PHC, List the elements of PHC& identify the different types of health systems in Egypt

B- Intellectual & practical skills:

By the end of the course, students should be able to:

- B1- Apply preventive and control measures for communicable and non-communicable diseases of special public health concern.
- B2- Draw Egypt's population pyramid and interpret the information obtained from the pyramid
- B3- Calculate and interpret vital rates including fertility
- B4- Calculate and interpret measures of morbidity and mortality
- B5- Investigate of an epidemic.
- B6 - Calculate sensitivity, specificity, and predictive values.
- B7- Assess and interpret work related medical hazards and conditions in Egypt.
- B8- Apply surveillance system for diseases and injuries.
- B9- Calculate relevant vital indices, and identify health problems related to the health of mothers and children as well as risk factors
- B10-Plan a session for health education
- B11- Carry out a health education session and/or conduct a counseling session and assess performance (self/ peer) & apply principles of communication skills in dealing with different situations.
- B12- Apply Certifications of cause of death and Classification of diseases.
- B13- Apply management programs in different health care services for improving its performance & outcome indicators
- B15- Investigate appropriate infection control practices.
- B16- Apply methods of assessment of nutritional status
- B17-Apply screening tests pertinent to selected morbidity conditions and the at-risk approach in its application

C-Professional skills:

- C1- Work effectively as a member or a leader of an interdisciplinary team.
- C2- Communicate effectively with clients and colleagues.
- C3- Write & evaluate of professional reports and proper interpretation.

D- General & Transferable skills:

- D1. Adopt principles of the lifelong learning needs of the medical profession.
- D2. Use information and communication technology effectively.
- D3. Do appropriate counseling, health education and communication strategies in different health care settings using behavioral change models.
- D4. Use different resources to gain knowledge and information.
- D5. Develop rules and indicators to evaluate the performance of others.
- D6. Show leadership and act as a team manager in motivating the community served.
- D7. Collaborate with colleagues in a teamwork during field visits, class discussion as well as solving problem

Structure of the block

	Lectures	Practical& field visits	SDL	Small group discussions	Seminars	Formative assessment	Total
Contact hours	40	38	113	20	10	5	226
Credit	1.34	1.28	3.7	0.67	0.34	0.17	7.5 points

Learning Methods

- 1- Lectures for knowledge and intellectual skill outcomes.
- 2- Practical sessions to gain practical skills aided with the practical book.
- 3-Field visits to prepare the student for community service through different health setting.
- 4-Self-directed learning (SDL) for the topics studied in lectures or related topics; including libraries, E learning (practical photographs and questions of different topics available online for student's assessments) and consulting professors for gathering information.
- 4- Group discussions.
- 5- Seminars.

Methods of Student Assessment

1. Formative:

This is used to monitor student's learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning.

It's given at least once in the form of quizzes that is made available for the students at the E-learning site at the end of the block.

Answers are presented instantly after the attempts and discussed on the students groups or in person with the teaching staff

Questions should be consistent with the level of the final exam. The student's attendance is a condition for entering the summative exams. The electronic or paper achievement file must be used to follow up on the students' evaluation, and its completion is a condition for entering the final exams

2. Summative

It is used to evaluate student's achievements at the end of an instructional unit. The grades tell whether the student achieved the learning goal or not.

The student's performance will be assessed according to the following:

Assessment task	Type of assessment	Proportion of total assessment	
		%	Marks
Midterm exam	MCQ (only correct one answer)	20%	23 marks
Portfolio		10%	11 marks
Final written exam	50% MCQ (only correct one answer) 50% written exam	40%	45 marks
practical exam	MCQ (only correct one answer)	30%	34 marks
Total		100%	113 marks

Block evaluation

- Students' results
- Students' feedback
- Tutors' feedback

Block Contents

Lecture Topics and Their Intended Learning Outcomes

	Lecture title	ILOs	NARS	Week	Hours
1	Concept of health and disease	A1, A2,A3,	2.1, 2.2	1st	1h
2	General concepts in epidemiology of communicable diseases	A2, A4, A7	2.4		3h
3	Levels of prevention	A4, A5,	2.1, 2.2, 2.3		1h
4	Host susceptibility, Immunity and vaccination/ EPI	A4, A5	2.1, 2.3		1h
5	Epidemiology of droplet infections (meningitis/ leprosy)	A8	2.4		2h
6	Epidemiology of Air born infection (Tuberculosis)	A8	2.3, 2.4	2nd	1h
7	Epidemiology of water & food born infection (typhoid)	A8	2.3, 2.4		1h
8	Epidemiology of water & food born infection (diarrhea)				1h
9	Epidemiology of Blood Born (HIV/AIDS)	A8	2.4		1h
10	Epidemiology of HCV and HBV				1h
11	Epidemiology of Zoonosis (Rabies)	A8	2.4		1h
12	Epidemiology of Tetanus				1h
13	Health care associated infection (HAIs)	A8, A17	24		1h
	Epidemiology of non-communicable diseases:	A6, A9	2.4	3rd	
14	General epidemiology of non-communicable diseases				1h
15	Diabetes and CAD				1h
16	Cancer				1h
17	PHC	A34	2.1, 2.2, 2.3		1h
18	Health care systems in Egypt	A34	1.10		1h
	Nutrition& health:				
19	Basic concepts in nutrition	A19, A20,A21	2.3		1h
20	Assessment of the nutritional status at the individual andcommunity level, Obesity				1h
21	Common vitamin & mineral deficiencies Nutritionaldeficiency diseases.				1h
	Environmental health:			4th	1h
	Definitions & basic concepts (Housing, Rural health)	A15, A16,A18	2.4		1h
	Safe drinking water				1h
	Air pollution				1h
	Occupational medicine:				
	Basic concepts of occupational medicine& health hazardclassification	A13, A14	2.4		1h
	Common occupational health problems				1h
	Prevention, management and occupational health services				1h
	School health programs	A22, A23 A24	2.3		2h

	Lecture title	ILOs	NARS	Week	Hour
	Reproductive health:				
28	Introduction to reproductive health and Adolescent health	A22, A23 A24	2.3	5th	1h
29	MCH: Maternal health and Child health				2h
31	Communication & health education				A25, B11
	Health services administration				
32	Concepts and definitions.	A31, A32, A33 C1, D6	1.7, 1.8, 2.3, 2.4,		1h
33	Planning				1h
34	Organizing	A35	1.8		1h
35	Supervision and evaluation	A35	1.8		1h
	Total				40h

Practical Topics and Their Intended Learning Outcomes

a- Classwork Topics and Their Intended Learning Outcomes

	Class work title	ILOs	NARS	Week	Hours
1	Demography	B2	2.4	1 st	2h
2	Fertility rates	B3	2.4		2h
3	Morbidity & ICD 10	B4, A10	2.4	2 nd	2h
4	Mortality rates& death certificate	B4, B12	2.4		2h
5	Investigation of outbreak	B5	2.3, 2.4	3 rd	2h
6	EPI	A4, A5, B4	2.1, 2.3, 2.4		2h
7	Occupational	A13, A14, B7,B17	2,4	4 th	4h
8	Screening	A12, B1, B6,B17	2.4	5 th	4h
Total					20h

b-Field visits and Their Intended Learning Outcomes

	Field visit	ILOs	NARS	Hours
1	Primary health care unit	B13, B9,D4, D5	2.4	2h
2	Water station	A15, A16	2.4	2h
3	Oils hydrogenation factory	A14, A15, B7	2.4	2h
4	Tropical hospital	B1, A8	2.3, 2.4	2h
5	Salam-Abdalla center	B1, A8	2.4	2h
6	Infection control unit	B15, A17	2.4	2h
7	Laundry unit	B7, B15	2.4	2h
8	Nutrition clinic	A23, B11,B16	2.3	2h
Total				18h

Group discussion and Their Intended Learning Outcomes

	ILOs	SDL/GD	NARS	Week	Hours
1	A1, A4	Health Promotion and healthy life style	2.1-2.3-2.4	1 st	2h
2	A5	EPI & international and recent vaccines	2.4		2h
3	A4, A5,	General Epidemiology especially	2.1 2.2 2.4	2 nd	2h
4	A5, A8	control measures of Corona Case contacts)	2.4		2h
5	A5	Emerging & reemerging diseases	2.4	3 rd	2h
6	A19, A20, A21	Disasters and disaster management	2.3		2h
7	A8	Improving immunity by good nutritional practices to fit COVID-19 infection	2.4	4 th	2h
8	A9	Epidemiology of COVID-19 virus	2.4		2h
9	A8, A17	Measuring Health and diseases in the community	2.4	5 th	2h
10	A11	Occupational health hazards among Health Care Workers (HCWs)	2.3		2h
Total					20h

Seminars

	Seminars	Weeks	Hours
1	Topics of the 1 st week	1 st	2hrs
2	Topics of the 2 nd week	2 nd	2hrs
3	Topics of the 3 rd week	3 rd	2hrs
4	Topics of the 4 th week	4 th	2hrs
5	Topics of the 5 th week	5 th	2hrs
Total			10hrs

Formative assessment

This is used to monitor student's learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning.

It's given at least once in the form of quizzes that is made available for the students at the E-learning site at the end of the block.

Answers are presented instantly after the attempts and discussed on the students groups or in person with the teaching staff

Questions should be consistent with the level of the final exam. The student's attendance is a condition for entering the summative exams. The electronic or paper achievement file must be used to follow up on the students' evaluation, and its completion is a condition for entering the final exams

Blue print of the block

	Lecture title	ILOs	Hours	Marks	Weight	Mid-term exam	Final exam
Frist week							
1	Concept of health and disease	A1, A2,A3	1h	2	2.9%	2	-
2	General concepts in epidemiology of communicable diseases	A2, A4, A7	3h	3	4.4%	3	-
3	Levels of prevention	A4, A5	1h	1	1.5%	1	-
4	Host susceptibility, Immunity and vaccination	A4, A5	1h	2	2.9%	2	-
6	Epidemiology of droplet infections (meningitis)	A8	2h	2	2.9%	1	1
Second week							
5	Epidemiology of Air born infection (Tuberculosis)	A8	1h	2	2.9%	1	1
7	Epidemiology of water & food born infection (typhoid)	A8	1h	2	2.9%	1	1
8	Epidemiology of water & food born infection (diarrhea)		1h	2	2.9%	1	1
9	Epidemiology of Blood Born (HIV/AIDS)	A8	1h	2	2.9%	1	1
10	Epidemiology of HCV and HBV		1h	3	4.4%	2	1
11	Epidemiology of Zoonosis (Rabies)	A8	1h	2	2.9%	1	1
12	Epidemiology of Tetanus		1h	2		1	1
13	Health care associated infection (HAIs)	A8, A17	1h	2	2.9%	1	1
Third week							
	Epidemiology of non-communicable diseases:	A6, A9					
14	General epidemiology of non-communicable diseases		1h	2	2.9%	1	1
15	Diabetes and CAD		1h	3	4.4%	2	1
16	Cancer		1h	2	2.9%	1	1
17	PHC	A34	1h	2	2.9%	1	1
18	Health care systems in Egypt	A34	1h	1	1.5%	-	1
	Nutrition& health:					-	
19	Basic concepts in nutrition	A19, A20, A21	1h	2	2.9%	-	2
20	Assessment of the nutritional status at the individual and community level, Obesity		1h	2	2.9%	-	2
21	Common vitamin & mineral deficiencies nutritional deficiency diseases.		1h	2	2.9%	-	2
Fourth week							
	Environmental health:					-	
22	Definitions & basic concepts (Housing, Rural health)	A15, A16, A18	1h	2	2.9%	-	2
23	Safe drinking water		1h	2	2.9%	-	2
24	Air pollution		1h	1	1.5%	-	1
	Occupational medicine:					-	
25	Basic concepts of occupational medicine& health hazard classification	A13, A14	1h	2	2.9%	-	2
26	Common occupational health problems		1h	2	3.5%	-	2
27	Prevention and management and Occupational health services		1h	2	2.9%	-	2
	School health program	A22, A23A24	2h	2	2.9%	-	2
Fifth week							

	Lecture title	ILOs	Hour	Marks	Weight	Mid - term exam	Final exam
	Reproductive health:						
28	Introduction to reproductive health and adolescent health	A22, A23 A24	1h	1	1.5%	-	1
29	MCH: Maternal health and child health		2h	2	2.9%	-	2
31	Communication & health education	A25, B11	1h	2	2.9%	-	2
	Health services administration					-	
32	Concepts and definitions.	A31, A32, A33, C1, D6	1h	2	2.9%	-	2
33	Planning		1h	2	2.9%	-	2
34	Organizing	A35	1h	2	2.9%	-	2
	Supervision and evaluation	A35	1h	1	1.5%	-	1
	Total		40h	68Ms	100%	23Ms	45Ms

Blueprint practical

الدور الأول

No.	Class Work Titles	ILOs	Hours	Weight	Final practical exam
1.	Demography	B2	2h	11.8 %	4 marks
2.	Fertility rates	B3	2h	8.8%	3 marks
3.	Morbidity & ICD 10	B4A,010	2h	14.7%	5 marks
4.	Mortality rates& death certificate	B4, B12	2h	17.6 %	6 marks
5.	Investigation of outbreak	B5	2h	14.7%	5 marks
6.	Screening	A12, B1, B6, B17	4h	11.8 %	4 marks
7.	Occupational	A13, B7, B17	4h	8.8%	3 marks
9.	EPI	A4, A5, B4	2h	11.8 %	4 marks
	Total		20h	30%	34M

الدور الثاني Practical

No.	Class Work Titles	ILOs	Hours	Weight	Final practical exam
1.	Demography	B2	2h	11.8 %	5 marks
2.	Fertility rates	B3	2h	8.8%	4 marks
3.	Morbidity & ICD 10	B4A,010	2h	14.7%	7 marks
4.	Mortality rates& death certificate	B4, B12	2h	17.6 %	8 marks
5.	Investigation of outbreak	B5	2h	14.7%	7 marks
6.	Screening	A12, B1, B6, B17	4h	11.8 %	5 marks
7.	Occupational	A13, B7, B17	4h	8.8%	4 marks
9.	EPI	A4, A5, B4	2h	11.8 %	5 marks
	Total		20h	40%	45M

الدور الثاني

Final	60%	68 M	Total
Practical	40%	45M	113 M

Study Resources

1. Lecture notes

2. Books:

- Community Medicine with Recent Advances, Third Edition: 2014.
- Park's Text Book of Preventive and social Medicine 23rd edition, 2015
- Jekel's Epidemiology, Biostatistics, Preventive Medicine, and Public Health, Fourth edition, 2014
- Indian Text Book of Public Health
- Text book of public health and Community Medicine: Demography and Public Health
- Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.
- Occupational & Environmental Medicine, 4th Edition, Joseph Ladou
- Egyptian Laws related to occupational health
- Introduction to health economics for the medical practitioner D P Kernick.

3- Periodicals and web sites:

- American Journal of Epidemiology.
- British Journal of Epidemiology and Community Health,
- CDC and WHO websites.
- Official website of World Health Organization

Lecture Outlines

Lecture (1): Concept of health and disease

By the end of the lecture the student will be able to:

- Define health and describe dimension of health.
- Recognize the spectrum of health.
- Define well-being, describe objective and subjective components of the wellbeing and define quality of life.
- Describe the determinants of health on the individual, the family, and the community levels.

Contents of the lecture:

- Definition of health (WHO definition)
- Dimension of health
- Spectrum of health
- Concept of wellbeing
- Component of individual well-being\
- Concept of Quality of life
- Determinants of health

Sources:

- Community Medicine with Recent Advances, Third Edition: 2014
- ParkK's Text Book of Preventive and social Medicine 23rd edition

By the end of the lecture the student will be able to:

- List the different theories of disease causation.
- Recognize epidemiologic triad, explain the three interacting ecological factors-agent, host, and environment-affecting the occurrence of disease.
- Define the natural history of disease and stages of disease.
- Recognize Spectrum of disease and Iceberg phenomenon of disease.

Contents of the lecture:

- Definition of the disease (Webster definition)
- Theories of disease causation
 - Germ theory of disease
 - Multifactorial causation
- Epidemiological triad
 - Agent Factors
 - Host Factors
 - Environmental Factors (extrinsic
- Natural history of disease

- Stages of disease
- Spectrum of disease
- Iceberg phenomenon, of disease

Sources

- Community Medicine with Recent Advances, Third Edition: 2014
- Park's Text Book of Preventive and social Medicine 23rd edition

Lectures (2): General concepts in epidemiology of communicable diseases

By the end of the lecture the student will be able to:

- Define infectious, contagious, communicable disease.
- Define common terms used in field of epidemiology.
- Identify components of infection cycle.

Contents of the lecture:

- Dynamics of disease transmission.
 - Infection cycle
 - Sources and reservoir
 - Susceptible host

Host defenses Sources

- Community Medicine with Recent Advances, Third Edition: 2014
- Park's Text Book of Preventive and social Medicine 23rd edition

Lectures (3): Levels of prevention

By the end of the lecture the student will be able to:

- Identify the different levels of prevention.
- Describe the principles of prevention of communicable diseases.

Contents of the lecture:

Levels of prevention

- Primordial prevention
- Primary prevention
- Secondary prevention
- Tertiary prevention

Prevention and control of communicable Diseases

- Elimination of Reservoir
- Breaking of Channel of Transmission
- Protection of Susceptible

Sources

- Community Medicine with Recent Advances, Third Edition: 2014
- Park's Text Book of Preventive and social Medicine 23rd edition

lectures (4): Host susceptibility, immunity and vaccination

By the end of the lecture the student will be able to:

- Define immunity and identify the types of immunity
- Differentiate between active and passive immunity
- Describe the host defense mechanisms
- Define herd immunity
- Identify the different types of vaccines
- List the contra-indications to vaccination
- Explain causes of vaccination failure
- Define seroprophylaxis and its uses
- Differentiate between chemo and seroprophylaxis
- Identify the compulsory immunization schedule for Egyptian children 0-24 months

Contents of the lecture:

- Types of Immunity Responses
- Difference between Active and passive immunity
- Herd Immunity or community immunity.

Types of vaccine

- Contraindications of vaccination
- Vaccine reactions
- Causes of vaccination failure
- Seroprophylaxis or passively acquired artificial Immunity
- Preparations and uses of Immunoglobulin
- Chemoprophylaxis
- Vaccination schedule of the Egyptian child during the first two years of life.

Sources

- Indian Text Book of Public Health
- Community Medicine with Recent Advances, Third Edition: 2014
- Park's Text Book of Preventive and social Medicine 23rd edition

Lectures (5): Epidemiology of Air born infection (Tuberculosis):

By the end of the lecture the student will be able to:

- Understand the size of the problem
- Define basic terminology related to tuberculosis infection
- Describe the epidemiological determinates of tuberculosis infection
- Identify measures of prevention and control for tuberculosis infection

Contents of the lecture:

- Problem statement
- Basic definitions of tuberculosis cases and treatment
- Diagnosis (clinical features and laboratory diagnosis)

- Epidemiological determinates (agent, host and social factors), mode of transmission.
- Measures of control and prevention for tuberculosis.

Sources

- Park's textbook for preventive and social medicine is an excellent source for preparing communicable diseases
- Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.
- Official website of World Health Organization

Lecture (6): Epidemiology of droplet infections (Meningitis and leprosy):

By the end of the lecture the student will be able to:

- Understand the size of the problem
- Describe the epidemiological determinates of meningitis and leprosy.
- Identify measures of prevention and control for meningitis and leprosy.

Contents of the lecture:

- Problem statement
- Epidemiological determinates (agent, host and risk factors), mode of transmission, incubation period
- Diagnosis (clinical features and laboratory diagnosis)
- Measures of control and prevention

Sources

- Park's textbook for preventive and social medicine is an excellent source for preparing communicable diseases
- Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.
- Official website of World Health Organization

Lecture (7): Epidemiology of water & food born infection (typhoid):

By the end of the lecture the student will be able to:

- Understand the size of the problem
- Describe the epidemiological determinates of typhoid
- Identify measures of prevention and control for typhoid

Contents of the lecture:

- Identification of typhoid
- Clinical picture of typhoid
- Problem statement
- Epidemiological determinates (agent, reservoir, host and environmental factors), mode of transmission, incubation period
- Measures of prevention and control of food borne diseases

Sources

- Park's textbook for preventive and social medicine is an excellent source for preparing communicable diseases
- Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.
- Official website of World Health Organization

Lecture (8): Epidemiology of water & food born infection (diarrhea):

By the end of the lecture the student will be able to:

- Understand the size of the problem
- Describe the epidemiological determinates of diarrhea.
- Identify measures of prevention and control for diarrhea.

Contents of the lecture:

- Identification of diarrhea.
- Clinical picture of diarrhea.
- Problem statement
- Epidemiological determinates (agent, reservoir, host and environmental factors), mode of transmission, incubation period
- Measures of prevention and control of food borne diseases

Sources

- Park's textbook for preventive and social medicine is an excellent source for preparing communicable diseases
- Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.
- Official website of World Health Organization

Lectures (9- 10): Blood borne diseases (HIV, Hepatitis B& Hepatitis C)

By the end of the lecture the student will be able to:

- Understand the size of the problem
- Describe the epidemiological determinates of HIV infection, Hepatitis B& Hepatitis C.
- Identify measures of prevention and control for HIV infection, Hepatitis B& Hepatitis C.

Contents of the lecture:

- Problem statement.
- Epidemiological determinates (agent, reservoir, source and host factors), mode of transmission, incubation period.
- Diagnosis (clinical picture and laboratory diagnosis).
- Control and prevention measures of HIV infection, Hepatitis B& Hepatitis C.

Sources

- Park's textbook for preventive and social medicine is an excellent source for preparing communicable diseases.
 - Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.
- Official website of World Health Organization

Lecture (11): Zoonotic diseases (Rabies)

By the end of the lecture the student will be able to:

- Understand the size of the problem
- Describe the epidemiological determinates of rabies
- Identify measures of prevention and control for rabies

Contents of the lecture:

- Problem statement
- epidemiological determinates (agent and vector, host and environmental factors), mode of transmission, and incubation period.
- Diagnosis (clinical picture and laboratory diagnosis)
- Control and prevention measures of rabies

Sources:

- Park's textbook for preventive and social medicine is an excellent source for preparing communicable diseases.
- Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.
- Official website of World Health Organization

Lecture (12): Zoonotic diseases (tetanus)

By the end of the lecture the student will be able to:

- Understand the size of the problem
- Describe the epidemiological determinates of tetanus
- Identify measures of prevention and control for tetanus

Contents of the lecture:

- Problem statement
- epidemiological determinates (agent and vector, host and environmental factors), mode of transmission, and incubation period.
- Diagnosis (clinical picture and laboratory diagnosis)
- Control and prevention measures of tetanus

Sources:

- Park's textbook for preventive and social medicine is an excellent source for preparing communicable diseases.
- Wallace/Maxcy-Rosenau-Last is considered a good source for preparing the lectures and could be given for the students as reading material for SDL.

- Official website of World Health Organization

Lecture (13): Healthcare Associated Infections (HAIs)

By the end of the lecture the student will be able to:

- Define and identify the HAIs.
- Know the magnitude of the HAIs problem
- Describe the epidemiology of HAIs
- Identify the general and specific prevention and control measures for HAIs.

Contents of the lecture:

- Definition of nosocomial infections
- Magnitude /Burden of the problem
- Epidemiology:
 - Agent
 - Sources (reservoir)
 - Routes of spread (Mode of transmission)
 - Host
 - Risk Factors for HAI / High Risk groups for HAIs
 - Affected sites
- Prevention and control measures:
 - Standard (routine) precautions
 - Transmission based precautions
 - Sterilization and Asepsis
 - Selective and judicious use of antimicrobials
 - Administrative regulations

Sources:

- Park's textbook of preventive and social medicine
- Jekels epidemiology
- <https://www.cdc.gov/infectioncontrol/guidelines/index.html>
 - The Financial Burden
- Common Elements in Pathogenesis (Risk factors):
 - Modifiable
 - Non-modifiable
- Prevention of Chronic Diseases

Sources:

- Jekels epidemiology
- Textbook of public health and community medicine
- Park's textbook of preventive and social medicine

Lectures (14): General epidemiology of non-communicable diseases

By the end of the lecture, students should be able to:

- Identify what are chronic diseases.
- Know the Magnitude of the problem
- Identify both the human and financial burden of chronic diseases.
- Identify both modifiable and non-modifiable risk factors of chronic diseases.
- Know the preventive measures of chronic diseases.

Contents of the lecture:

- Definition of chronic diseases
- Magnitude of the Problem
- Burden of chronic diseases:
 - The Human Burden

Lecture (15): DM and CAD

By the end of the lecture the student will be able to:

- Define DM and CAD
- Know the Magnitude of the problem of each disease (DM and CAD).
- Identify both modifiable and non-modifiable risk factors of each disease (DM and CAD).
- Know the preventive measures of each disease (DM and CAD).

Contents of the lecture:

- Definition of DM and CAD
- Magnitude of the problems of: DM and CAD
- Determinants (Risk Factors) of DM and CAD:
 - Modifiable
 - Non-modifiable
- Prevention of DM and CAD:
 - Primary prevention
 - Secondary prevention
 - Tertiary prevention

Sources:

- Textbook of public health and community medicine
- Community medicine with recent advances
- Jekels epidemiology
- Park's textbook of preventive and social medicine

Lectures (16): Cancer

By the end of the lecture the student will be able to:

- Define cancer

- Know the Magnitude of the problem of cancer
- Describe the epidemiological factors affecting cancer.
- Identify the most prevalent types of cancer.
- Identify both modifiable and non-modifiable risk factors of DM.
- Know the preventive measures of cancer

Contents of the lecture:

- Definition of cancer
- Magnitude of the cancer problems
- Epidemiology of cancer.
- Most prevalent types among male, female and both sexes.
- Determinants (Risk Factors) of cancer:
 - Modifiable
 - Non-modifiable
- Prevention of cancer:
 - Primary prevention
 - Secondary prevention
 - Tertiary prevention

Sources:

- Textbook of public health and community medicine
- Community medicine with recent advances
- Jekels epidemiology
- Park's textbook of preventive and social medicine

Lecture (17): Primary Health Care

By the end of the lecture the student will be able to:

- Define Health for all & PHC
- Recognize Characteristics of PHC.
- List the Components of PHC.
- Identify Requirement of primary health care.
- List Function of the PHC

Content of the lecture:

- Concept and definition of Health for all
- Definition of primary health care (PHC)
- Characteristics of primary health care
- Components of primary health care:
- Requirement of primary health care
- Function of the PHC:

Sources:

- Community Medicine with Recent Advances, Third Edition: 2014

- Park's Text Book of Preventive and social Medicine 23rd edition

Lecture (18): Health systems in Egypt

By the end of the lecture the student will be able to:

- Identify the main pillars of the health system
- Identify the sectors of the Health System in Egypt
- Understand the organization of the Health System in Egypt
- Recognize levels of health care
- Enumerate examples of MOHP programs and health services

Contents of the lecture:

- General Organization of the Health System
- Organization of the Ministry of Health and Population (Administrative structure- Service Delivery Structure)
- MOHP Public Health Programs (Population, Reproductive health, family planning program, Maternal health, Expanded program of immunization, diarrheal and acute respiratory infection program)
- Parastatal Sector (General organization of teaching hospitals, health insurance organization- the curative care organizations).

Source:

- Overview of the Health system in Egypt. Chapter 2. Pages 13: 19.
- The health system and Public Health. The Egyptian Health system, chapter 2. Pages: 7-11

Lecture (19): Basic Nutrition Concepts

By the end of the lecture the student will be able to:

- Understand important definitions and concepts in nutrition
- Recognize Food guide pyramid.
- Identify General principles of diet planning
- Explain Pattern and spectrum of nutritional problems
- Identify Nutrients and their main categories

Contents of the lecture:

- Definitions of some nutrition terminology:
- Balanced diet
- Therapeutic nutrition
- Food fortification
- Reference man and women
- Food guide pyramid (old and new)
- General principles of diet planning
- Pattern and spectrum of nutritional problems

- Nutrients and their main categories:
- Recommended nutritional dietary allowances

Sources

- Park's textbook of preventive and social medicine
- Jekels epidemiology
- Maxcy public health & preventive medicine
- The U.S. Department of Agriculture's MyPyramid food guide

Lecture (20): Assessment of Nutritional Status

By the end of the lecture the student will be able to:

- Define nutritional assessment
- Understand methods of nutritional assessment
- Describe the characteristic of food balance sheet for Egypt

Contents of the lecture:

- Definition of nutritional assessment
- Methods of nutritional assessment
 - At the individual or group level
 - At the national level
- Role of Physical activity in health and disease

Sources:

- Text book of public health and community medicine first edition 2009, published by department of community medicine, Armed forces medical college, Pune, in collaboration with WHO, India Office, New Delhe,
- Jekel's Epidemiology, Biostatistics, Preventive Medicine, and Public Health, ISBN: 978-1-4557-0658-7, Copyright © 2014, 2007, 2001, 1996 by Saunders, an imprint of Elsevier Inc. International Standard Book Number,
- WHO, 1995, 2000, 2002

Lecture (21): Common nutritional problems in Egypt

By the end of the lecture the student will be able to:

- Identify the common vitamin and mineral deficiencies in Egypt
- Study the risk factors of these common vitamin and mineral deficiencies
- Recognize some common nutritional problems
- Understand the prevention of the common nutritional problems

Contents of the lecture:

- Common vitamin and mineral deficiencies
 - Iron Deficiency
 - Iodine Deficiency
 - Vitamin D Deficiency
 - Calcium Deficiency

- Others deficiencies: Vitamin B12 Deficiency, Vitamin A Deficiency, Magnesium Deficiency and Fibers deficiency
- Common nutritional problems:
 - Protein- Energy Malnutrition (PEM)
 - Nutritional Anemias: Iron deficiency anemia
 - Nutritional Bone Diseases: Rickets, osteomalacia, osteoporosis and dental Caries

Sources:

- Park's textbook of preventive and social medicine
- Jekels epidemiology
- Maxcy public health & preventive medicine
- <https://www.cdc.gov/infectioncontrol/guidelines/index.html>
- <https://apps.who.int/iris/handle/10665/42841>

Lecture (22): Definition and basic concept of environmental health

By the end of the lecture the student will be able to:

- Identify Environmental health, and its components.
- Identify environmental factors affecting health.
- Recognize sources of environmental risks
- Global strategy for environmental health

Contents of the lecture:

- Environment health definition
- purpose of Environmental health
- Determine environment components
- Concept of Sanitation
- Environmental risks
- WHO standards for Environmental global strategy

Sources:

- Community medicine with Recent advance 3rd Edition (main source)
- Park Textbook of preventive and social Medicine (22nd edition)
- WHO report on WHO public health and Environment global strategy overview.

Lecture (23): Safe drinking water

By the end of the lecture the student will be able to:

- Understand the nature, health effects and sources of environmental risks for water
- Summarize process of purification

Contents of the lecture:

- Water cycle,

- Safe water criteria
- Types of impurities of water
- Health hazards of water contamination
- Purification of water in large and small scale
- Sanitary analysis of water
- Laboratory examination of water

Sources:

- Community medicine with Recent advance 3rd Edition (main source)
- Park Textbook of preventive and social Medicine (22nd edition)

Lecture (24): Air pollution

By the end of the lecture the student will be able to:

- Understand the nature, health effects and sources of environmental risks for Air
- Recognize effect of air pollution on health
- Identify global effect of air pollution

Contents of the lecture:

- Composition of air
- Changes of air due to human occupancy
- Indices of thermal comfort and comfort zone
- Air pollution (pollutants and its health effect, Global effect of air pollution, indicators of air pollution, prevention and control of air pollution)
- Global warming

Sources:

- Community medicine with Recent advance 3rd Edition (main source)
- Park Textbook of preventive and social Medicine (22nd edition)

Lecture (25): Basic Concept of occupational medicine & health hazards classifications

By the end of the lecture the student will be able to:

- Identify concept and aim of occupational medicine
- Identify different hazards

Contents of the lecture:

- Basic terminology related to Occupational Medicine
- Role of Occupational Medicine
- Identify classification of different hazards
- Recognize the following items:
 - Different Physical hazards
 - Different Chemical hazards
 - Important Biological hazards

- Mechanical hazards
- Psychosocial hazards
- Ergonomics
- Specific hazards for common occupations (example: HCWs and agriculture)

Sources:

- Community medicine with Recent advance 3rd Edition
- Occupational & Environmental Medicine, 4th Edition, Joseph Ladou

Lecture (26): Common Occupational Health Problems

By the end of the lecture the student will be able to:

- Identify different health effect from different hazards
- Understand clinical features and management of these health effects

Contents of the lecture:

- Define Occupational disease and work-related disease
- Occupational Chest Diseases (pneumoconiosis: silicosis, asbestosis, bagassosis and byssinosis (occupational exposure, pathogenesis, diagnosis).
- Occupational hearing loss (to identify occupational exposure, health effects, how to diagnose these effects in case of occurrence).
- Most common Dermatological Occupational Disease
- Temperature changes related health problems
- caisson disease
- Radiation related health problems
- Common occupational cancers

Sources:

- Community medicine with Recent advance 3rd Edition
- Occupational & Environmental Medicine, 4th Edition, Joseph Ladou

Lecture (27): Prevention and management of occupational health problems

By the end of the lecture the student will be able to:

- Outline Important items of prevention and control programs for occupational health problems

Contents of the lecture:

- Medical prevention measures
- Engineering prevention measure
- Legislations related to occupational health
- Occupational Health Services (Identify occupational health system, Occupational health team and its role in occupational disease prevention)

Sources:

- Community medicine with Recent advance 3rd Edition
- Occupational & Environmental Medicine, 4th Edition, Joseph Ladou

- Egyptian Lows related to occupational health

Lecture (28): Reproductive health and family planning

By the end of the lecture the student will be able to:

- Define the reproductive health. Identify the reproductive rights.
- Identify the overall aims and goals of reproductive health program
- Understand elements of reproductive health program.

Contents of the lecture:

- Definition of reproductive health.
- Identify the reproductive rights.
- The overall aims and goals of reproductive health program.
- Elements of reproductive health program.
- The life cycle approach
- Family planning program in Egypt

Sources:

- Park's textbook for preventive and social medicine

Lecture (29): Maternal and Child health

By the end of the lecture the student will be able to:

- Define & explain significance of maternal and child health
- Identify objectives of Maternal and child health care (MCH)
- List services of Maternal Health Program
- Describe stages of maternity cycle
- Identify objectives of Maternal Health Program
- understand services of Maternal Health Program

Contents of the lecture:

- Significance of maternal and child health
- Objectives of Maternal and child health care (MCH)
- The components of MCH
- Stages of maternity cycle
- Objectives of Maternal Health Program
- Services of Maternal Health Program

Sources:

- Textbook of Public Health and Community Medicine. Rajesh Valdyia, rina tilak, Rajul Gupta, Renuka Kunte - Published by Department of Community Medicine Armed Forces Medical Collage, Pune, WHO
- Maternal Mortality Bulletin 2014 published by MCH directorate - Cairo

Lecture (30): School health

By the end of the lecture the student will be able to:

- Recognize school health program
- Identify School health team
- Enumerate Duties of school medical officer
- List Common diseases among school children

Contents of the lecture:

- What is school health program?
- School health team.
- Duties of school medical officer.
- Common diseases among school children

Source:

- Park's textbook for preventive and social medicine

Lecture (31): Communication and health education

By the end of this lecture the student should be able to:

- Identify basic definition.
- Recognize principals and barriers of communication.
- Enumerate the process steps.

Contents of the lecture:

- Basic definitions
- Principles and barriers of communication
- The- process steps

Source

- Text book: Community medicine with recent advances (2014)
- WHO Report: Health Communication Partnership (December 2003). The new P-Process, steps in strategic communication. Baltimore: Johns Hopkins Bloomberg School of Public Health/ Center for Communication Programs/ Health Communication Partnership.
https://www.who.int/immunization/hpv/communicate/the_new_p_process_jhuccp_2003.pdf

Lecture (32-35): Management

By the end of the lecture, students should be able to:

- Define management in different ways
- Identify the principles and main functions of management
- Recognize definition, leading, organizing a health team
- Identify planning health activities
- Understand implementing & evaluating health activities

Contents of the lecture:

- Concepts, definitions, principles and main functions of management
- Definition, Leading, Organizing a health team
- Planning health activities
- Implementing health activities
- Evaluating health activities

Source

- On being in charge: a guide to management in primary health care

Outlines of topics for self-directed learning and group discussions

Topic (1): Health Promotion and healthy life style

ILOs: To

- Define Health Promotion
- Identify Areas of health promotion activates
Define Healthy Lifestyles
- Identify the main healthy lifestyle practice.
- Recognize the physical activity as example of healthy lifestyle practice
- Recognize Incentives and Disincentives for Healthy Behaviour
- Describe and list healthy lifestyle targets as a part of global Action Plan for the Prevention and Control of non-communicable diseases

Topic (2): EPI & International vaccine

ILOs: To:

- list the objectives of the EPI program as a primary level of communicable diseases
- Identify the type of each vaccine, how to handle it, route & site of administration, dose
- Identify the compulsory immunization schedule for Egyptian children 0-24 months
- Consult mothers about the early reactions to vaccination
- Mention new vaccine suggested to add to compulsory immunization schedule for Egyptian children 0-24 months
- Identify the international immunization schedule
- Identify the type of each vaccine, how to handle it, route & site of administration, dose

Topic (3): (General Epidemiology especially Control Measures of Corona Case Contacts)

ILOs: To:

- Identify the main determinants of Corona Disease
- Describe the geographical distribution of the disease
- Follow the updates of mortality and morbidity statistics of the disease worldwide
- Describe the main control measures for contacts of Corona Case (suspected and confirmed)

Topic (4): Emerging & reemerging diseases

ILOs: To:

- Define emerging and resurging (re-emerging) infectious diseases
- Identify causes of reemergence
- Enumerate examples of emerging and re-emerging diseases

Topic (5): Disasters and disaster management

ILOs: To:

- Define disasters, its types, and understand the difference between disaster and hazard
- Understand the difference between disasters in developed and developing countries
- Outline disasters in Egypt
- Describe the main items of disaster management

Topic (6): Improving immunity by good nutritional practices to fit COVID-19 infection

ILOs:

- Identify good nutritional practices that can upgrade immune system
- Avoid bad nutritional habits that can suppress immunity
- Spotlight on food staff that play a role in activation of immune system
- Nutritional advises and protocol for patients infected with COVID-19

Topic (7): Epidemiology of COVID-19 virus

ILOs: To:

- Problem statement of COVID-19 virus infection
- Epidemiological determinates (agent, host and risk factors), mode of transmission, incubation period
- Diagnosis (clinical features and laboratory diagnosis)
- Measures of control and prevention

Topic (8): People at higher risk for severity of COVID-19 illness

ILOs: To know

- Are all persons susceptible for COVID-19 infection?
- Are all subjects susceptible for developing sever illness of COVID-19 infection?
- Describe the probability for developing sever COVID-19 illness for those groups:
 - People of any age
 - Those have serious underlying medical conditions particularly if not well controlled
 - People with disabilities,
 - pregnant people
 - and people experiencing homelessness

Topic (9): Measuring Health and diseases in the community

ILOs:

- To apply principles of morbidity and mortality measures with special attention to COVID 19 pandemic
- -To identify differences between incidence and prevalence

- - to apply different rates to measure mortality
- Follow the updates of mortality and morbidity statistics of the disease worldwide and Egypt

Topic (10): Occupational health hazards among Health Care Workers (HCWs)

ILOs: To:

- Identify different occupational health hazards among HCWs
- Enumerate occupational diseases could HCWs catch from their Jobs
- Illustrate Important methods of protection from different exposed hazards

Topic (11): Infection control measures to COVID 19

ILOs:

- Identify, recognize and enlist the two tiers of recommended precautions to prevent the spread of infections in healthcare settings; Standard Precautions and Transmission-Based Precautions with special elaboration to COVID 19.
- Know the different components, of Standard Precautions
- Proper understanding of the Indications, different procedures of hand hygiene
- Identify the proper indication, donning and doffing of personal protective equipment.
- Know, practice and educate others about proper respiratory hygiene and cough etiquette.
- Identify the different components and requirements of transmission-based precautions in case of suspected and confirmed COVID 19.

Topic (12): surveillance COVID-19 virus

ILOs: To:

- Know The objectives of the global surveillance of COVID-19 virus
- Identify updated case definitions for surveillance of COVID-19 virus
- Revise the definition of a contact (close contacts and casual contacts)
- Describe transmission patterns at national and sub-national levels
- Identify surveillance system for COVID-19 virus in Egypt
- Draw chart describing the for-surveillance procedure of COVID-19 virus infection