



University of Sulaimani

Faculty of Medical Sciences

School of Medicine

Department of Family and Community Medicine

The Course book

2011/2012

1. Name of the Course

Community Medicine

2. Department/ Branch/ College

Department of Family and Community Medicine
School of Medicine
Faculty of Medical Sciences

3. Year of study

Fourth

4. Course calendar and credits

- Fourth year: Weekly 2 hours theory and 2 hours practical, total 60 hours theory and 60 hours practical equal to 6 credits.

5. Course Coordinator:

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6. Lecturers

Dr. Zhyan S. Ramzi, M.B.Ch.B, M.Sc, PhD Community Medicine
Dr. Ali Muhammad Jabari, M.B.Ch.B, F.I.B.M.S Family Medicine
Dr. Bushra M. Ali, M.B.Ch.B, F.I.B.M.S Family Medicine

7. Course overview

Community medicine deals with the health of populations where the dynamic relationship between individuals and communities reflects on their health. The focus in community medicine, however, is health at the community level and how various factors in the social and physical environment as well those related to agents and hosts determine the health status of the community.

The course of community medicine is therefore very broad in content and covers a variety of different subjects that are important for community health. These include description of the concept of health, public health, primary care and its components, child and maternal health, human nutrition, environmental health issues, water and sanitation, occupational health hazards and health education.

Epidemiology of communicable diseases will describe why and how infections in individuals could pose a risk to the community and what are the best ways to control spread of these disease. Major non-communicable diseases and their burden on the community will also be described.

As research is so important in health protection; this course will provide basic understanding of health research and biostatistics. The course will present description of basic concepts in epidemiology, objectives and epidemiological methods in health research; and epidemiologic approach for causation and transmission of diseases and various measurements of morbidity and mortality.

The practical sessions of the course will familiarize students with the community health needs, health hazards and services provided focusing on preventive health services. The students will have a chance to make field visits to health and safety--related institutions and male some research and present their findings in seminars to their fellow students.

8. Course objectives

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

1. Concepts of health and disease, definition of health, holistic concepts of health including concept of spiritual health, appreciation of health as a relative concept, determinants of health.
2. Describe the concept of primary health care and health management.
3. Describe the epidemiological methods and their application to study communicable and non-communicable diseases in the hospital and community situations.
4. Understanding the natural history of disease and application of interventions at various levels of prevention.
5. Practice how to undertake research in health issues and present seminars
6. Characteristics of agent, host and environmental factors in health and disease and the multi factorial etiology of disease.
7. Describe epidemiology of communicable diseases, understand common communicable diseases and the methods of their control.
8. Describe epidemiology of non-communicable diseases and the burden of major ones on health.
9. Describe principle of human nutrition, nutritional assessment and malnutrition in children.
10. Describe common occupational hazards in workplace and their impact on health.
11. Doctor-patient relationship.
12. Describe maternal and child health problems and their management.
13. Describe health needs of communities and methods of their assessment
14. Describe health education and its importance in health.

9. Suggested readings

1. Pencheon, D., et al., *Oxford handbook of public health practice*. 2003, Oxford: Oxford University Press.
2. Olsen J., et al., *An Introduction to Epidemiology for Health Professionals*. 2010, New York: Springer Science+Business Media.
3. Skolnick, N., *Essential infectious disease topics for primary care*. 2008, Totowa: Humana press.
4. Bernard J. Healey & Kenneth T. Walker, *Introduction To Occupational Health In Public Health Practice*. 2009, Jossey-Bass
5. Jekel, J.F., D.L. Katz, and J.G. Elmore, *Epidemiology, biostatistics and preventive medicine*. 2nd ed. 2001, Philadelphia: Saunders.
6. Gordis, L., *Epidemiology*. 2nd ed. 2000, London: Saunders
7. Hennekens, C.H. and J.E. Buring, *Epidemiology in Medicine*. 1987, Boston: Little, Brown.
8. Weber, R., *Communicable disease epidemiology and control*. 2002, Oxon: CABI publishing.
9. Kirkwood, B., *Essential medical statistics*. 2001, London: Blackwell Science.
10. Chin, J., *Control of communicable diseases manual*. 17th ed. 2000, Washington: American Public Health Association.
11. Lukas, A. and H. Gilles, *Short textbook of public health medicine for the tropics*. 2003, London: Arnold.
12. Wallas, R. and N. Kohatsu, *Maxcy-Rosnau-Last public health and preventive medicine*. 19th ed. 2008: The McGraw-Hill.

10. The syllabus, fourth year

Subject	Contents	References	Teacher	Hours
Epidemiology and epidemiological methods	<ul style="list-style-type: none"> • Definition, historical background basic concepts, uses • Measures of occurrence and association • Epidemiological study methods: surveys, case-control, cohort, interventions studies (design, uses, conduct, analysis, bias, strengths and weakness) 	Gordis Hennekens	Dr.Nasih	10
Epidemiology of communicable diseases	<ul style="list-style-type: none"> • Natural history of disease, epidemiological triad, host-agent-environment-vector factors • Agents' survival strategies, effect on the host, modes of transmission • Time periods of infection and disease: latent period, period of infectiousness, incubation period, types of epidemics, epidemic curve • vaccination, environmental control methods, vector control methods • Definition and investigation of an outbreak 	Lucas	Dr.Bushra	6
Example of infectious diseases and their control	<ul style="list-style-type: none"> • Introduction to communicable disease and their classification • Air-borne infections, Measles • Food and water-borne infections, cholera, Hepatitis A, typhoid • Blood-borne infections, Hepatitis B • Vector-borne infections, malaria 	Skolnick Olsen	Dr.Ali	10
Epidemiology of non-communicable disease	<ul style="list-style-type: none"> • Introduction to non-communicable diseases • Life style • Obesity • Cardiovascular diseases • Cancer 	Wallas	Dr.Ali	10
Nutrition	<ul style="list-style-type: none"> • Types of food, requirements, local foods • Nutrition of special groups and patients • Malnutrition in children 	Wallas	Dr.Ali	6
Accidents and injuries	<ul style="list-style-type: none"> • Major accidents and injuries that as causes of morbidity and mortality 	Wallas	Dr.Bushra	2
Occupational health	<ul style="list-style-type: none"> • Principles and practice of occupational health • Major occupational health hazards and diseases • Asbestosis 	Bernard	Dr.Ali	4
Maternal and child health	<ul style="list-style-type: none"> • Maternal care • Child care 	Wallas	Dr.Bushra	4
Health education	<ul style="list-style-type: none"> • Importance of health education to health promotion • Methods of health education 	Lucas	Dr.Bushra	2
International health	<ul style="list-style-type: none"> • Health as an international issues, health protection during travel 	Lucas	Dr.Zhian	2
Screening test	<ul style="list-style-type: none"> • Principles and application 	Wallas	Dr.Zhian	1

11. Teaching methods and Teaching aids

Lectures, group discussions, practical sessions, field visits, seminars
Data show, whiteboard, overhead projector

12. Examination questions

The examinations will be comprehensive and cover all subjects studied during the preceding period. Marks will be spread over the subjects proportional to their size. For example if a subject has been covered in twice as much time as another, its marks will be proportionally higher. Questions will include the following types:

- Short essays
- Calculations
- Enumeration
- Multiple choice questions
- Discuss examples and situations

13. Sample questions

1. A study was done to investigate the effect of smoking on oral cancer. Hundred and fifty (150) cases of oral cancer who had being previously registered in the cancer referral hospital were interviewed face to face for history of smoking. Three hundred (300) healthy individuals were selected randomly in the community as a comparison group. It was found that 50 of the oral cancer individuals were smokers and 50 of the comparison group were also smokers.

Now answer the following questions:

- A. What type of study was this? What was the exposure under study? What was the outcome under study?
 - B. Calculate odds of exposure among both groups separately and then calculate odds ratio and comment on your final result
 - C. Discuss briefly some possible sources of bias in this study
 - D. Enumerate the strengths and weaknesses on cross sectional studies (surveys).
2. Define latent period and incubation period and explain how they are related to disease transmission with an example.
 3. Fifteen employees of a hospital were given a course in community medicine scored as follows: 75, 70, 55, 90, 65, 80, 75, 85, 81, 45, 75, 40, 70, 50, 35. Find the mean and standard deviation of these scores
 4. Trace metals as a source of air pollution include the following EXCEPT
 - a. Copper
 - b. Lead
 - c. Iron
 - d. Cadmium

5. Draw a diagrammatic presentation of green house effect.
6. Enumerate three major life style factors related to increased risk of coronary health disease
7. write short notes on classification of overweight and obesity by body mass index(BMI)



For any feedbacks, please contact

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