Faculty of Medicine

Introduction to Community Medicine

(31505201)

By

Hatim Jaber

MD  MPH  JBCM  PhD

18-09-2016
معلومات وقواعد عامة

- التعريف
- الالتزام والوقت
- ساعات العمل في المكتب
- الحضور والغياب
- الامتحانات
- منسق المجموعة
- المراجع والكتب
## Presentation outline

<table>
<thead>
<tr>
<th>Topic</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to course 31505201</td>
<td>12:10 to 12:20</td>
</tr>
<tr>
<td>Medicine and Health</td>
<td>12:20 to 12:30</td>
</tr>
<tr>
<td>Public Health and Medical Care</td>
<td>12:30 to 12:40</td>
</tr>
<tr>
<td>Community Medicine and Clinical Care</td>
<td>12:40 to 12:50</td>
</tr>
</tbody>
</table>
Introduction to Community Medicine
Community Medicine

سهل الممتنع
Introduction to course
31505201

• Course Title: Introduction to Community Medicine
• Credit Hours: 3 Credit Hours
• Calendar Description: 15 weeks/ First Semester - 2nd year (2016/2017)
• Teaching Approaches: 3 Lectures per week for 15 weeks

(including two field visits to Public Health Department)
Introduction to course 31505201 (cont...)

• **General Objective**: Founding the basis necessary for the **understanding and appreciation** of Community Medicine as the umbrella that address the spectrum of public health problems.
Specific Objectives: by the end of the course, a student shall be able to:

- List the names and roles of the different public health disciplines under the community medicine umbrella.
- Name nutrient categories according to their physiologic roles, and outline the ecology of malnutrition with differentiation characterization of the various types and classes of nutritional disorders.
- Identify nutrition-risk groups by application of proper criteria and suggest ideas for the prevention and control of nutrition-related diseases.
- List the scientific reasons that justify the launching of public campaigns that target at the promotion of breast feeding practice for infants.
- Define primary health care strategy and it’s contents.
- List steps of planning health education talk to individual persons and to groups.
- Describe epidemiology and the special features of environmental and occupational epidemiology.
- Describe diseases that are related to water, food and air pollution and their Control.
- Specify the uses of epidemiology.
- Differentiate between various epidemiological methods.
- Define epidemic and endemic occurrence of diseases.
- Enumerate steps in the investigation and control of disease.
- List levels of prevention and differentiate between population strategy and high risk strategy used in disease prevention.
- Describe criteria used in disease screening.
- Describe study design focusing on experimental randomized trials.
Introduction to course 31505201 (cont...)

• Method of Instruction: Lectures and field visits
  3 ‘one full hour’ Lectures per week (Sun, Tue, Thu) 12:00-13:00 and two field visits

• Evaluation and Grading: three written exams (MCQ)
  • First Exam - assessment = 25%
  • Second Exam - assessment = 25%
  • Final Examination = 50%

• Field Visits ????????????????????????
Introduction to course 31505201

Course Content

- Week 1 Unit 1: Introduction to Health and Community Health
- Week 2 Unit 2 Nutrition and Nutrition Assessment and Diet
- Week 3: Unit 2 (cont.) Nutrition and Nutrition Assessment and Diet
- Week 4 Unit 2 (con..): Infant and Breast Milk Characteristics
- Week 5 Unit 3: Public Health/Environmental Health
  
  Field visit to environmental health department – mostly in Saturday

- Week 6 Unit 4: Epidemiology In course assessment I
- Week 7 Unit 4 (cont...): Epidemiology
- Week 7 Unit 5: Primary Health care
- Week 8 Unit 6: Demography, Data and Biostatics
- Week 9 Unit 7: Public Health Surveillance
- Week 10 Unit 8: Study design
- Week 11 Unit 9: Prevention and Control of Diseases In course assessment II
- Week 12 Unit 10: Health Education and Communication
  
  Field visit to environmental health department – mostly in Saturday

- Week 13 Unit 11: Screening
- Week 14 Unit 12: Health Administration and healthcare management
- Week 15 Unit 13: Health Research
- Week 16 Final assessment (Exams.)
• 31505204 *Epidemiology and Biostatistics* (3 H)

• 31505291 *Public Health* (3 H)

• 31505391 *Health Economic* (2 H)
What is health?

Nutritious foods help us stay healthy.

Regular exercise helps keep us strong and healthy.

Doctors, hospitals & medicines help us get healthy if we’re sick.
Definition: ‘Health …’

• ‘…is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’ (WHO, 1948)

• ‘Health is only possible where resources are available to meet human needs and where the living and working environment is protected from life-threatening and health threatening pollutants, pathogens and physical hazards’ (WHO, 1992)
Defining Health:

The WHO Definition

• Health is the state of complete physical, mental and social well-being and not only the absence of disease or infirmity (illness).

Ecological definition:

• “Health is a state of optimal physical, mental and social adaptation to one’s environment.”
Along the continuous change of the world, new concepts of health emerge based on new patterns of thought.

1. Biomedical concept
2. Ecological Concept
3. Psychosocial concept
4. Holistic concept
Concepts of Health

1. **Biomedical**: “health is the absence of disease” - (Germ theory of disease).

2. **Ecological Concept**: Health is an **Dynamic Equilibrium between Man and his Environment**. Imbalance results in Disease.

3. **Psychosocial concept**: Psychological, Social, Cultural, Economic, Political factors are included in defining and measuring health.

4. **Holistic concept**: Include all the factors of the other concepts in addition to all human activities such as education, communication, agriculture, industry, housing, recreation etc.
• Have you noticed that when you have been through an illness
  ➢ You become **irritable**?
  ➢ **Lose your temper much faster** than in your healthy days.

  Why?
You

- lack in physical energy & gets frustrated
- can’t do things that you want to do.
- Hence you get angry, shout, and scream

**PHYSICAL, SOCIAL AND MENTAL HEALTH ARE INTER RELATED**
The Health Triangle

- Health is the measure of our body’s efficiency and over-all well-being.
- The health triangle is a measure of the different aspects of health.
- The health triangle consists of: Physical, Social, and Mental Health.
Physical, Mental & Social Health

• Physical health deals with the body’s ability to function.

• Mental health deals with how we think, feel and cope with daily life.

• Social Health deals with the way react with people within our environment.
Signs of Good Health

what are signs of good

- **Physical health**—no disease
- Social heath
- Mental health
Signs of Good Health

B. Social health
A person with good social health –
• gets along well with people around
• has pleasant manners
• helps others
• fulfills responsibility towards others

C. Mental health
Mental health implies -
• control on emotions
• sensitive to the needs of others
• confidence in one’s own abilities
• freedom from unnecessary tensions, anxieties and worries
New philosophy of Health

- Health is a **Fundamental right**
- Health is the essence of **Productive life**
- Health is **Intersectorial**
- Health is Integral part of **Development**
- Health is central to **Quality of Life**
- Health Involves **Individuals, Families, Communities Local, National and International responsibilities**
- Health and its maintenance is a **Social Investment**
- Health is **Worldwide Social Goal.**
Health is the outcome of a mix of several factors that interact at the individual, community, and societal level.

Source: Adapted from Why Are Some People Healthy and Others Not?
RG Evans, ML Barer, and TR Marmor, 1994. [2]

Evans and Stoddart Field Model of Health and Wellbeing
Population Perspective of Relations

All populations

Human population

Community, nation

Family

Individual
### Community Medicine

<table>
<thead>
<tr>
<th>Time</th>
<th>Public Health and Medical Care</th>
<th>12:30 to 12:40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Medicine and Clinical Care</td>
<td>12:40 to 12:50</td>
<td>12:40 to 12:50</td>
</tr>
</tbody>
</table>
• Confusion about DEFINITION, SCOPE, & CONTENTS OF:
  Public Health
  Preventive medicine
  Preventive and social medicine
  Community medicine

Chronologically these terms present the:

World Picture of Evolution of the Discipline
• Scope of this specialty is quite wide ranges from:

planning & provision of public health services, to the delivery of primary health care throughout the life cycle of human beings (i.e. from childhood to old age).

It demands not only study of general medicine covering all the organ systems of human body but also the awareness of the civic, social, legal & economic organization of the communities.
Therefore community specialist has to:

acquire vast knowledge & range of skills,
have basic understandings & skills to deliver general medicine care & possess in depth knowledge of communicable and non communicable disease, principles of social & behavior sciences.
Public health

• The WHO has defined it as “The science and art of preventing disease, prolonging life, and promoting health through organized community efforts”

• Public health is a combination of scientific disciplines (e.g., epidemiology, biostatistics, laboratory science, social science, demography) and skills and strategies (e.g., epidemiological investigations, planning and management, intervention, evaluation) that are directed to the maintenance and improvement of the health of people.

• Public health is both a body of knowledge and also means to apply that knowledge
Preventive medicine

• Preventive medicine developed as a branch of medicine distinct from public health, based on etiology.

• It scored several successes in the prevention of communicable diseases based on immunization. As concepts of the etiology of disease changed through time, so too have the techniques and activities of PM.

• The concept of PM has broadened to include health promotion, treatment, and prevention of disability.
Social medicine

• “The **study of man as a social being** in his total environment”. It concerned with all the factors affecting the distribution of health and disease in population.

Social medicine reflect the strong relationship between medicine and social science.

• The laboratory to practice social medicine is the whole community, **the tools for diagnosing community ills** are epidemiology and biostatistics; and social therapy doesn’t consist in administration of drugs but social and political action for better conditions of life.
Definition of community

- A true community in the sociological sense (shared community sentiment, social institutions)
- A defined neighborhood
- Workers/students in a defined company/school
- Persons registered as potential users of a group practice/health center
- Users of a defined service or repeated users of the service
Community medicine

- This term is a newcomer. It is often considered synonymous with preventive and social medicine, public health, and community health. All these share common ground, i.e. prevention of disease and promotion of health.

- CM provides comprehensive health services ranging from preventive, promotive, curative, to rehabilitative services.
Community Medicine

- Providing medical services in the community
- Understanding community resources
- Health promotion and disease prevention
- Occupational health
- Knowledge of communities
- Care of populations
- Community participation in health care activities
4 Dimensions of Community Medicine

• Paying attention to socio-cultural aspects of patient care
• Coordinating a community’s health resources in the care of patients
• Identifying and intervening in a community’s health problem
• Assimilating into a community and participating in its organizations
Community Medicine

• WHO defined community medicine as a system of delivery of comprehensive health care to the people by health team to improve the health of the community through the promotive, preventive and curative health services.

Health care on epidemiologic basis includes:
1. Promotive
2. Preventive
3. Curative

Health care on health care system management basis includes:
1. Primary (PHC)
2. Secondary
3. Tertiary
Community Medicine and Internal Medicine (family medicine)
Community health components

- Epidemiology
- Registration
- Surveillance
- Biostatistics
- Health care
  management
- Health care system
- Data
MODERN MEDICINE

• CURATIVE MEDICINE – Removal Of Disease.
• PREVENTIVE MEDICINE/COMMUNITY MEDICINE – Prevention of disease.
• SOCIAL MEDICINE – Study of man as social being in his total environment.
• FAMILY MEDICINE - Family oriented medicine or health care centered on the family as unit.
PREVENTIVE MEDICINE:

• It is the science and art of
  - Preventing disease
  - Prolonging life and
  - Promoting health through efficiency groups of individuals and individuals within these groups,

• THROUGH *INTERCEPTION* OF DISEASE PROCESSES

• Customarily applied to “healthy” individuals
• Actions affect large numbers or population
Cont.

- Modern Preventive Medicine: The *science and art* of health promotion, disability limitation and rehabilitation
In addition to the knowledge of basic and clinical sciences and skills common to all physicians, distinctive aspects of preventive medicine include knowledge of and competence in:

- Epidemiology & biostatistics
- Administration (including planning, organization, management, financing & evaluation of health programs)
- Environment & occupational health.
- Application of the social & behavioral factors in health.
- Application of primary, secondary & tertiary preventive measures.
What do community medicine specialists do?

- **Assess the health needs** of the population by identifying appropriate information or generating new information that recognizes the interactions of biological, behavioral, social & environmental factors that affect health.

- **Recognize the strengths and weakness** in various measurements of health & characteristics of society & understand the principles of the statistical methods required to summarize & analyze the information.
Cont.

• **Set priorities and develop programs** to meet the health needs of the population.

• **Implement programs taking** in to account the socioeconomic, educational, occupational & political factors.

• **Develop skills in evaluating programs** & in providing consultation to others involved in the planning, management or evaluation of health services.
WHERE DO COMMUNITY SPECIALISTS WORK?

- **Teaching**: Practice of public health at local, regional, provincial, national or international level
- **Planning and administration**: of health services in institutions and government;
- **Community oriented clinical practice**: with an emphasis on health promotion & disease prevention;
- **Assessment and control**: of occupational & environmental health problems; Research;
Thank You