Tutor Book

Block 4.2

HEALTH SYSTEM AND DISASTER

Second Edition

2011

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HEALTH SYSTEM AND DISASTER

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CURRICULUM MAP – CBC
Medical Faculty Universitas Gadjah Mada 2007

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X Block Examination

O Progress Test & Clinical Skills Exams

CONTENTS (Nomor Blm Disesuaikan)

OVERVIEW

Block 4.2. is the second block in year 4 phase 2 in the curriculum map. This block is part of Phase 2 of the medical curriculum, entitled transition from Theory to Practice. In this block, students learn about the health system and disaster management, which are closely related. A health system is a set of collections of components organized to accomplish a set of functions in health. The health system can be analyzed from a normal situation perspective. However due to the natural and man-made disasters, the system can be disturbed or even destroyed. In this block, students will learn various aspects of public health policy and management, quality of care, social and political aspect of health, leadership, communication, and disaster management. Based on the topic tree, Block 4.2 is divided into two modules and six weekly themes. The modules are: (1) Health System, and (2) Disaster Management. In Module 1, there are four weekly themes discussing: (1) The Concept of Health System, (2) Health Finance Physician Payment Mechanism and Quality of Care, (3) Surveillance and Informatics, and (4) Leadership and Communication. In Module 2 there two themes: (1) Principles of Disaster Management and (2) Health Program in Disaster and Quality in Intervention. This block is carried out over six-week period.

LEARNING OBJECTIVES

General Objectives:
After completing block 4.2, students should be able to:

1. Understand the role and function of doctor as part of the health care system who cares to health problem of individuals, families and communities.

2. Understand the nature of disaster (both natural and man-made) and its impact towards health care, as well as be able to undertake required measures to anticipate and manage disasters.

Specific Objectives
The specific objectives of block 4.2 are for students to be able to:

1. Analyze the systemic concept and the sub-components within a health system globally, nationally and locally (area 4).
2. Analyze physician payment system and its mechanism in relation to professional roles of medicaldoctors (Area 4).
3. Analyze clinical governance, patient safety, quality in health care, and clinical governance (Area 4 and 7).
4. Use information concerning health issues in order to cope with potential epidemics/KLB (Area 4).
5. Communicate with other team members, institutions and communities in identifying problems, making analysis, and planning for required action (area 1).
6. Possess leadership and managerial skills in order to handle health problems in the community (area 1).

7. Explain the principles of disaster management (area 2).

8. Understand clinical emergency during disaster condition in a correct and ethical manner in accordance to own authority and competence (area 2).

9. Understand the various programs in disaster management, which includes coordination, medical team support, logistics, prevention of mental problems and spread of infectious disease, as well information system (Area 4 and 7).

10. Practice triage principals and logistics management (laboratory/simulation) (area 7).

11. Understand basic principles of disaster victim identification (DVI) (laboratory) (area 2).

12. Apply patient safety principles during disaster situations (laboratory/simulation) (area 7).

CENTRAL DISCIPLINES

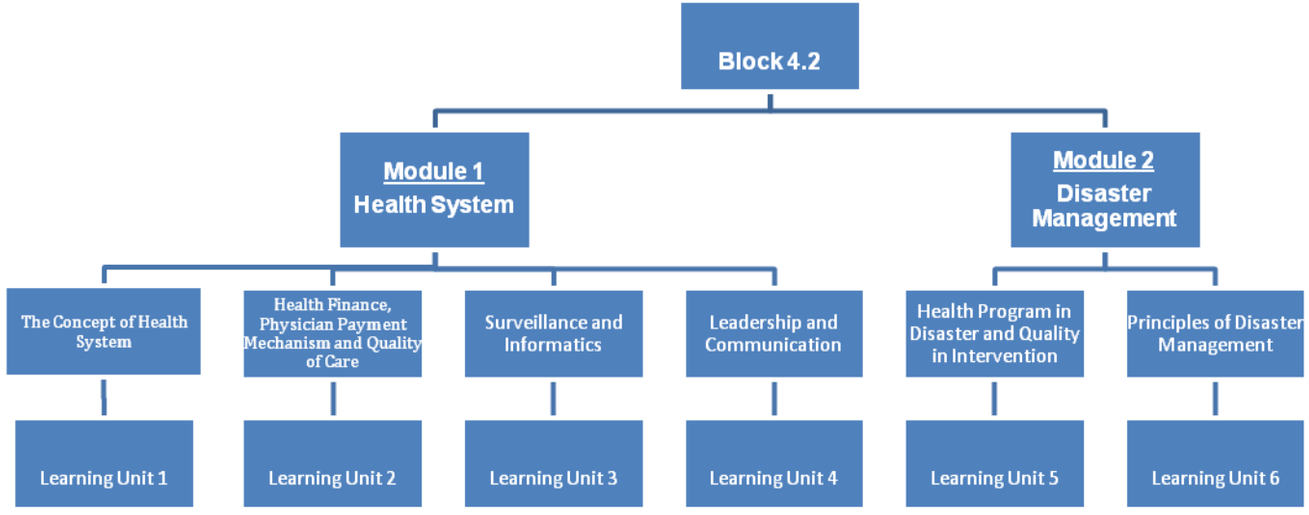
Public Health (Health Policy and Management, Epidemiology, Health Promotion), Microbiology, Parasitology, Forensic Medicine and Medical Law, Forensic Anthropology, Pharmacology and Therapy, Nursing Sciences, Surgery, Psychiatry, Obstetric and Ginecology, Internal Medicine, Pediatrics, Dermato-Venerology, Clinical Pathology, and Bioethics.

RELATIONSHIP WITH OTHER BLOCKS

Block 4.2 relates with:

1. Block 1.6. Basic Medical Practice
2. Block 4.1. Emergency

TOPIC TREE


Block 4.2
Module 1
Health System
Module 2
Disaster Management
The Concept of Health System
Health Finance, Physician Payment Mechanism and Quality of Care
Surveillance and Informatics
Leadership and Communication
Health Program in Disaster and Quality in Intervention
Principles of Disaster Management
Learning Unit 1
Learning Unit 2
Learning Unit 3
Learning Unit 4
Learning Unit 5
Learning Unit 6

LEARNING ACTIVITIES

The following learning activities are prepared to guide the students to obtain the learning objectives of this block:

1. Group Discussion with Tutors

Group discussion with tutors or commonly called tutorial session is scheduled twice weekly for two hours each. If the groups do not meet the tutors for some reason, they are responsible to inform the secretariat immediately by calling: 631201/7104188. To get a life discussion, the students should prepared substance they are going to discuss. Prior knowledge is also important to put during discussion. Members of the group should bring some relevant notes taken from relevant learning resources. To achieve learning objectives, the "seven-jump" method will be used in the group discussion. Usually, the first group discussion covers steps 1-5, and the remaining steps are carried out in the second meeting within the same scenario. The underlying thoughts are basically asking the following questions: What do we need to know? What do we already know? What more do we wish to know?

The seven jumps are:

Step 1. Clarify terms and concepts
Step 2. Define the problem
Step 3. Analyze the problem
Step 4. Make a systematic inventory of the various explanations found in step 3
Step 5. Formulate learning objectives
Step 6. Collect additional information outside the group discussion
Step 7. Synthesize and test acquired information

Week	Scenario	Duration (hours)
1	Physicians and Specialist Distribution in Indonesia	4
2	Physician Income and Its Impact on Quality	4
3	Pandemic Preparedness	4
4	Poor Team-Working in Health Care Personnel	4
5	Earthquake in Yogyakarta (Natural Disaster)	4
6	Air Plane Crash	4
Total Tutorial		**24**

2. Independent Learning (Self Study)

As an adult learner, students are able to learn independently, a skill that is essential for future career and personal development. This skill includes discovering their own interests, searching for more information from available learning resources, understanding the information through using different learning strategies and various learning activities, assessing their own learning, and identifying further learning needs. They should never be satisfied with merely learning from the lecture notes or textbooks. Independent learning is an important feature of the PBL approach and should become a never-ending journey.

Students learn independently using the block's objectives and scenario objectives, and learning can also be developed using the recommended references or through comparative literature study from the internet.

3. Lecture

Lectures are provided by experts in their field. They will complete the knowledge and the skills that students need. They are carried out in the classroom attended by approximately 150 students.

Week	No	Topics	Department	Duration (hours)
1	1	Introduction of Block 4.2 and Health System and Its Outcomes	Public Health	1.5
	2	Globalization in Health	Public Health	1
	3	Human Resources Management in Health and Physician Career	Public Health	1
	4	Health Finance	Public Health	1
	5	Cultural Aspect in Medicine	Public Health	1
	6	International Health and Decentralization	Public Health	1
	7	Legal Aspect in Medicine	Forensic Medicine and Medico legal	1
	Total Lectures of Week 1			**7.5**
2	1	Quality Framework, Clinical Governance and Patient Safety	Public Health	1
	2	Clinical Audit and Quality Tools	Public Health	1
	3	Payment mechanisms for physician	Public Health	1
	4	Regulating physician and services	Obstetric Gynecology	1
	5	Pharmacology: Drugs formulary and Antibiotic Hospital Policy	Pharmacology and Therapy	1
	6	Drug Management and Policy in Primary Health Care	Pharmacology and Therapy	1
	Total Lectures of Week 2			**6**
3	1	Surveillance, Response, and The Role of Health Informatics	Public Health	1
	2	Communicable Disease Surveillance: TB, Malaria	Internal Medicine	1
	3	Non-communicable Disease Surveillance: Traffic Accident and Cardiovascular	Public Health	1
	4	Environmental medicine and global health	Public Health	1
	5	New Emerging Diseases: Corona Virus/Avian Influenza, SARS	Microbiology	1
	6	Microbiological Aspect of Traveler Medicine	Microbiology	1
	7	Nosocomial Infections	Microbiology	1
	8	Vector Control during Outbreak of Parasitic Diseases	Parasitology	1
	9	HIV/AIDS Infection	Dermato-Venerology	1
	Total Lectures of Week 3			**9**
4	1	Coordinating Multi professions and Stakeholders: The Case of MDGs	Public Health, Obstetric and Ginecology, and	1.5

			Pediatrics	
	2	Leadership and Team Work	Clinical Pathology	1
	3	Motivation	Public Health	1
	4	Doctor and Community Participation and Mobilization	Public Health	1
	Total Lectures of Week 4			**4.5**
5	1	Conceptual Framework of Disaster and Disaster Management	Surgery	1
	2	Preparedness, response, and recovery	Surgery	1
	3	Hospital Incident Command System and Field Hospital	Surgery	1
	4	Logistic Management Support	Pharmacology and Therapy	1
	5	Post Traumatic Stress Disorders Management	Psychiatrics	1
	6	Rehabilitation and Palliative Care	School of Nursing	1
	7	Ethics in Disaster	Bioethics	1
	8	Disaster Blood Banking	Clinical Pathology	1
	Total Lectures of Week 5			**8**
6	1	Forensic Anthropological Roles in Disaster Victim Identification	Anthropology	1
	2	Medical Approach in Disaster Management	Surgery	1
	3	Rapid Response Team	Surgery	1
	4	Management of Disaster Victim Identification	Forensic Medicine and Medico legal	1
	5	Disaster Management in Mental Health	Psychiatrics	1
	6	Death Certification	Forensic Medicine and Medico legal	1
	Total Lectures of Week 6			**6 hours**

4. Guest Lecture

Guest lectures are structured to address the basic concepts of health system and disaster management. In addition, guest lecturers from various organizations will be invited to share their perspectives and experiences. Students are encouraged to pose questions and ask for explanations of unsolved issues in the tutorial.

During block 4.2 there will be several guest lecture held by involved departments;

Week	Topics	Coordinator & Moderator	Duration (hours)	Guest Lecturers
2	Diagnostic Related Groups	dr. Sigit Riyarto, M.Kes	1	Ministry of Health
4	Communication in Working	dr. Andreasta	1	PKU

	Place	Meliala, DPH, M.Kes. MAS		Muhammadiah Yogyakarta Hospital
	Hospital Law & Health Law	Prof. dr. Budi Mulyono, Sp. PK(K)	1	Ministry of Health
5	Social Mobilization and Education	dr. Hendro Wartatmo, Sp.B-KBD	1	Indonesian Red Cross
Total Practical Session Hours			**4 hours**	

5. Skills Laboratory

Several skills training sessions are carried out in the skills laboratory during this block. Students will learn about Communication Skills *(Psychosocial post-disaster)*, General Physical Examination (*Identification during mass disaster*), Advance Life Supports (*Critical Care, Stabilization and Evacuation, Disaster Simulation)* and Examination for Major Mental Disorders. Those skills sessions will use cases to stimulate the integration of knowledge, skills and behaviors to discuss and perform clinical skills relevant to the cases. The training will focus on Emergency skills, and students will continue joining in the Integrated Patient Management (IPM) IV sessions which continued from block 4.1 to 4.2.

Week	Topics	Duration (hours)	Department/Center/Unit
1	Integrated Patient Management & Medical Record Skills	2	Skills Lab
2	Critical Care	2	
3	Integrated Patient Management & Medical Record Skills	2	
4	Integrated Patient Management & Medical Record Skills	2	
5	Triage (Simulation)	2	Skills Lab + Rapid Response Team
6	Triage (Simulation)	2	Skills Lab + Rapid Response Team
Total Skills Lab Hours		**12 hours**	

6. Practical Session

In block 4.2 there will be several practical sessions held by Department of Public Health, Center for Health Service Management (CHSM), Clinical Epidemiology and Biostatistics Unit (CEBU), Department of Microbiology, Department of Forensic Medicine and Medicolegal, Department of Pharmacology and Therapy, Laboratory of Bio-Paleoanthropology, and Gadjah Mada Rapid Response Team to develop and enrich students' understanding associated with module topic in the running week. During block 4.2, there will be several practical sessions held by involved departments/centers/unit;

Week	Topics	Coordinator	Duration (hours)	Department/Center /Unit
1	Systemic Thinking	Prof. dr. Laksono Trisnantoro, M.Sc. Ph.D	2	Center for Health Service Management
	Narrative Writing	dra. Retno Siwi Padmawati, MA	2	
2	Clinical Audit and Quality Tools	Prof. dr. Adi Utarini, M.Sc, MPH, Ph. D	4	Public Health, Obstetrics and Gynecology, CEBU, Centre for Health Service Management
3	Antiseptic Activity Examination	dr. Hera Nirwati, M.Kes	2	Microbiology
	Phenol Coefficient	dr. Hera Nirwati, M.Kes	2	Microbiology
4	Interpersonal Communication and Advocacy	dr. Andreasta Meliala, DPH, M.Kes. MAS	2	Public Health and Center for Health Service Management
5	Medical Logistic for Disaster	dr. Sulanto Saleh Danu, Sp. FK	2	Gadjah Mada University Rapid Response Team
6	Forensic Anthropology in Disaster Victim Identification	Prof. drg. Etty Indriati, Ph. D	2	Anthropology
	Death Victim Identification in Mass Disaster	dr. Yudha Nurhantari, Sp. F, Ph. D	2	Forensic Medicine and Medicolegal
Total Practical Session Hours			**20 hours**	

7. Panel Discussion

Few panel discussions will be organized, such as in the discussion of the current health system situation. The objectives of panel discussion are: (1) to provide forum for understanding the current situation of health system; (2) to give students opportunities for meeting health system leaders; and (3) to discuss various health systems across Indonesia.
The students will have opportunities to participate in a multi-professional lecture for introduction, multidiscipline discussion independently, and expert panel to discuss the results, feedback and reflections.
During block 4.2 there will be several panel discussions held by involved departments;

Week	Topics	Moderator	Panelist	Duration (hours)	Department
1	Mental Health: Global and Mental Health System (Capacity Building)	Prof. dr. Laksono Trisnantoro, M.Sc. Ph.D	dr.Mahar Agusno,Sp. KJ; Dr. Rahmat Hidayat, M.Sc	2	Psychiatrics; Faculty of Psychology
	Governance and Regulation	Prof. dr. Laksono Trisnantoro, M.Sc. Ph.D	Kadinkes Propinsi Yk; Prof. dr. Budi Mulyono, Sp. PK(K) Director of Sardjito Hospital; Director of Panti Rapih Hospital; Head of PT Askes Indonesia Branch of Yogyakarta	2	Dinas Kesehatan Kota Yogyakarta; Dr. Sardjito Hospital; Panti Rapih Hospital; PT Askes Indonesia Cabang Yogyakarta
2	Physician Economics Behavior, Health Insurance, Managed Care and Quality	dr. Sigit Riyarto, M.Kes	Dr. drg. Yulita Hendartini, M.Kes; Head of PT Askes Indonesia Cabang DIY	2	Faculty of Dentistry; PT Askes Indonesia Yogyakarta Branch
4	Doctor and Nurse Collaboration in Home Care and Chronic Diseases	Supriyati, S. Sos, M.Kes	Akhmadi, S. Kp., M. Kes., Sp. Kom.; Purwanta, S.Kp, M.Kes.; dr.Probosuseno, Sp. PD-KGER	2	School of Nursing; Internal Medicine; Health and Nutrition
	Health Centre Management System	dr. Andreasta Meliala, DPH, M.Kes. MAS	Head of Sleman Health District; Head of Gondokusuman PHC	2	Sleman Health District; Gondokusuman Public Health Centre
5	Multi-professional Team in Disaster Management	dr. Mubasysyr Hasan Basri, MA	dr. Belladonna, M. Kes; Sutono, S. Kp; Toto Sudargo, SKM., M. Kes	2	GP; School of Nursing; Nutritionist
6	Victim Identifications	dr. Yudha Nurhantari, Sp. F, Ph. D	Prof. drg. Etty Indriati, Ph.D; dr. Lipur Riyantiningtyas, BS, Sp. F	2	Anthropology; Forensic Medicine and Medico legal
Total Practical Session		**14 hours**			

BLUE PRINT ASSESSMENT

There will be two main sources of final mark: (1) Block Examination, and (2) Practical Examination. Block examinations will contribute 60% in the final mark. The rest will be marked from various skills-laboratory and practical

Block Examination

Block Examination will be held in 1 session (2 hours for @ 100 items). Module 1 consists of 65 items, Module 2 consists of 34 items.

Skills-laboratory and Practical Examination

Student will receive mark as they learn through skills-laboratory examination and practical session marks.

WEEK 1
MODULE 1: HEALTH SYSTEM
LEARNING UNIT 1: THE CONCEPT OF HEALTH SYSTEM

Learning Objectives of Week 1

No	Learning Objectives	TUT	LEC	PRA	SL	PD
1	Explain systemic concept and the components within a health system.	v	v	v	v	v
2	Explain the goals of health system.	v	v			v
3	Explain global health system.	v	v	v		v
4	Explain global, national, provincial and district health system under decentralization policy.	v	v			v
5	Explain obstacles in achieving good outcomes in health system.	v	v			v
6	Perform clinical skills in Integrated Patient Management.				v	
7	Perform community & colleague interpersonal relations.				v	

TUT : Tutorial
LEC : Expert Lecture
PRA : Practical Session
SL : Skills Laboratory
PD : Panel Discussion

Scenario of Week 1

Physicians and Specialist Distribution in Indonesia

A survey conducted by Pusrengun (Center for human resources efficiency and planning) in 78 districts/municipals (kabupaten) of 17 provinces in Indonesia (out of 440 districts/municipals in 33 provinces) revealed that out of 1165 Primary Health Centers (PHCs) in those areas, 364 (31%) are located in remote/underdeveloped/border/conflict and disaster areas (Kurniati A, 2007). About 50% of these 364 PHCs were reported to have no doctors, 18% no nurse, 12% no midwife, 42% no sanitarian, and 64% no nutritionist. In contrast, only 5% PHCs in non-remote areas have no doctors.

There is also an unfair imbalance in the distribution of specialists (Table 1), especially in the context of national policies adopting health social security for poor families *(Jamkesmas).* In area where doctors are rare, it is difficult for the poor to access medical service. Meanwhile, in the area having many doctors, it will be very easy to access medical service. Consequently, the central government health social security fund for the poor will be spent largely in the big cities and in Java Island.

Table1. Number of doctors and ratio to population

Province	Number of Specialist	%	Population	Ratio
D.I. Yogyakarta	485	4.01%	3,343,000.00	1 : 6,892
South Sulawesi	434	3.59%	8,698,800.00	1 : 20,043
Banten	352	2.91%	9,836,100.00	1 : 27,943
Bali	350	2.90%	3,466,800.00	1 : 9,905
South Sumatera	216	1.79%	6,976,100.00	1 : 32,296
East Kalimantan	203	1.68%	2,960,800.00	1 : 14,585
North Sulawesi	173	1.43%	2,196,700.00	1 : 12,697
West Sumatera	167	1.38%	4,453,700.00	1 : 26,668
Other Province	1,104	9.14%	52,990,200.00	1 : 47,998
	12,083	100.00%	224,904,900.00	1 : 18,613

Note:
"Number of Doctors" using Indonesian Medical Council Data year 2007
"Number of Population" using BPS Data year 2005

The shortage of physicians happens especially in remote areas and other unattractive areas, where community's health status is also lower than those in non-remote areas. Quality of service suffers because of this shortage. In regions without medical specialist, a general practitioner can be forced to do specialists' tasks. This situation may violate Medical Practice Laws and needs specific additional clinical training for the general practitioner. It needs a careful preparation for task shifting.

Ministry of Health regulation in medical-doctor deployment is not effective. The contract doctor *(dokter Pegawai Tidak Tetap)* scheme does not work well. The current health insurance

system, which is expected to increase financial resources for health care, to open more access for the poor, and to make providers more accountable, also does not work well. This situation is not supportive for achieving universal coverage and equity in health system.

The decentralization of health system seems have little influence on health workforce distribution. Although Government of Indonesia has already undertaken several initiatives to manage the new decentralized environment for health care provision, the misdistribution of health workforce worsens. Even in some rich (high fiscal capacity) districts, the shortage of physicians and specialists still exist. In this situation some foreign countries offer physicians to work in remote areas in Indonesia. However, is it proper to allow foreign doctors to work in those difficult areas?

Keywords:

Health system - health finance – decentralization - health-workforce - globalization

Difficult Terms (answer to Step 1):

1. Health System.
2. Health Financing
3. Health Regulation
4. Task Shifting and Multiple Profession in Health
5. Good – Governance
6. Effectiveness and efficiency
7. Equity
8. Universal Coverage in Health.
9. Health Insurance and Social Security
10. Globalization

Possible questions or problems (answer to Step 2)

1. What are the components of health system in Indonesia?
2. What is the policy of human resources in Indonesian health system?
3. How is the mobilization of health finance?
4. What is the meaning of good governance and regulation in health system?
5. Why is the term 'equity' important in this case?
6. Is there any difference between effectiveness, efficiency and equity?
7. What are the meaning of task shifting and multiple professions in health?
8. What is the difference between social security in health and health insurance?
9. What is the mechanism of globalization in health human resources?

Concepts and theories to be learnt through the scenario (answer to Step 3-7)

1. Health System
2. Health Finance
3. Development of Health Insurance and Social Security
4. Decentralization
5. Globalization and health workforce

Lectures of Week 1

1. Title : Introduction of Block 4.2 and Health system and Its Outcomes
   Lecturer : Prof. dr. Laksono Trisnantoro MSc, Ph.D
   Department : Block Coordinator Team
   Duration : 1.5 hour
   Content : This lecture provides an overview of Block 4.2, which covers Health System and Disaster. The health system will be described using WHO vast knowledge on how health sector should be analyzed as a system. This description will lead to the fact that physicians should understand that they live and work in a comprehensive health system. More over, it is important to understand the current trend of health system that becomes more decentralized, having more managed carefeature funded by insurance or social security system, competitive and remote areas health service, and has many values such as equity and efficiency. The understanding of health indicators of health system outcome such as health status, community satisfaction, and risk protection will be more explored in this lecture.

   References : RI, D. K. (2009). *Sistem Kesehatan Nasional: Bentuk dan cara penyelenggaraan pembangunan kesehatan*. Jakarta.

   Savigny, D., & Adam, T. (2009). Systems thinking for health systems strengthening/edited by Don de Savigny and Taghreed Adam.

   Trisnantoro, L. (2009). *Decentralization policy in health care in Indonesia: 2002-2007*. Yogyakarta: Gadjah Mada University Press.

   Learning resources: www.kebijakankesehatanindonesia.net. Students are requested to learn this website for more understanding of health system and policy.

2. Title : Globalization in Health
   Lecturer : dr. Yodi Mahendradhata, M. Sc,Ph.D
   Department : Public Health
   Duration : 1 hour
   Content : This lecture will discuss globalization of trade with emphasis on health system implications of trade in health services. By the end of the lecture, students are expected to comprehend: (1) the role of the World Trade Organization; (2) Public health implications of Trade-Related aspects of Intellectual Property Rights (TRIPs); and (3) Health system implications of International trade in health services, including cross-border trade, consumption of health service abroad,

commercial presence of health service and natural presence of foreign health worker.

References : Beaglehole, R., & Bonita, R. (2009). *Global public health: a new era*: Oxford University Press, USA.

Birn, A. E., Pillay, Y., Holtz, T. H., & Basch, P. F. (2009). *Textbook of international health: global health in a dynamic world*: Oxford University Press, USA.

Detels, R., Beaglehole, R., Lansang, M., & Gulliford, M. (2009). Oxford textbook of public health, Volume 1: the scope of public health. (Ed. 5).

3. Title : Human Resources Management in Health and Physician Career

Lecturer : dr. Andreasta Meliala, DPH, M. Kes, MAS

Department : Public Health

Duration :1 hour

Content : This lecture is concerned with human factor, the most prominent input in the healthcare organization. As the prime mover of organization, human resource may influence the effectiveness of other inputs utilization, such as: logistic, device, procedure, and finance. However, managing human resource is mostly dealing with day-to-day complexity of human side and involving various dimensions of individual as well as organization. Management of human resource within the organization can be divided into three parts, they are: recruitment, retention, and release. Recruitment deals with the planning aspect up to placement strategy of selected human resource. Retention is part of human resource management which discussing about capacity development and productivity. The last part is to discuss about how to release human resource, with various reason, without affecting the balance of organization. This section aims to discuss these three parts of human resource management.

References : Bennington, L., & Habir, A. D. (2003). Human resource management in Indonesia. *Human Resource Management Review, 13*(3), 373-392.

Meija, L., Balking, D., & Cardy, R. (2002). *Managing Human Resources*. USA: Prentice Hall International Inc. .

4. Title : Health Finance

Lecturer : Prof. dr. Ali Ghufron Mukti, M. Sc., Ph. D

Department : Public Health

Duration :1 hour

Content : This lecture will cover three important topics. First topic will describe the reform toward the universal coverage. Second topic will cover how to cover the poor. Third topic will cover " integrated-decentralized system

of health insurance. First topic: Many people in developing countries, including Indonesia, do not have social security. Therefore, it is necessary to reform the social security system. Indonesia has passed a National Social Security System comprising five programs: comprehensive health coverage, occupational health, provident fund, pension system, and death benefit. The law mandates Social Health Insurance by sharing contribution of employers and employees while the government is mandated to subsidize contribution for the low income. This law provides foundation for universal health coverage funded by a combination of social health insurance and tax. It is hope that there will be a law of the carrier. Some issues such as number of health insurance carrier, benefit package, contribution etc. are discussed. The second topic is concerned with how to cover the poor. Many approaches are developed to cover the poor. In this topic an explanation on how government of Indonesia covers 76.4 million lowest income people will be presented. What the benefit package, where the money from and how to register and reimburse are discussed. The third topic is " integrated-decentralized system of health insurance. In this topics issues such as what are the best model of health insurance system in the decentralization setting will be discussed.

Reference : Rokx, C., Schieber, G., Harimurti, P., Tandon, A., & Somanathan, A. (2009). Health Financing in Indonesia. *Health Financing in Indonesia, 1*(1), 1-167. (Can be downloaded fromwww.kebijakankesehatanindonesia.net)

Mukti, A. (2008). *Alternatif pengelolaan Askeskin 2008*. Paper presented at the Workshop oleh Kementrian Koordinator Kesejahteraan Rakyat RI.

Gotawa, & Pardede. (2007). *Bagaimana masa depan sistem pembiayaan dan asuransi kesehatan di Indonesia*. Paper presented at the Seminar Bali.

Organization, W. H. (2010). *World Health Report: Health Systems Financing: the Path to Universal Coverage*: WHO.

5. Title : Cultural Aspect in Medicine
   Lecturer : Dra. Retno Siwi Padmawati, MA
   Department : Surgery
   Duration : 1 hour
   Content : This lecture describes the meaning of culture, and how cultures throughout the world use different systems of meaning to describe and respond to illness. One of the perspectives to understand illness is the *emic* perspective—understanding health and disease as perceived by the members of particular culture. The understanding of health and disease of a particular culture is reflected in the illness and health seeking behaviors among its members; and also in the perceptions of risk, the practices of prevention, and the attitudes towards healers and their

mode of treatments. Medical professionals sometimes see the different worldviews and practices of their patients and families as noncompliance, thus, might result to an unsuccessful treatment. This lecture introduces medical students to the complex interactions between health, illness, and culture; to increase their awareness of the diverse cultural perceptions and attitudes about health issues and to improve their skills in coping with these characteristics so that they could give better treatment to their patients.

References : Greene, J. A. (2004). An ethnography of non-adherence: culture, poverty, and tuberculosis in urban Bolivia. *Culture, medicine and psychiatry, 28*(3), 401-425.

Hartog, J., & Hartog, E. A. (1983). Cultural aspects of health and illness behavior in hospitals. *Western Journal of Medicine, 139*(6), 910.

Khan, A., Walley, J., Newell, J., & Imdad, N. (2000). Tuberculosis in Pakistan: socio-cultural constraints and opportunities in treatment. *Social Science & Medicine, 50*(2), 247-254.

6. Title : International Health and Decentralization
   Lecturer : dr. Yodi Mahendradhata, M. Sc,Ph.D
   Department : Public Health
   Duration : 1 hour
   Content : This lecture will discuss the evolution of international health policies, including the drivers of decentralization, seen from the perspective of international political economy. The dynamics will be presented chronologically through a historical lens, culminating with discussions on current international health policies and emerging scenarios. By the end of the lecture students are expected to comprehend: (1) the milestones in international health policies; and (2) International political economy aspects of health policies, including decentralization.
   References : Beaglehole, R., & Bonita, R. (2009). *Global public health: a new era*: Oxford University Press, USA.

Birn, A. E., Pillay, Y., Holtz, T. H., & Basch, P. F. (2009). *Textbook of international health: global health in a dynamic world*: Oxford University Press, USA.

Detels, R., Beaglehole, R., Lansang, M., & Gulliford, M. (2009). Oxford textbook of public health, Volume 1: the scope of public health. *Oxford textbook of public health, Volume 1: the scope of public health*(Ed. 5).

7. Title : Legal Aspect in Medicine
   Lecturer : dr. Hendro Widagdo, Sp. F
   Department : Forensic Medicine and Medico legal
   Duration : 1 hour
   Content : This topic provides the basic understanding in medical practice regulations, as well as the nature of doctor-patient relationship in health system. Medical practice regulations will cover the legal approach in medical services, medical board in Indonesia, and the mechanism and legal boundaries of medical practice licensing. This topic also discusses the obligations and the rights of both patients and doctors. A vision of legal aspect in international setting will be discussed as well.
   References : The Legislation of Medical Practice, Hospitals, and Health, and other Indonesian government regulations. Available from: www.kebijakankesehatanindonesia.net.

   Mossialos E. Permanand. G, Baeten R, Hervey T. 2010. Systems Governance in Europe. The Role of European Union Law and Policy. © Cambridge University Press 2010. http://www.euro.who.int/en/home/projects/observatory/publications/studies/health-systems-governance-in-europe-the-role-of-eu-law-and-policy. (A new book in developed countries which is recommended as the future of legal aspect in medicine).

Skills Laboratory of Week 1

Topic : Integrated Patient Management & Medical Record Skills
Duration : 2 hours

Practical Session of Week 1

Topic : Systemic Thinking
Coordinator : Prof. dr. Laksono Trisnantoro MSc, Ph.D
Department : Public Health
Duration : 2 hours

Topic : Narrative Writing
Coordinator : Dra. Retno Siwi Padmawati, M.A.
Department : Public Health
Duration : 2 hours

Panel Discussion of Week 1

Topic :Mental Health: Global and Mental Health System (Capacity Building)
Moderator : Block Coordinator Team
Panelist : dr. Mahar Agusno, Sp. KJ
Dr. Rahmat Hidayat, M.Sc
Department : Psychiatrics, & Faculty of Psychology
Duration : 2 hours

Topic	:Governance and Regulation
Moderator	: Block Coordinator Team
Panelist	: Kadinkes Propinsi Yk Prof. dr. Budi Mulyono, Sp. PK(K) Director of Panti Rapih Hospital Head of PT Askes Indonesia Branch of Yogyakarta
Duration	: 2 hours

Allocated Time Activities of Week 1

Tutorial	:	4	hours
Lecture	:	8	hours
Skills lab	:	2	hours
Practical session	:	4	hours
Panel Discussion	:	4	hours
Total	**:**	**22**	**hours**

WEEK 2
MODULE 1: HEALTH SYSTEM
LEARNING UNIT 2: HEALTH FINANCE, PHYSICIAN PAYMENT MECHANISM AND QUALITY OF CARE

Learning Objectives of Week 2

No.	Learning Objectives	TUT	LEC	PRA	SL	PD
1	Explain payment system and mechanism for payment in relation to the professional role of physicians.	v	v			v
2	Explain the use of health insurance in financing medical and health service.	v	v			v
3	Explain the concept of managed care and various roles of local government .	v	v			v
4	Explain clinical governance, patient safety and equality in health care.	v	v	v	v	v
5	Explain regulating Quality.	v	v	v	v	v
6	Perform skills to manage critical care for patients.				v	

TUT : Tutorial
LEC : Expert Lecture
PRA : Practical Session
SL : Skills Laboratory
PD : Panel Discussion

Scenario of Week 2

Physician Income and Its Impact on Quality

Hospital X is a C-Class public hospital located in a busy district in Central Java province. There are 14 medical specialists and 10 general practitioners working in this district hospital (Hospital X). Overall, it has a poor performance. A recent satisfaction survey showed that only 45% of patients were satisfied with the service. Most of the patients visit the hospital merely because it is affordable and even free of charge (under arrangement through Jamkesmas/Health Insurance program). Therefore, they keep seeking care in this hospital despite their dissatisfaction. Physicians' income in hospital X is lower than in private hospitals. Their income is also influenced by the drugs prescribed. By prescribing branded drugs, doctors receive more incentives from the pharmaceutical companies. Comparison of hospital performance is shown with the following data and indicators below.

Table 1. Performance of public and private hospitals in obstetric services

	Hospital X	Hospital A	Hospital B	Hospital C	Hospital D
Hospital type and ownership	Public	Private non for profit	Private for profit	Private owned by doctors	Private maternity hospital
Hospital class	C	B	C	D	D
No. of Obstetricians	4	5	3	2	2
Name of obstetricians	Sugiarto Andre Totok Rudi	Sugiarto Andre Rudi Yuni Totok	Sugiarto Rudi Yuni	Totok Yuni	Sugiarto Andre
No. total delivery per year	1540	2406	714	657	830
No. of Caesarian Section per year	310	857	346	458	408
Average income per year (in Million Rp)					
Sugiarto	54	185	239		124
Andre	74	368			150
Rudi	35	150	85		
Yuni		235	76	250	
Totok	23	170		327	
% of patient satisfaction	45	83	92	91	95

Keywords

Physician's income - Quality of Care - Health financing – regulation - drug formulary

Difficult Terms (answer to Step 1):

1. Hospital class
2. Hospital type
3. Hospital ownership
4. Hospital performance
5. Patient satisfaction survey
6. Patient satisfaction
7. Hospital ownership
8. Health insurance program, *Jamkesmas*
9. Indicators
10. Physician income
11. Quality
12. Incentive

Possible questions or problems (answer to Step 2)

1. Are private hospitals better than district-public hospital?
2. How do hospitals determine the income of physicians? What are the considerations?
3. What payment systems are available to pay physicians and what are the strengths and weaknesses in relation to the hospital, physician income and quality of care?
4. What mechanisms exist to pay physicians? What are advantages and disadvantages?
5. Is Jamkesmas a type of Indonesian system of managed care? What are the roles of government in a managed care system?
6. How does physician's income influence quality of clinical care provided to the patients?
7. Why does physician income vary in public and private hospitals?
8. Are there any regulations on physician income?
9. How to control physician behavior in prescribing drugs?
10. How do we measure hospital performance?
11. What indicators are used to measure hospital performance?
12. How do we measure patient satisfaction? Is it a valid measure? What instruments exist?
13. How do we measure performance of obstetric services? What clinical indicators exist?
14. Is private hospital of better quality than public hospital?
15. How do we regulate quality of physician performance and hospital service?

Concepts and theories to be learnt through the scenario (answer to Step 3-7)

1. Payment system and its mechanisms
2. Managed care and roles of government
3. Physician income and quality
4. Clinical governance and patient safety
5. Quality framework and regulation
6. Hospital performance

Lectures of Week 2

1. Title : Quality Framework, Clinical Governance and Patient Safety
   Lecturer : Prof. dr. Adi Utarini, M.Sc, MPH, Ph.D
   Department : Public Health
   Duration : 1 hour
   Content :To ensure optimum clinical care, clinical governance is introduced as a quality framework through which organizations are accountable for continuously improving the quality of their services, and safeguarding high standards of care by creating an environment in which clinical care will flourish. Clinical governance is implemented through four main pillars, i.e. clinical value, clinical performance and evaluation, clinical risk management and professional development and management.

   References : Donaldson, L. (2008). The challenge of quality and patient safety. *Journal of the Royal Society of Medicine, 101*(7), 338-341.

   Scally, G., & Donaldson, L. J. (1998). Clinical governance and the drive for quality improvement in the new NHS in England. *Bmj, 317*(7150), 61.

   Specchia, M., La Torre, G., Siliquini, R., Capizzi, S., Valerio, L., Nardella, P., et al. (2010). OPTIGOV-A new methodology for evaluating Clinical Governance implementation by health providers. *BMC health services research, 10*(1), 174.

2. Title : Clinical Audit and Quality Tools
   Lecturer : Prof. dr. Adi Utarini, M.Sc, MPH, Ph.D
   Department : Public Health
   Duration : 1 hour
   Content : Clinical audit is one of the main pillars in the implementation of clinical governance in health care facilities and by law, it is mandatory to be carried out by all physicians/clinicians in order to evaluate quality of clinical care provided to their patients. The aim of clinical audit is to improve the quality of patient care and clinical outcomes through peer-led review of practice against evidence-based standards and the implementation of change where subsequently indicated. Clinical audit is built upon two main principles, i.e. a commitment to do better, and an acceptance of the concept of best practice or evidence-based practice by the clinicians
   References : Graham, W. (2009). Criterion-based clinical audit in obstetrics: bridging the quality gap? *Best Practice & Research Clinical Obstetrics &Gynecology, 23*(3), 375-388.

   Scrivener, R., Excellence, N. I. f. C., Nursing, R. C. o., Leicester, U. o., & Improvement, C. f. H. (2002). *Principles for best practice in clinical audit*: Radcliffe Medical.

3. Title : Payment mechanisms for physician
Lecturer : dr. Sigit Riyarto, M.Kes
Department : Public Health
Duration : 1 hour
Content :This lecture discusses the impact of Indonesia's health financing system change to insurance based. Therefore, instead of patients' out of pocket payment, there will be other parties (insurance agency or government) who will pay the physicians. These agencies will implement several payment mechanisms for physicians. There are several types of payment mechanism, namely: prospective payment system, retrospective payment system or fee for service, out of pocket, salary, bonus and a mixture of those mechanisms. One type of the prospective payment system is the capitation that is now implemented by the largest insurance company in Indonesia, PT Askes. This lecture will discuss the mechanism's strengths and weaknesses. For example in capitation payment mechanism the doctors are paid before they provide service, while in retrospective payment mechanism they will be paid after the service. Retrospective payment system is more favorable to doctors because it will increase their motivation and satisfaction. On the other hand, government or the insurance company prefers prospective payment, because it provides better efficiency and quality. Salary has an advantage of maintaining loyalty of the physicians, while bonus will increase performance.

References :Abbey, D. C. (2009). *Healthcare Payment Systems: An Introduction*: Productivity Press.

Kongstvedt, P. R. (2001). *The managed health care handbook*: Aspen Pub.

Trisnantoro, L. (2004). Memahami penggunaan ilmu ekonomi dalam manajemen rumah sakit. Gadjah Mada University Press, Yogyakarta.

4. Title : Regulating Physician and Health Service Organization
Lecturer : dr. Rukmono Siswishanto, Sp. OG(K)
Department : Obstetric Gynecology
Duration : 1 hour
Content :This lecture explains the fact that physicians are becoming more regulated. The regulation can be implemented at the hospital level using the term of physician credential. Using this process, a physician can be given the privilegefor medical practice at the hospital. Other regulation of medical practitioners are licensing and certification. In terms of health service organization regulation there are some important activities such as accreditation and licensing. This lecture will cover these regulation tools in health system, which has increasing insurance scheme.

References : Utarini Adi. 2011. "Mutu Pelayanan Keselamatan Indonesia : Sistem Regulasi yang Responsif". Pidato Pengukuhan sebagai Guru Besar di UGM. (Can be downloaded fromwww.kebijakankesehatanindonesia.net)

Utarini A., Djasri. H., Siswiyanti.V.D., Trisnantoro. L. 2009. In Implementing Health Decentralization in Indonesia period 2000 – 2007: Experience and Future Scenario, editor Trisnantoro L. BPFE Press (Can be downloaded fromwww.kebijakankesehatanindonesia.net)

5. Title : Pharmacology; Drugs Formulary and Antibiotic Hospital Policy
Lecturer : Prof. dr. Iwan Dwiprahasto, M.Med.Sc., Ph.D
Department : Pharmacology and Therapy
Duration : 1 hour
Content : The first part of this lecture focuses in the drug formulary policy. Formularies may be formed for individual facilities, facility types, or at the government level. At the hospital level, this may involve forming a Formulary and Therapeutics Committee responsible for establishing a limited list of drugs approved for procurement and use. Essentially, medications listed in the drug formulary of either an insurance company or a government agency are those that the company or government will pay for, at least partly. Doctors need to keep drug formularies for each common insurance company on hand too. When treating a patient who will need prescription drugs, the doctor can scan the drug formulary to find appropriate medications that are covered or offer low copayment options for patients.

The second part of this lecture is concerned with antibiotics policy in hospital. Increasing antimicrobial resistance and the cost pressures of managed care have led to increased needs to assess and ensure appropriate antimicrobial use. Restrictive formularies, antibiotic cycling, academic detailing, antibiotic order forms, and selective susceptibility reporting have been advocated and may be effective in controlling certain types of epidemic resistance. However, these methods fail to address the quality of antibiotic use and are difficult to sustain. This lecture will describe how to overcome this failure.

Reference :Manchester, N., & Health, M. C. (2011). Antibiotic Guidelines. Manchester: NHS.
(http://www.manchester.nhs.uk/document_uploads/Policies_Procedures/ANTIBIOTIC%20GUIDELINES%20PCT%20%20FINAL%2020Jan2011.pdf).

Learning resources:
http://www.eastcheshire.nhs.uk/About-The-Trust/policies/A/Antibiotic%20policy.pdf

6. Title : Drug Management and Policy in Primary Health Care
Lecturer : Dr. Erna Kristin, M.Si., Apt.

Department : Pharmacology and Therapy
Duration : 1 hour
Content : Most leading causes of death and disability in developing countries can be prevented, treated, or at least alleviated with cost-effective essential drugs. Despite this fact, hundreds of millions of people do not have regular access to essential drugs. Many of those who do have access are given the wrong treatment, receive too little medicine for their illness, or do not use the drug correctly.*Managing Drug* Supply is concerned with practical ways to ensure that high-quality essential drugs are available, affordable, and used rationally. Drugs are of particular importance because they can save lives and improve health, and they promote trust and participation in health services. They are costly, and there are special concerns that make drugs different from other consumer products. In addition, substantive improvements in the supply and use of drugs are possible.National drug policy provides a sound foundation for managing drug supply.Wise drug selection underlies all other improvements. Effective management saves money and improves performance.
Reference :Quick, J. D. (1997). *Managing drug supply: the selection, procurement, distribution, and use of pharmaceuticals* (Vol. 2): Kumarian Press (West Hartford, Conn., USA).

Guest Lecture of Week 2

Topic :Diagnostic Related Groups
Department : Ministry of Health
Duration : 1 hours

Skills Laboratory of Week 2

Topic : Critical Care
Duration : 2 hours

Practical Session of Week 2

Topic : Clinical audit and Quality Tools
Coordinator : Prof. dr. Adi Utarini, M.Sc, MPH, Ph.D
Department : Public Health, Obstetrics and Gynecology, CEBU, Centre for Health Service Management
Duration : 4 hours

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Panel Discussion of Week 2

Topic	: Physician Economics Behavior, Health Insurance, Managed Care and Quality
Moderator	: Block Coordinator Team
Panelist	: Dr. drg. Yulita Hendartini, M.Kes Head of PT Askes Indonesia Cabang DIY
Department	: Faculty of Dentistry , Gadjah Mada University PT Askes Indonesia Yogyakarta Branch
Duration	: 2 hours

Allocated Time Activities of Week 2

Tutorial	:	4 hours
Lecture	:	6 hours
Guest Lecture	:	1 hour
Skills lab	:	2 hours
Practical session	:	4 hours
Panel Discussion	:	2 hours
Total	**:**	**19 hours**

WEEK 3
MODULE 1: HEALTH SYSTEM
LEARNING UNIT 3: SURVEILLANCE AND INFORMATICS

Learning Objectives of Week 3

No	Learning Objectives	TUT	LEC	PRA	SL
1	Explain the surveillance system and the role of physician in pandemic preparedness.	v	v		
2	Explain emerging and Reemerging Diseases.	v	v		
3	Explain management of Infection prevention.	v	v	v	
4	Explain the potential outbreaks in Indonesia and region.	v	v		
5	Explain changing global health in changing society (environmental medicine and global health).	v	v		
6	Manage integrated patients and medical record.				v

TUT : Tutorial
LEC : Lecture
PRA : Practical Session
SL : Skills Lab

Scenario of Week 3

Pandemic Preparedness

A 40-year-old poultry worker came to hospital with sore throat and a headache. The sore throat stated about three days ago, accompanied with headache, coughing, myalgia and nasal discharge. He never has any contact with pig farm. History indicating immune-compromised person was not found. He had suffered from this flue like symptoms many times before, but this time it is worse. On physical examination, the following were found: body temperature 40^{o}C, minor cervical adenopathy, and signs of pneumonia. Blood test found slight neutrophilia and lymphopenia. Chest radiograph shows diffuse infiltrate on the middle and lower of bilateral. Viral examination is being carried out, but the result has not been obtained.

As a doctor who taking care this patient, you realized that he probably suffered from a serious viral infectious disease and may spread out to the community. You decide to report to the municipal health agency. The agency then performs an outbreak and pandemic preparedness measures. This action was performed since WHO has already declares several emerging and reemerging viral diseases occur because of genetic evolution of viruses.

Keywords

Sore throat – headache - immunocompromised patient - cervical adenopathy - cervical adenopathy

Difficult Terms (answer to Step 1):

1. Sore throat: pain in the throat. Sore throat may be caused by many different causes, including inflammation of the larynx, pharynx, or tonsils.
2. Headache: a pain in the head with the pain being above the eyes or the ears, behind the head (occipital), or in the back of the upper neck. Headache, like chest pain or backache, has many causes.
3. Immunocompromised patient: people whose immune system is not functioning normally because of an immunodeficiency disorder or other disease, or as the result of the administration of immunosuppressive drugs or radiation.
4. Cervical adenopathy: enlargement of the cervical lymph nodes, which are located on both sides of the neck.
5. Neutrophilia (or neutrophil leukocytosis): a condition where a person has a high number of neutrophil granulocytes in their blood.
6. Limphopenia: a condition in which the number of lymphocytes falls below normal levels.

Possible questions or problems (answer to Step 2)

1. Explain the clinical appearance of influenza syndrome!
2. How are the characteristics of influenzas viruses?
3. What is the subtype diversity of influenzas viruses?
4. What is the meaning of genetic drift of influenzas viruses?
5. Explain about genetic shift of influenzas viruses!
6. How is the effect of genetic shift on clinical manifestation?
7. What are laboratory tests for influenzas syndrome?
8. How is the management of influenza?
9. How to prevent the spread of influenza virus infection?
10. What kinds of actions are included into pandemic preparedness measure?
11. What are the definitions of emerging and reemerging diseases?
12. Describe the pandemic preparedness management in Indonesia?

Concepts and theories to be learnt through the scenario (answer to Step 3-7)

1. Emerging and reemerging diseases
2. Surveillance system, outbreak and pandemic preparedness
3. Virology of influenza virus
4. Antigen drift and antigen shift
5. Diagnosis and management of avian influenza infection

Lectures of Week 3

1. Title : Surveillance, Response, and The Role of Health Informatics
   Lecturer : dr. Lutfan Lazuardi, Ph. D
   Department : Public Health
   Duration : 1 hour
   Content :This topic covers the definition of surveillance, public health surveillance including terms used in surveillance and the role of information technology on surveillance system. Students are expected to understand the purpose and the use of surveillance, as well as its application in public health action and assuring public health preparedness.
   References : Castillo-Salgado C. (2010). Trends and directions of global public health surveillance. *Epidemiol Rev* Apr;32(1):93-109. (Can be downloaded from http://epirev.oxfordjournals.org/content/32/1/93.full)

   DCPP. (2008). Public Health Surveillance. The Best Weapon to Avert Epidemics. Disease Control Priority Project. May (Can be downloaded from http://www.dcp2.org/file/153/dcpp-surveillance.pdf)

   WHO . (2004). Overview of the WHO framework for monitoring and evaluating surveillance and response systems for communicable diseases. *Wkly. Epidemiol. Rec.* .79:322-326 (Can be downloaded fromhttp://www.who.int/entity/wer/2004/en/wer7936.pdf)

2. Title : Communicable Disease Surveillance: TB, Malaria
   Lecturer : dr. Yodi Mahendradhata, M.Sc, Ph.D
   Department : Public Health
   Duration : 1 hour
   Content :This topic discusses malaria and tuberculosis surveillance. It includes the operational definition, the purpose, and components of malaria and tuberculosis surveillance. Further discussion covers the policy and the activities in TB and malaria surveillance. Specifically for tuberculosis, main causes are discussed, as well as TB risk factor, way of transmission, disease classification and patient types, and the laboratory management in tuberculosis.

   References :PAHO. (2000). An integrated approach to Communicable Disease Surveillance. *Epidemiological Bulletin* Vol. 21 No. 1 (Can be downloaded from http://www.paho.org/english/dd/ais/EB_v21n1.pdf)

   WHO. WHO TB Epidemiology and Surveillance Virtual Workshop (available at http://apps.who.int/tb/surveillanceworkshop/)

3. Title : Non-Communicable Disease Surveillance: Traffic Accident and Cardiovascular
   Lecturer : Prof. dr. Hari Kusnanto Josep, SU., Dr. PH
   Department : Public Health
   Duration : 1 hour
   Content :The STEPwise approach is a standardized strategy for non-communicable disease surveillance, which will be the main topic of this lecture. Non-communicable disease surveillance covers the definition, causes, and types of injuries based on the number of global deaths. Topics that are also discussed are the definitions of injury control and prevention, as well as the models of injury control. Additionally, this lecture will discuss the link between environmental risk factor and life style changes to various non-communicable diseases such as diabetes mellitus, hypertension and heart disease. The efforts to control and prevent these diseases through ten methods for limiting physical energy transfer, and the behaviors that contribute to wellness will also be discussed.
   References :Probst-Hensch, N., Tanner, M., Kessler, C., Burri, C., & K¸nzli, N. (2011). Prevention-a cost-effective way to fight the non-communicable disease epidemic. *Swiss medical weekly, 141*.

   WHO. Non-communicable Disease Surveillance. (available at http://www.who.int/ncd_surveillance/en/)

4. Title : Environmental Medicine and Global Health
   Lecturer : Prof. dr. Hari Kusnanto Josep, SU., DR. PH
   Department : Public Health
   Duration : 1 hour
   Content :Environmental health addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviors. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments. This lecture will discuss numerous scientific evidences of the influence of environment to our health and the efforts to prevent the disease through healthy environments.

   Reference :Pruss-Ustun, & Corvalan, C. (2006). *Preventing disease through healthy environments: Towards an estimate of the environmental burden of disease*. Geneva: World Health Organization. (Can be downloaded from http://www.who.int/quantifying_ehimpacts/publications/preventingdisease.pdf)

5. Title : New Emerging Diseases: Corona Virus/Avian Influenza, SARS
   Lecturer : dr. Titik Nuryastuti, M. Si., Ph. D
   Department : Microbiology
   Duration : 1 hour
   Content : Clarifies the definition of emerging viruses and emerging disease, evolution and mechanisms of emerging viruses / disease, difference in viral DNA and RNA viruses in evolution, describes examples of emerging disease: infection of avian influenza, swine influenza, and SARS, including: the structure and characteristics each virus, antigenic shift and drift, the mechanism of occurrence of new virus variants, pathogenesis, laboratory tests for diagnosis, and therapy management.
   References : Carter, J. B., & Saunders, V. A. (2007). *Virology: principles and applications*: Wiley.

   Gillespie, S. H., Bamford, K. B., & Gillespie, J. P. (2000). *Medical microbiology and infection at a glance*: Blackwell Science.

   Murray, P., Baron, E., Jorgensen, J., & Landry, M. (2007). and Pfaller, MA,. Manual of Clinical

Microbiology: ASM Press: Washington, DC.

6. Title : Microbiological Aspect of Traveler Medicine
   Lecturer : dr. Tri Wibawa, Ph. D
   Department : Microbiology
   Duration : 1 hour
   Content :This lecture will include the microbiological aspect of traveler medicine, which covers the following issues: International travels; Travel-related risks; Travelers with pre-existing medical conditions and special needs; Modes of transmission and general precautions; Vaccine/chemoprophylaxis prevented diseases; Vaccine for travelers; Vaccine/chemoprophylaxis un-prevented diseases; etiology and risk for traveler of specific diseases such as: traveler diarrhea, hepatitis A, typhoid fever, poliomyelitis, Japanese Encephalitis, Sexually transmitted infection, diphtheria, rabies, and rickettsia.
   References : WHO. (2009). *International Travel and Health: Situations as on 1 January 2009*. International Health Regulations Secretariat on Communicable Diseases. Geneva, World Health Organization.

7. Title : Nosocomial Infections
   Lecturer : dr. M. Mustofa, SU, Sp. MK(K) (Regular)
   dr. Hera Nirwati, M. Kes (International)
   Department : Microbiology
   Duration : 1 hour
   Content : Nosocomial infections are infections acquired during hospital care,which are not present or incubating at admission. Infection occurring morethan 48 hours after admission are usually considered nosocomial. Definitions to identify nosocomial infections have been developed for specific infection sites. Nosocomial infections may also be considered either endemic or epidemic. Endemic infections are most common. Epidemic infection occur during outbreaks, defined as an increase above the baseline of a specific infection or infecting organism. Factors influencing the development of nosocomial infection; the microbial agent, patient susceptibility, environmental factors, bacterial resistance. Sites of the most common nosocomial infection; urinary infection, surgical site infection, and nosocomial pneumonia.
   References : Murray, P., Baron, E., Jorgensen, J., & Landry, M. (2007). and Pfaller, MA,. Manual of Clinical Microbiology: ASM Press: Washington, DC. p118-128

8. Title : Vector Control during Outbreak of Parasitic Diseases
   Lecturer : dr. Tri Baskoro Tunggul S, M.Sc, Ph.D
   Department : Parasitology
   Duration : 1 hour
   Content : To describe the public health importance of vector-borne diseases among displaced population, characteristics of the major vectors commonly encountered in humanitarian emergencies, defining the safe use of pesticides, and describing the methods used to monitor and evaluate vector control programs.
   References : Project, S. (2003). *Sphere Project Training Package: Humanitarian Charter and Minimum Standards in Disaster Response*: Oxfam.

   Thomson, C.M. (1995). Disease Prevention Through Vectors Control. Guidelines for Relief Organization Oxfan. Publishing Oxford.

Chavasse, D., & Yap, H. (1997). Chemical methods for the control of vectors and pests of public health importance. *Chemical methods for the control of vectors and pests of public health importance.*

The John Hopkins and IFRC Public Health Guide for Emergencies.

9. Title : HIV/AIDS Infection
   Lecturer : dr. Satiti Retno P, Sp.KK(K) (Regular)
   dr. Sunardi Radiono, Sp. KK(K) (International)
   Department : Dermato-Venerology
   Duration : 1 hour
   Content : This lecture presents the impact of AIDS epidemic in Indonesia and its management. The number of HIV/AIDS in a certain population and region increased after Implementation of nations wide program in a certain periods of time. The main problems in handling HIV AIDS are: the failure to stop transmission, the failure to promote/socialize the preventive program, the failure to support the program, and the failure to treat the disease.

   References : Dallabetta, G., & Neilsen, G. (2008). Prevention and Control of STD and HIV Infection in Developing Countries. In K. Holmes, P. Sparling, W. Stamm, P. Piot, J. Wasserheit, L. Corey, M. Cohen & D. Watts (Eds.), *Sexually Transmitted Diseases* (4th ed., pp. 1957-1976). New York: McGraw-Hill Medical.

Indonesia National HIV/AIDS Strategy. (can be downloaded from: http://www.undp.or.id)

Komisi Penanggulangan AIDS. (2010). Strategi Nasional Penanggulangan HIV dan AIDS 2007-2010. (can be downloaded from: http://www.undp.or.id)

Skills Laboratory of Week 3

Topic : Integrated Patient Management & Medical Record Skills
Duration : 2 hours

Practical Session of Week 3

Topic : Antiseptic Activity Examination
Coordinator : dr. Hera Nirwati, M. Kes
Department : Microbiology
Duration : 2 hours

Topic : Phenol Coefficient
Coordinator : dr. Hera Nirwati, M. Kes
Department : Microbiology
Duration : 2 hours

Allocated Time Activities of Week 3

Tutorial	:	4 hours
Lecture	:	9 hours
Skills lab	:	2 hours
Practical session	:	4 hours
Total	**:**	**19 hours**

WEEK 4
MODULE 1: HEALTH SYSTEM
LEARNING UNIT 4: LEADERSHIP AND COMMUNICATION

Learning Objectives of Week 4

No	Learning Objectives	TUT	LEC	PRA	SL	PD
1	Explain the role of physician as a member of organization, society and citizen.	v	v			v
2	Explain & discuss the important of communication skills with other team members, institutions and communities when identifying problems, making analysis, and planning for required action.	v	v	v		v
3	Explain the natural position of physician as a leader in his/her unit and jobs.	v	v			v
4	Perform principles of leadership and managerial skills in order to handle health problems in the community.	v	v	v		v
5	Perform clinical skills in Integrated Patient Management.				v	
6	Perform Community & Colleague Interpersonal Relations.					

TUT : Tutorial
LEC : Lecture
PRA : Practical Session
SL : Skills Lab
PD : Panel Discussion

Scenario of Week 4

Poor Team-Working in Health Care Personnel

Mr. Sukirman, a 60-year-old patient with diabetes came for a visit to the local primary health care center (PHC). When he arrived, there was already a long queue of patients waiting to see the doctor. He was registered by the receptionist and told that he was patient number 83. After waiting for a couple hours, the nurse called his number and asked him to enter the clinic. The general practitioner on duty was Dr. Jati, a recent graduate of a nearby medical school. It was Dr. Jati's first day working at the PHC.

Dr. Jati noted that Mr Sukirman's chief complaint was an acutely painful shoulder and he had been diagnosed with diabetes since five years before. After evaluating the shoulder pain and prescribing medication, Dr Jati realized that there are still many patients waiting and he has yet to assess diabetic control. Having search fruitlessly though Mr Sukirman's medical record to find previous eye examination results, glycosylated hemoglobin (HbA_{1c}) and lipid levels, Dr. Jati gave up in frustration and asked Mr Sukirman to return in the following week to manage his diabetes.

After examining all the remaining patients, Dr Jati asked the clinic nurse on how diabetic patients are usually managed in this PHC. The clinic nurse replied that they have been managed like any other patients: based on brief acute episodic visit. There was no specific up-to-date guideline from the ministry of health regarding chronic diseases management yet. The nurse also mentioned that indeed there were more and more patients with diabetes or other chronic conditions seen at the clinic in the past few years.

Dr Jati realized that his years in this health centerwould be a nightmare if things stay the way it is. He would see more and more patients with poor chronic conditions despite their visits to the health center. Something definitely needs to be handled urgently.

Keywords

Primary health care - chronic disease management - episodic visit – guideline - task Shifting - leadership

Difficult Terms (answer to Step 1):

1. Primary health care
2. Chronic disease management
3. Episodic visit
4. Guideline
5. Staff Management - Task Shifting – Leadership

Possible questions or problems (answer to Step 2)

1. What is primary health care?
2. What are the functions of a primary health care center?
3. What role do doctors play in primary health care center?
4. How to manage chronic conditions in primary health care settings?
5. Who needs to be involved in primary care management of chronic conditions
6. How to distribute tasks within teams for primary care management of chronic conditions?
7. What role do doctors play in primary care management of chronic conditions?

8. How can doctors effectively lead a team for primary care management of chronic conditions?
9. How can doctors mobilize resources to support implementation of an effective primary care management system for chronic conditions?

Concepts and theories to be learnt through the scenario (answer to Step 3-7)

1. Chronic disease management
2. Primary health care
3. Community-based interventions and multiple profession principles
4. Community participation and Community mobilization
5. Health service and work design
6. Leadership
7. Team Work and Task Shifting

Lectures of Week 4

1. Title : Coordinating Multi professions and Stakeholders; The Case of MDGs

Lecturer : Prof. dr. Laksono Trisnantoro, M. Sc., Ph. D
dr. Ova Emilia, Sp. OG, M.M.Ed, PhD
dr. Mei Neni Sitaresmi, Sp.A, PhD

Department : Public Health, Obstetric and Gynecology, and Pediatrics.

Duration : 1.5 hour

Content : This lecture provides the meaning of multi-profession and inter-profession principles in the health systems. These principles will be described through the case of maternal and child health program as stated in Millennium Development Goals (MDGs) 4 and 5. The description of multi-profession will be taken from educational to the real work situation. A critical analysis on the training and education system that is not yet planned using multi-profession and inter-profession approach will be discussed. In line with this topic a deeper understanding of stakeholders in health system will be described as well. The stakeholders reflect the actors and organizations in MNCH services. Therefore this lecture consists of: the current maternal and child health program in Indonesia; the objective of MNCH program in terms of MDG4 and MDG5; the stakeholders and MNCH network; the multi-profession and inter-profession principles and application; and the case study in Gadjah Mada Medical School.

References : WHO. (2009). *Task shifting: Rational redistribution of tasks among health workforce teams: Global recommendations and guidelines*. Geneva: World Health Organization.

WHO. (2010). *Framework for action on inter-professional education & collaborative practice*. Geneva: Department of Human Resources for Health, World Health Organization.

Learning resources: www.kesehatan-ibuanak.net

2. Title : Leadership and Team Work

Lecturer : Prof. dr. Budi Mulyono, Sp. PK(K)
Department : Clinical Pathology
Duration : 1 hour
Content : This topic is concerned with leadership and teamwork in health management. In this leadership characteristics, this lecture will explain that health care leaders should have: (1) a strong commitment to excellent service and communicate it through words and deeds - clearly and consistently to those inside and outside the organization; (2) creating and sustaining the organizational culture and convincing their employees to believe in that culture as well; and (3) motivate people develop their talents, provide them with proper resources, and reward them when they succeed. These leadership characteristics relate to the existence of team work culture in the health care organizations whether in primary, secondary, tertiary care, and also its referral system.
References :Grumbach, K., & Bodenheimer, T. (2004). Can health care teams improve primary care practice? *JAMA: the journal of the American Medical Association, 291*(10), 1246.

Yuki, G. (2010). *Leadership in Organization* (7th ed.). Boston: Pearson.

3. Title : Motivation

Lecturer : dr. Andreasta Meliala, DPH, M. Kes., MAS
Department : Public Health
Duration : 1 hour
Content : Motivating human resource to improve performance is the major concern of managing people within the healthcare organization. Motivation refers to the driving forces that determine the direction and strength of goal-oriented behavior. The mission of organization has to be aligned with the interest of human resource working in it. Therefore motivation of human resource to conduct goal-oriented behavior is the first capital of organization to accomplish its missions. This lecture will explain the theory and concept of motivation, which have been developed since years. Particularly in the healthcare organization, theory and concept of motivation have been widely discussed, to find the most appropriate one to be applied in this complex organization. To identify several motivation theories and concepts, as well as to explore the utilization of motivation concept to improve performance, are the aim of this section.
References : Kreitner, R., Kinicki, A., & Buelens, M. (2001). Organizational Behaviour. McGraw Hill.

Steers, R. M., Porter, L. W., & Bigley, G. A. (1996). *Motivation and leadership at work*: McGraw-Hill New York.

4. Title : Doctor and Community Participation and Mobilization

Lecturer : dr. Fatwa Sari Tetra Dewi, MPH atau Supriyati, S.Sos, M. Kes
Department : Public Health
Duration : 1 hour
Content : As a disaster progresses to later phase, recovery processes take place. During the recovery phase, preventive measures are principalin maintaining the health and to care for the victims and disabled patients in order to ensure positivewell being and productive life.
Preventive efforts are focused to activities that can be regulated by policies or laws, such as the obligation to wear safety helmet, as well as to activities that cannot be regulated because of its nature as an individual choice, such as teeth brushing before going to bed at night. These preventive measures will be more effective if executed at the community level, due to the strong environmental influence to individual behaviors. Hence, there is a need for a strong cooperation from the targeted community in implementing healthy life style so that they would be prevented from developing diseases.
In order to achieve this, we need the skills of community participation and mobilization, which include:

a. The skill in analyzing the needs of the community and to integrate them with health system goals
b. The skill to gain trust from the community, raise awareness and organize the community
c. The skill to cooperate with peers, other programs and sectors in meeting the growing needs of the community.

Referece : Bartle, P., & Mbulamuko, L. (2003). Hand Book for Mobilizers.

Flaman, L. M., Nykiforuk, C. I. J., Plotnikoff, R. C., & Raine, K. (2010). Exploring facilitators and barriers to individual and organizational level capacity building: outcomes of participation in a community priority setting workshop. *Global health promotion, 17*(2), 34.

Kelly, C. S., Meurer, J. R., Lachance, L. L., Taylor-Fishwick, J. C., Geng, X., & Arabìa, C. (2006). Engaging health care providers in coalition activities. *Health Promotion Practice, 7*(2 suppl), 66S.

Meheux, K., Dominey-Howes, D., & Lloyd, K. (2010). Operational challenges to community participation in post-disaster damage assessments: observations from Fiji Macquarie University ResearchOnline.

Guest Lecture of Week 4

Topic : Communication in Working Place
Department : PKU Muhammadiyah Yogyakarta Hospital
Duration : 1 hours

Topic : Hospital Law & Health Law

Department : Ministry of Health
Duration : 1 hours

Skills Laboratory of Week 4

Topic : Integrated Patient Management & Medical Record Skills
Duration : 2 hour

Practical Session of Week 4

Topic : Interpersonal Communication and Advocacy
Coordinator : dr. Andreasta Meliala, DPH, M. Kes., MAS
Department : Public Health
Duration : 2 hours

Panel Discussion Week 4

Topic : Doctor and Nurse Collaboration in Home Care and Chronic Diseases
Moderator : Supriyati, S. Sos
Panelists : Akhmadi, S. Kp., M. Kes., Sp. Kom.
Purwanta, S.Kp, M.Kes
dr. Probosuseno, Sp. PD-KGER
Department : School of Nursing, Internal Medicine, Health and Nutrition
Duration : 2 hours

Topic : Health Centre Management System
Moderator : Block Team Coordinator
Panelists : Head of Sleman Health District
Head of Gondokusuman Public Health Care
Department : Sleman Health District & Gondokusuman Public Health Centre
Duration : 2 hours

Allocated Time Activities of Week 4

Tutorial	:	4 hours
Lecture	:	5 hours
Guest Lecture	:	2 hours
Skills Lab	:	2 hours
Practical Session	:	2 hours
Panel Discussion	:	4 hours
Total	**:**	**19 hours**

WEEK 5

MODULE 2: DISASTER MANAGEMENT

LEARNING UNIT 5: HEALTH PROGRAM IN DISASTER AND QUALITY IN INTERVENTION

Learning Objectives of Week 5

No	Learning Objectives	TUT	LEC	PRA	SL	PD
1	Explain preparedness, response and recovery in disaster management.	v	v			v
2	Explain coordination Hospital Incident Command System.	v	v	v		v
3	Explain medical team support - Rapid Response Team - Field Hospital.	v	v	v		v
4	Explain & practice logistics - Support Management	v	v	v		v
5	Explain prevention of mental problems in and spread of infectious disease.	v	v			
6	Explain comprehensive management of disaster including surveillance, rehabilitation, palliative care, ethics, blood banking.	v	v			v
7	Perform triage (simulation) during disaster.				v	

TUT : Tutorial
LEC : Lecture
PRA : Practical Session
SL : Skills Lab
PD : Panel Discussion

Scenario of Week 5

Earthquake in Yogyakarta (Natural Disaster)

On Saturday, May 26, 2006, 6 a.m., an enormous earthquake occurred with 6 RS with its epicenter was 30 km from Jogjakarta city. Sardjito Hospital received its first victim at 6.45 A.M. The victim is a motorcycle rider who fell down due to the earthquake. Following this patient continuously until 4 P.M more than 2000 victims crowded the hospital, while the normal hospital capacity only to receive 700 patients. The exceeding number of victims caused difficulty in conducting triage. At that time, the hospital was in preparation to treat victims from Merapi volcanic eruption, which was thought about to erupt. Without proper preparedness and contingency plan, Sardjito Hospital was chaotic, no coordination in sight, thus treatments were not optimal. The lack of preparation was partly solved by individual networking among medical professionals, but there were many problems with effects still remaining till recovery period.

Keywords

Preparedness - contingency plan – coordination - triage - treatment - networking

Difficult Terms (answer to Step 1):

1. Contingency plan
2. Triage
3. Chaotic

Possible questions or problems (answer to Step 2)

1. How is the proper preparedness?
2. Who makes contingency plan?
3. Who is in charge to coordinate hospital activity in disaster condition?
4. How to perform triage in the above condition?
5. How to ensure optimal treatment in the overloaded number of patients?
6. Is networking always needed or the hospital itself that should be able to overcome the disaster condition?
7. What should be done to follow up disaster victim patients?
8. How to handle posttraumatic disorder syndromes?

Concepts and theories to be learnt through the scenario (answer to Step 3-7)

a. Bio-mechanism of trauma
b. Tissue conservation
c. Multi organs dysfunction and multi organs failure
d. Diagnostic test
e. Supportive treatment

Lectures of Week 5

1. Title : Conceptual Framework of Disaster and Disaster Management

Lecturer : dr. Hendro Wartatmo, Sp. B-KBD
Department : Surgery
Duration : 1 hour
Content : A disaster is the product of a hazard such as earthquake, flood or windstorm coinciding with a vulnerable situation which might include communities, cities or villages. There are two main components in this definition: hazard and vulnerability. Without vulnerability or hazard there is no disaster. A disaster occurs when hazards and vulnerability meet. Disaster defined as sudden ecological phenomenon of sufficient magnitude to require external assistance (WHO). American college of emergency physicians defined that destructive effect of natural or manmade force overwhelms the ability of given area or community to meet the demand for health care. Disaster Management is the aggregate of all measures taken to reduce the likelihood of damage that will occur related to hazard(s) and to minimize the damage once an event is occurring or has occurred and to direct recovery from the damage and the body of policy and administrative decisions and operational activities that pertain to the various stages of a disaster at all levels.

References : Arya, Anar, S., et al. (2008). Hazard, Disaster, and Your Community. In National Management Division. Government of India Ministry of Home Affairs.

Departemen Kesehatan RI. (2002b). Kebijakan dan Strategi Nasional 3: Penanggulangan Masalah Kesehatan Kedaruratan dan Bencana. Jakarta.

Pan American Health Organization. (2006). Bencana Alam Perlindungan Kesehatan Masyarakat, terjemahan. Jakarta: EGC.

2.Title : Preparedness, response, and recovery
Lecturer : dr. Handoyo-Pramusinto SpBS
Department : Rapid Response Team
Duration : 1 hour
Content : Disaster management can be defined as the body of policy and administrative decisions and operational activities, which pertain to the various stages of a disaster at all levels. In this lecture, disaster management will be presented into pre-disaster and post-disaster contexts. *1.Pre-disaster,*risk reduction activities are taken under this stage and they are termed as mitigation (embraces all measures taken to reduce both the effect of the hazard itself and the vulnerable conditions to it in order to reduce the scale of a future disaster) and preparedness. This protective process embraces measures, which enable the governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes the formulation of viable emergency plans, the development of warningsystems, the maintenance of inventories and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be at risk from a recurring disaster. *2. Disaster.* Activities takenunder this stage are called as *emergency response,3. Post-disaster*, Activities taken under this stage are called *recovery activities*.

References :Arya, Anar, S., et al. (2008). Hazard, Disaster, and Your Community. In National Management Division. Government of India Ministry of Home Affairs.

Departemen Kesehatan RI. (2002b). Kebijakan dan Strategi Nasional 3: Penanggulangan Masalah Kesehatan Kedaruratan dan Bencana. Jakarta.

Pan American Health Organization. (2006). Bencana Alam Perlindungan Kesehatan Masyarakat, terjemahan. Jakarta: EGC.

Learning resources: www.bencana-kesehatan.net

3. Title : Hospital Incident Command System and Field Hospital
   Lecturer : dr. Hendro Wartatmo, Sp. B-KBD
   Department : Surgery
   Duration : 1 hour
   Content : This lecture describes The Incident Command System (ICS) a standardized, on-scene, all-hazards incident management approach that: (1) Allows for the integration of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure; (2) Enables a coordinated response among various jurisdictions and functional agencies, both public and private; (3). Establishes common processes for planning and managing resources. ICS is flexible and can be used for incidents of any type, scope, and complexity. ICS allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents. ICS is used by all levels of the government—Federal, State, tribal, and local—as well as by many nongovernmental organizations and the private sector. ICS is also applicable across disciplines. It is typically structured to facilitate activities in five major functional areas: Command, Operations, Planning, Logistics, and Finance/Administration. (Federal Emergency Management Agency, 2007).

   References : Ballay, C. (2006). *Hospital Incident Command System Guidebook*. California: Emergency Medical Services Authority.

Federal Emergency Management Agency. (2007). Incident Command System, National Incident Management System.

WHO-PAHO. (2003). Guidelines for the use of foreign field hospitals in the aftermath of sudden-impact disasters. Geneva, World Health Organization.

4. Title : Logistic Management Support
   Lecturer : dr. Sulanto Saleh-Danu, Sp. FK
   Department : Pharmacology and Therapy
   Duration : 1 hour
   Content : For the Health Institution (Health Office – Province/District/ Health Care; Hospitals) to respond effectively to the demands associated with disaster support requirements will be coordinated by the Logistic Section. Each resource request from an area in field or hospital should be reported to Logistic Section using pre identified ordering procedures outlined in the Emergency Operations Plan (EOP). It is important for the field/hospital to know how the request is made (letter / electronically / fax / phone / others). The Logistics Section, depends on the work load and as situation warrants, can be divided into two branches: The Services Branches will be responsible for supporting communication, IT/IS resources need, and food/water services for staff. The Support Branches will be responsible for coordinating resources needs for employee health and behavioral/mental health, family care, acquiring needed supplies, supporting infrastructure operations, coordinating transportation internal and external and acquiring and credentialing additional personal. When activated each sub branches or units would have a leader providing command and control.
   References : Ballay, C. (2006). Hospital Incident Command System Guidebook: Emergency Medical Services Authority, California.

Departemen Kesehatan RI. (2002b). Kebijakan dan Strategi Nasional: Penanggulangan Masalah Kesehatan Kedaruratan dan Bencana. Jakarta.

5. Title : Post Traumatic Stress Disorders Management
Lecturer : dr. Bambang Hasta Yoga, Sp. KJ
Department : Psychiatrics
Duration : 1 hour
Content :In disaster, Post Traumatic Stress Disorder is frequently found. This topic introduces the physiology of stress, its risk factors, symptoms, and recovery processes. Students will have knowledge on PTSD triage and management in routine primary care, as well as coordination and the follow up principles for PTSD patients.
References :Nemeroff, C. B., Bremner, J. D., Foa, E. B., Mayberg, H. S., North, C. S., & Stein, M. B. (2009). Posttraumatic Stress Disorder: A State-of-the-Science Review. *Focus, 7*(2), 254.

Ursano, R. J., Bell, C., Eth, S., Friedman, M., Norwood, A., Pfefferbaum, B., et al. (2010). Treatment of Patients With Acute Stress Disorder and Posttraumatic Stress Disorder.

6. Title : Rehabilitation and Palliative Care
Lecturer : Sri Setiyarini, S. Kp., M. Kes
Department : School of Nursing
Duration : 1 hour
Content : This lecture cover issues of rehabilitation in disaster; definition and timing of rehabilitation phase at disaster, stages of rehabilitation in disaster, main activities at disaster rehabilitation, andthe advantages of disaster rehabilitation. For many victims, palliative care is unavoidable. Therefore various aspects of palliative care in disaster will be presented such as: definition & application of palliative treatment, palliative treatment at disaster; palliative triage in disaster, role and function of thedisaster team, actual issues related disaster palliative treatment, and challenges at management of disaster palliative treatment.
References :Bogucki, S., & Jubanyik, K. (2009). Triage, rationing, and palliative care in disaster planning. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science, 7*(2), 221-224.

Kim, D. H., Proctor, P. W., & Amos, L. K. (2002). Disaster Management and the Emergency Department:: A Framework for Planning. *Nursing Clinics of North America, 37*(1), 171-188.

Lechat, M. F. (1990). The public health dimensions of disasters. *International Journal of Mental Health, 19*(1), 70-79.

Matzo, M., Wilkinson, A., Lynn, J., Gatto, M., & Phillips, S. (2009). Palliative care considerations in mass casualty events with scarce resources. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science, 7* (2), 199-210.

United Nations Development Programme. (2010). Guidelines post-disaster Recovery.

Veenema, T. G. (2007). *Disaster nursing and emergency preparedness: for chemical, biological, and radiological terrorism and other hazards*: Springer Publishing Company.

7. Title : Ethics in Disaster
Lecturer : Prof. Dr. dr. Soenarto Sastrowijoto, Sp. THT
Department : ENT & Bioethics

Duration : 1 hour

Content :This topic covers the definition and types of disaster, and discusses the branches of medical science that are related to disaster. This topic also includes medical ethics and the possible ethical issues in disaster management. The topic introduces the new approach to the ethical dilemma found in emergency situations. Students will have the knowledge about their role as a physician in disaster setting as well as the ethical approach in emergency/disaster situation.

References : Iserson, K. V., Sanders, A. B., & Mathieu, D. (1995). *Ethics in emergency medicine*: Galen Pr Ltd, Tucson (page 7-10 and 39-47).

Learning resources:
http://www.humanitarianinfo.org/imtoolbox/10_Reference/Humanitarian_General/1997_Disaster_Management_Ethics_UNDMT.pdf

8. Title : Disaster Blood Banking

Lecturer : dr. Teguh Triyono, Sp. PK(K), M. Kes

Department : Clinical Pathology

Duration : 1 hour

Content : In disaster, blood-banking system is an important aspect. This lecture provides knowledge on the aspects of donation process; medical examination of donors, collection of donor blood, determination of ABO and Rhesus D, infectious diseases screening, processing the blood, storage, and distribution of blood components. A common question: What would you do if there were a shortage in the blood supply? This question will be discussed in this lecture. The blood shortages may result from a disaster, the goal is to ensure secure access to safe blood components for patients who are most in need of them in times critically low inventory levels. Students will be informed about the guide for restriction of blood use; reduce inventory held on site by 50% or more, follow strict protocol for acceptable ordering, reduce dosage per treatment where possible, review of elective surgical list for possible deferral, restrict blood usage to life threatening situation. Transfer of blood between sites; develop relationships with other nearby facilities, develop plan for transferring products between sites, redistribution plans may already be in development. In summary blood bank disaster plan consists of: what fluids to use, from where are they to be obtained, to what degree are they to be tested, how will they be transported, and how will they be stored

References : AABB. (2003). *Disaster Operations Handbook.*

AABB. (2005).*Technical Manual*. 15th Ed.

Tabatabaie, M., Ardalan, A., Abolghasemi, H., Holakouie, N. K., Pourmalek, F., Ahmadi, B., et al. (2010). Estimating blood transfusion requirements in preparation for a major earthquake: the Tehran, Iran study. *Prehosp. Disaster Med, 25*, 246-252.

Guest Lecture of Week 5

Topic : Social Mobilization and Education

Department : Indonesian Red Cross

Duration : 1 hours

Skills Laboratory of Week 5

Topic : Triage (Simulation)

Duration : 2 hour

Practical Session of Week 5

Topic	: Medical Logistic for Disaster
Department	: Rapid Response Team (dr. Sulanto Saleh Danu,Sp.FK)
Duration	: 2 hours

Panel Discussion of Week 5

Topic	: Multi-professional Team in Disaster Management Moderator
Moderator	: dr. Mubasysyr Hasan Basri, MA
Panelis	: dr. Belladonna, M. Kes
	Sutono, S. Kp
	Toto Sudargo, SKM., M. Kes
Department	: GP, School of Nursing, & Nutritionist
Duration	: 2 hours

Allocated Time Activities of Week 5

Tutorial	:	4 hours
Lecture	:	8 hours
Guest Lecture	:	1 hour
Skills Lab	:	2 hours
Practical session	:	2 hours
Panel Discussion	:	2 hours
Total	**:**	**19 hours**

WEEK 6

MODULE 2: DISASTER MANAGEMENT

LEARNING UNIT 6: PRINCIPLES OF DISASTER MANAGEMENT

Learning Objectives of Week 6

No	Learning Objectives	TUT	LEC	PRA	SL	PD
1	Explain The principles of disaster management.	v	v			
2	Explain the role of doctor at clinical emergency during disaster condition in a correct and ethical manner.	v	v			
3	Explain principle of forensic anthropological identification: race, sex, age, stature.	v	v	v		v
4	Explain principle of Interpol ante mortem vs. post-mortem forms.		v	v	v	
5	Explain social mobilization and education in disaster management.	v	v			

TUT : Tutorial
LEC : Lecture
PRA : Practical Session
SL : Skills Lab
PD : Panel Discussion

Scenario of Week 6

Air Plane Crash

On March 7, 2007 Garuda crashed near the Yogyakarta airport. Dead victims were brought to the Dr. Sardjito hospital. Because of severe burn, most of them were very difficult to identify, moreover, the victims were mixed of Australians and Indonesians, males and females total of 22 deceased. Family members were outside the Forensic Installation, waited for their loved one to be identified. It was fortunate that Yogyakarta has various experts that work well together, the forensic pathologist from police department, hospital and academic; the forensic anthropologist and dentist. Identification finished the next day after the day of the disaster for the Indonesian remains and two days after disaster for the Australian remains.

Keywords

Burnt - forensic anthropology - forensic pathology - dentist - identification of sex - dead victims.

Difficult Terms (answer to Step 1):

1. Forensic anthropology
2. Forensic pathology
3. Forensic dentistry
4. Disaster victim identification
5. Severe burnt
6. Individuation
7. Race
8. Sex
9. Age
10. Stature

Possible questions or problems (answer to Step 2)

1. Who are the various experts involve in disaster victim identification? How are they coordinated?
2. Indonesian law regarding dead victim identification.
3. Why there are time differences in duration of the identification between victims?
4. What are the different job distributions between forensic anthropologist and forensic pathologist?
5. What is the task of dentist in death victim identification?
6. How we collect ante mortem and postmortem data?
7. Who is responsible for death certificate?
8. Who is in charge in managing death victim identification? Is it different from country to country?
9. Explain each method of DVI.

Concepts and theories to be learnt through the scenario (answer to Step 3-7)

1. Five steps in Disaster Victim Identification.
2. Primer vs secondary types of identification (DNA, fingerprint, teeth and bones) vs (property, family/friends explanation about biological traits of the deceased, photographs).
3. Ante mortem data (i.e. medical records, dental records).
4. Skeletal biology and dental anthropology.
5. Forensic anthropology (individuation through race/ancestry, sex, age, stature, trauma).
6. Management of DVI, Police, Academics, Health Workers, Forensic.

Lectures of Week 6

1.Title : Forensic Anthropological Roles in Disaster Victim Identification
Lecturer : Prof. drg. Etty Indriati, Ph.D
Department : Anthropology
Duration : 1 hour

Content : Five steps in disaster victim identification, ante mortem & postmortem data acquisition, primer and secondary data, identification of race, identification of sex, identification of age and stature

References : Indriati, Etty. (2010). Antropologi Forensik: Identifikasi Rangka Manusia dalam Konteks Hukum, ed 2. Gadjah Mada University Press, Yogyakarta.

Indriati, Etty. (2009). Historical perspectives on Forensic Anthropology in Indonesia. In: S.Blau and DH Ubelaker: Handbook of Forensic Anthropology and Archaeology. Left Coast Press, Inc. California, pp.115-124.

2. Title : Medical Response in Disaster management
Lecturer : dr. Hendro Wartatmo, Sp. B-KBD
Department : Surgery
Duration : 1 hour
Content : The primary object of any medical response to a disaster is to mitigate the mortality and morbidity associated with that event. A secondary objective is the restoration of the health status to pre-disaster levels, and a third objective is to establish a recovery process that hopefully will promote health and a preparedness level that would be an improvement over the *status ante.*
To attain these objectives, and to evaluate whether they have been attained, several criteria come into play. To date, however, the severity of a health disaster and the efficacy of the response(s) to it are usually assessed according to the number of persons killed, injured or burned, or the economic cost to the social and healthcare system. Medical Emergency Response can be divided into: (1) Pre Hospital phase, which includes: Day to Day Emergency services, Rapid Response Team and Field Hospital, (2) Hospital phase : Hospital response, and (3) Regional phase.

References : Ballay, C. (2006). *Hospital Incident Command System Guidebook*. California: Emergency Medical Services Authority.

Gunn, Masellis. (1996). Evaluation of Disaster Medical Response: A proposal for a research template. *Annals of Burns and Fire Disaster; vol. 9.*

3. Title : Rapid Response Team

Lecturer : dr. Hendro Wartatmo, Sp. B-KBD
Department : Surgery
Duration : 1 hour
Content : Rapid Response Team has a similar name/task as Tim Reaksi Cepat, assessment team, advance team, DIMAT (Disaster Medical Assistance Team), DART (Disaster Assistance Response Team), and Field Hospital. The objectives are to provide a medical support to disaster's victim ASAP after an event and perform a rapid health assessment for constructing the next steps of an operation. This lecture also describes the characteristics of volunteers in Disaster Response. They should have willingness, professionalism and be well-trained, good motivation and capability to cooperate with other people. Ideally, the rapid-response team is a flexible, self-sufficient, and rapidly mobile unit capable of meeting the needs of a wide variety of disaster and humanitarian response missions. The success of any disaster rapid-response team ultimately depends on its ability to adapt to the acute needs of the local population, assist in re-establishing local medical services, and facilitating medical evacuation, logistics, consultation, and communication.

References : Haley, T. F., & De Lorenzo, R. A. (2009). Military Medical Assistance Following Natural Disasters: Refining the Rapid Response. *Prehospital and Disaster Medicine (editorial).*

ICSI (Institute for Clinical Systems Improvement). (2011). Healthcare Protocol for Rapid Response Team.

3. Title : Management of Disaster Victim Identification

Lecturer : dr. Yudha Nurhantari, Sp. F, Ph. D
Department : Forensic Medicine and Medico legal
Duration : 1 hour
Content : Organization of national disaster victim identification, principle of the works of DVI Team, steps in management of dead victim identification in disaster including; the scene of incidence, post mortem examination, including lab/ supporting exam, ante mortem data collection, reconciliation, and identification.
References : Arya, Anar, S., et al. (2008). Hazard, Disaster, and Your Community. In National Management Division. Government of India Ministry of Home Affairs.

Interpol. (2002). Interpol Disaster Victim Identification. (http://www.interpol.int/Public/DisasterVictim/Guide/Default.asp)

Kepolisian Republik Indonesia. (2006). Disaster Victim Identification: Pedoman Penatalaksanaan Identifikasi Korban Mati pada Bencana Massal. Departemen Kesehatan RI dan Kepolisian Negara RI, Jakarta.

4. Title : Disaster Management in Mental Health

Lecturer : dr. Bambang Hastha Yoga, Sp. KJ
Department : Psychiatrics
Duration : 1 hour
Content :This topic introduces the psychosocial problems emerged after the occurrence of disaster and how these problems affect the community and the health system. This topic also covers the clinical psychological phases that need to be recognized following a disaster. Furthermore, this topic provides the knowledge on how to manage psychological problems in the community due to disaster, including in acute emergency phase, community education or communication, and reconsolidation phase of coping mechanism.
References: Lupez-Ibor JR, J. J. (2006). Disasters and mental health: New challenges for the psychiatric profession. *World Journal of Biological Psychiatry, 7*(3), 171-182.

WHO. (2007). *The Mental Health Aspects and Psychosocial Aspects of Disaster Preparedness*. New Delhi: World Health Organization.

5. Title : Death Certification
Lecturer : dr. Martiana Suciningtyas, Sp. F
Department : Forensic Medicine and Medico legal
Duration : 1 hour
Content :The important of death registration, standard certificate of death, physician responsibility in death certification, time & cause of death, diagnosis according to ICD 10, common problems on death certification.
Reference : DHHS. (2003). Physician's Handbook on Medical Certification of Death. Department of Health and Human Services. National Center for Health Statistics, Maryland.

International Classification of Diseases, 10th edition.

Skills Laboratory of Week 6

Topic : Triage (Simulation)
Duration : 2 hour

Practical Session of Week 6

Topic : Forensic Anthropology in Disaster Victim Identification
Department : Anthropology
Duration : 2 hours

Topic : Death Victim Identification in Mass Disaster
Department : Forensic Medicine and Medicolegal

Duration : 2 hours

Panel Discussion of Week 6

Topic : Victim Identifications
Moderator : Block Team Coordinator
Panelist : Prof. drg. Etty Indriati, Ph.D
dr. Lipur Riyantiningtyas, BS, Sp. F
Department : Anthropology & Forensic Medicine and Medico legal
Duration : 2 hours

Allocated Time Activities of Week 6

Tutorial	:	4 hours
Lecture	:	6 hours
Skills Lab	:	2 hours
Practical session	:	4 hours
Panel Discussion	:	2 hours
Total	**:**	**18 hours**