



THE SUPERIOR COLLEGE, LAHORE
4th PROFESSIONAL MBBS
Annual EXAMINATION 2018
COMMUNITY MEDICINE
(SEQ)

Time Allowed: 2 hours

Roll No. F11040
Total Marks: 75

Instructions

1. Attempt all questions.
2. All question carry equal marks.
3. The SEQ's part is to be submitted within 2 hours, Extra time will not be given.
4. Neat Hand Writing use of margin and marker for headlines will increase the presentation of your paper.
5. Do not write your name or disclose your identity in anyway.

Q-No: 1

- a. Define Protein Energy Malnutrition. 278 2.5
- b. Tabulate five major differences between Marasmus and kwashiorkor. 286 2.5

Q-No: 2

- a. Define school Health services. 321 2.5
- b. What is the role of a school teacher in school health services? 325 2.5

Q-No: 3 Describe the effects of global warming. 200 5

Q-No: 4 Describe the principals of water chlorination 189 5

Q-No: 5 Calculate the mean, Median, mode and standard deviation of the following data 5
80, 70, 62, 65, 10, 78, 80, 78, 85, 89, 88, 80, 89 153

Q-No: 6 Yellow fever is a public health concern for Pakistan, what are the measures to control spread of yellow fever in Pakistan? slides + 100 page 5

Q-No: 7 Incidence of hypertension is increasing.

- a. What are the modifiable causes blamed to be responsible for it? 118 2.5
- b. What health education strategy can be prepared to change the life style for lowering the incidence of hypertension? 118 2.5

Q-No: 8 What are the characters of case control studies? 30 5

- a. Which principles of primary health care are, used in this project? 2.5
- b. Enlist the components of primary health care. 2.5

174

- Q-No: 10
- a. Define Pneumoconiosis. 2.5
 - b. Enlist its preventive measures. 2.5

226+225

- Q-No: 11 why Primary Health care is chosen for health improvement all over the world? 5

174

- Q-No: 12
- a. Define Demography. 2.5
 - b. What is meant by demographic transition? 2.5

161

168

- Q-No: 13
- a. Define Reproductive Health. 2.5
 - b. What are the objectives of antenatal services? 2.5

233

235

- Q-No: 14
- a. Enlist mosquito born diseases. 2.5
 - b. What protective measures should be adopted to prevent mosquito bites? 2.5

slides

Slide

- Q-No: 15
- a. Define disaster. 2.5
 - b. What are the reasons for increased transmission of communicable diseases after disaster? 2.5

slide

Protein Energy malnutrition:

"Range of pathological conditions arising from simultaneous deficiency of protein and calories and commonly associated with infections."

Types:

→ Kwashiorkor

→ Marasmus.

Difference:

Features	Marasmus	Kwashiorkor
• Muscle wasting	Obvious	Hidden
• Fat wasting	Severe loss	Retained
• Oedema	None	lowe legs
• Weight for height	very low	low
• Mental changes	Quiet	Irritable

Annual 2018

School Health Services:

"It is a branch of preventive medicine which deals with the medical inspection of school children to their health protection, primarily in environment of school."

Role of School Teacher in School health service:

- He can give lecture on health and personal hygiene.
- He can give nutritional education.
- He attends parent teacher meeting.
- He actively participates in school meal service.
- He can vaccinate the children.
- Render First aid Treatment.
- He can supervise cleanliness of classroom.

causation.

- Damages lung tissues.

Heart patients at more risk.

- Increase O_3 at ground level.

→ water resources:

- Dry soil
- poor water quality
- overall dec. water quantity.

→ Deforestation:

→ Agriculture soil erosion.

→ Temp. rise

→ Raising sea level

- water should be clean & free from turbidity.
- Chlorine demand of water should be estimated.
- At least one hour is essential as a contact period of free residual chlorine for killing bacteria & viruses.
- Minimum recommended conc. of free chlorine
- The sum of chlorine demand of the specific water plus the free residual chlorine of

Prevention of Yellow Fever:

① Jungle Yellow Fever:

- Uncontrollable
- Vaccination of humans with 17D vaccine.

② Vector Control:

- Source reduction method
- Elimination of breeding places
- Use of repellants
- Mosquito repellent / nets
- Mosquito coils

③ Surveillance:

- WHO uses Aedes aegypti index
- It should be less than 1%

2. Modifiable ✓✓

1. Obesity: The greater the weight gain, the greater the risk of high blood pressure
2. Lack of exercise: Physical activity by reducing body weight may have an indirect effect on blood pressure
3. Heavy alcohol intake: It is associated with increased risk of HTN
4. Cigarette smoking
5. Heavy salt intake: High salt intake increases the blood pressure
6. Saturate fat: They increase blood pressure
7. Oral contraceptives: Increase blood pressure

Prevention

1. Primary Prevention

a. Population Strategy

- Health education on all risk factors
- Weight reduction
- Reduction in alcohol consumption
- Reduce or stop smoking
- Reduction of salt intake
- Avoid stress
- Exercise promotion
- Hypertension during pregnancy is prevented by regular antenatal checkup

b. High Risk Strategy

High risk individuals must be identified by screening for HTN or family history

2. Secondary Prevention

a. Early Case Detection

By screening the population for HTN

b. Treatment

The aim of treatment should be to obtain blood pressure below 140/90mm Hg. Control of HTN would reduce the risk for stroke and other complications.

c. Patient Compliance

Generally treatment of HTN will be lifelong. Compliance of patient can be through education.

Complications

- Heart failure
- Ischemic heart disease (IHD)
- Stroke
- Renal failure

Ans: a. odd ratio (cross product ratio)
b.

Case control study

1. it proceeds from effect to cause (retrospective)	Proce
2. it starts with disease	
3. it tests whether the suspected cause occurs more frequently in those with the disease	It sta It tes frequ simil
4. it involves the fewer number subjects	It inv
5. usually first approach to testing of hypothesis	It is hyp
6. it gives relatively quick results	Lor
7. it is suitable for study of rare diseases	Ina
8. only yield estimate of relative risk	Yie ris
9. cant yield information other than selected case	yie ou
10. inexpensive	E

Q.18: A researcher wanted to study the risk (births) caused by maternal anemia during pregnancy. The incidence of PMN/100000 births. (annual 2008)

in a village development project, manual labor was provided by the villagers and consultancies were provided by different departments (health, education, agriculture and livestock).

Which principles of primary health care are used in this project.

Enlist components of primary health care

Answer:

Principles

Community participation.

Equitable distribution.

Inter-sectoral coordination.

Appropriate technology.

COMPONENTS

Proper food supply and nutrition.

Basic sanitation and safe water supply.

Maternal and child care and safe family planning.

Immunization against infectious disease.

Education about prevailing health problems.

Prevention and control of locally endemic diseases. e.g Malaria

Treatment of common diseases and injuries.

Provision of essential drugs.

Prevention of mental health.

Q10

a) Define Pneumoconiosis ?

b) Enlist factors underlying the pneumoconiosis.

Answer

a)

Pneumoconiosis:

Group of diseases resulting from inhalation of respirable fraction of chemical dust (inorganic,organic) leading to irreversible fibrosis is called pneumoconiosis.

✓ P.P DEMOGRAPHIC TRANSITION

Moving from a stage of high birth rate and a high death rate to a low birth rate and a low death rate is called demographic transition. First stage (high fertility and mortality) is known as old balance and second (low fertility and mortality) is new balance. In between these two there is a stage of imbalance in which there is high fertility and low mortality.

A. Old Balance (HF & HM)

In old balance, since death has to be replaced by births, a large number of births are required to compensate for large number of deaths.

B. New Balance (LF & LM)

It represents the improved condition of human efficiency and health with few deaths. Production of agricultural and industrial commodities are greater and life style is more comfortable.

C. Imbalance (LM & HF)

It is the stage of natural increase, which leads to population explosion. This growth is helpful for under populated nations, which needs more

- Components of population growth
- Basic fertility measures

- Demograph
- Demograph
- Demograph
- Population

DEMOGRAPHY

is made up of two words; "demos" means people and "graphos" means drawing.

Definition

Demography is defined as the science of population and mathematical knowledge of population changes. It is concerned with size, structure, distribution and changes in population.

Size

Size is the total number of persons in that area at a particular time.

Structure

Structure is distribution of population among its age and sex groupings e.g. How many persons are below five and above 40

CHAPTER CONTENTS

- Reproductive Health
- Maternal mortality & morbidity
- High-risk approach in pregnancy
- MCHC
- Antenatal care
- Intranatal care
- Postnatal care
- Training program of MCHC
- Birth weight & Low
- Growth monitoring
- Growth chart
- Care of under five
- Breastfeeding
- Artificial feeding
- Weaning, baby fr
- Social obstetrics

REPRODUCTIVE HEALTH

Reproductive health is defined as a condition in which the reproductive process is accomplished in a state of complete physical, mental and social well-being and not merely the absence of disease or disorders of the reproductive process.

Components of Reproductive Health

It includes:

- Safe motherhood
- Fertility regulation
- Infertility
- Prevention and control of reproductive tract infections
- Sexually Transmitted Diseases (STDs) including HIV/AIDS
- Malignancies of reproductive tract
- Newborn care

Fertilization

Antenatal care

Intranatal care

Post natal care

Inter-conceptual period (time between two pregnancies)

ANTENATAL CARE

means care of mother during pregnancy.

Aim: The aim of antenatal care is to achieve healthy mother and healthy baby at the end of pregnancy.

Objectives

- To promote, protect and maintain health of the mother during pregnancy
- To detect high-risk cases and give them special attention
- To foresee complications and prevent them
- To reduce anxiety associated with delivery
- To reduce maternal and fetal mortality and morbidity

To sensitize mother to the need for family planning

To teach the mother elements of child health care, nutrition, personal hygiene and environmental sanitation

To attend the under-fives accompanying the mother

Components

Antenatal care clinic

Home visits

Laboratory and diagnostic facilities

Mental preparation and family planning

Making referrals and follow up

⇒ Prevention & control of Dengue:

- ① Travellers should be advised to sleep under nets which impregnateds & to use topical repellents.
- ② Adults mosquitoes should be destroyed by sprays & breeding sites should be eradicated,
- ③ Keep flower pots dry
- ④ Cover body & arms especially at sunshine & sunset
- ⑤ Apply mosquito repellent lotion on uncovered body parts
- ⑥ Wash water container daily & keep them properly covered
- ⑦ So far no effective vaccine has been made
- ⑧ Integrated vector control (IVC) used to counteract, technical, financial, environmental & operational problems.

Q: Criteria for

Q: I

→ Hu
→ En

→ Way

→ SOC

→ Hea

Pers

- Social reaction following a disaster
- Duties of health team
- The surveillance cycle

Steps

DISASTER

A disaster can be defined as any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area.

Types of D
Disasters a

DISASTE

Meteoro

Disaster

C. Post-Disaster Management (Public Health Interventions)

C. Recovery Phase

1. Epidemiologic Surveillance and Disease Control

Reasons for Increased Transmission of Communicable Diseases after Disaster

- Overcrowding and poor sanitation in temporary resettlements
- Population displacement may lead to introduction of communicable diseases to which either the migrant or indigenous populations are susceptible
- Disruption and the contamination of water supply, damage to sewage system and power systems are common in natural disasters
- Disruption of routine control programs
- Ecological changes may favor breeding of vectors
- Displacement of domestic and wild animals that carry with them zoonosis that can be transmitted to humans as well as to other animals e.g., Leptospirosis and Anthrax
- Provision of emergency food, water and shelter in disaster situation from different sources may itself be a source of infections