

Tanta University  
Faculty of Medicine  
Department of Public Health & Community medicine  
OSPE exam – Fourth Academic year – May, 2015

## Group I

**Slide 1: 2 marks**

A two years old child who was breast fed for only six months and weaned by his poor mother. The child is suffering from severe loss of body weight.

- a. **What is** Marasmus 0.5
- b. **Mention methods of prevention of such cases**
  - proper nutrition of the child 0.5
    - encourage breast feeding
    - supplementary feeding
    - nutritional education about proper feeding and weaning
  - Growth monitoring: longitudinal follow up of growth. 0.5
  - Specific protection 0.5
    - immunization
    - protein supplement
    - early diagnosis and treatment of predisposing factor
    - early diagnosis and treatment of infectious disease

**Slide 2: 2 marks**

- a. What is in the picture?
  - Growth chart 0.5
- b. What is used for? And for what age group?
  - growth monitoring : follow up of growth to assess if normal or not and early detection of deviation 0.5
  - For children below age of 2 years. 0.5
- c. Comment on the curve.
  - Normal growth pattern as it is between upper and lower lines and ascending 0.5

**Slide 3: 3 marks**

- a. What is this measurement?
  - Head circumference 0.5
- b. What are its benefits?
  - Anthropometric measures for nutritional assessment objectively. 0.5
- c. For what age groups is suitable?
  - up to two years of age 0.5
- d. What is its relationship with chest circumference?
  - the ratio of head to chest circumference is 1 at birth 0.5
  - ratio decrease with advancing age 0.5
  - if stationary or increased indicates malnutrition 0.5

**Slide 4: 3 marks**

- a. What is the measurement used in the picture?
  - upper arm circumference 1
- b. What is the benefit of measuring it?
  - anthropometric measures for nutritional assessment objectively. 1
- c. Interpret the result of this measurement as seen in the picture.
  - red color indicates severe protein energy malnutrition 1

**Slide 5: 2 marks**

- a. Which of these vaccine vials is suitable for use? 0.5  
A& B
- b. Give reasons for your answer.
  - Inner square is lighter than the outer circle: used if expiry date not passed. 0.5
  - inner square is still lighter than the outer circle: used if expiry date not passed 0.5
  - Inner square same color as outer circle: don't use or 0.5  
Inner square darker than outer circle; don't use

**Slide 6: 2 marks**

- a. What is the chart present in the picture? 0.5
- Vaccine cold chain monitor card.
- b. What are the benefits of using it? 1.5
- contain chemical substances that change in color by heat
  - window A: polio - window b : measles -window c : BCG,DPT,TT,DT
  - all window white : use vaccine normally
  - Window A blue others white: vaccine has exposed to temperature between 10c - 34c for 2-3 days.
  - Window A&B blue : vaccine has exposed to temperature between 10c -34c for 6- 8 days.
  - window A,B&C blue : vaccine has exposed to temperature between 10c -34c for 11-14 days.
  - window D is blue : vaccine has exposed to temperature between more than 34c for s hours (cold chain has broken))

**Slide 7: 2 marks**

- a. What is in the picture? 1
- food guide pyramid
- b. What is used for? 1
- educational tool for amount and types of food included in daily diet.

**Slide 8: 4 marks**

The picture shows an epidemic curve.

- a. What is an epidemic curve? 1
- used for describing characters of epidemics /outbreak
  - It is plotting time of disease onset against number of cases.
- b. What is the type of the source of infection? 1
- ((Propagated epidemic))
- c. What other information you can get from epidemic curves in general?
- if agent is known and incubation period is known we can identify the time of exposure 1
  - if agent is unknown and time of exposure is known we can identify the average incubation and we can know the agent 1

**Slide 9: 4 marks**

- a. What is the family planning method in the picture?
  - oral contraceptive pills 1
- b. What are its advantages and disadvantages?
  - advantages: reversible method, most common use in Egypt , Decease incidence of ovarian cancers 1
  - disadvantages: Remembering to take it daily, weight gain, spotting, depression (not in old age, not in cardiac patients) 1
- c. Which type can be used during lactation?
  - Hormonal: progestin only pills, injectable "Depo-Provera", implant. 0.5
  - Non : IUDs ,condom 0.5

**Slide 10: 3 marks**

This is an ulcer on the skin of a farm worker

- a. What is you diagnosis?
  - cutaneous anthrax malignant pustule 1
- b. Mention other workers who are exposed to this disease?
  - farmer /butcher /veterinaries /occupation in contact with animal or handling infected materials. 2

**Slide 11: 3 marks**

These two animals are reservoir of a hemorrhagic disease.

- a. What is this disease? MERS-CoV disease 1
- b. How can we prevent this disease? 1.5
  - Like flu by hand washing with soap and water or alcohol paste (*hand hygiene*).
  - Use mask in overcrowded places.
  - Use paper towel during coughing or sneezing (*cough etiquette*).
  - Do not share patients belongs.
  - Avoid touch nose, eye with unwashed hands.
  - Avoid animal contact or use of undercooked animal meat Or unpasteurized milk.
  - Avoid direct contact with affected cases.
  - Contact supervision for 14 days. Any symptoms consider it suspect case.
  - Recent travelers returning from the Middle East who develop SARI should be tested for MERS-CoV.
- c. What other hemorrhagic diseases you know? 0.5
 

Marburg, Lassa fever, Crimean-Congo hemorrhagic fever, dengue fever, Rift Valley fever , yellow fever.

**Slide 12: 3 marks**

The highlighted area in Africa is the endemic zone for disease transmitted by droplet infection that has the tendency to spread in outbreaks or epidemics.

a. What is the disease?

**Meningococcal Meningitis** **0.5**

b. Mention target population to be vaccinated and how the vaccine is given.

- One dose of vaccine 0.5 ml is recommended S.C 1
- High risk groups : 1.5
  - ✓ Military recruits.
  - ✓ Anyone traveling to, or living in, a part of the world where meningococcal disease is common
  - ✓ Travelers for hajj or Omra
  - ✓ Health care workers during epidemics
  - ✓ Contacts of suspected or confirmed cases
  - ✓ Laboratory personnel who are routinely exposed to meningococcal bacteria.

**Slide 13: 2 marks**

a. Is this method of communication a good one?

- No, bad communication 1

b. Comment on positive and negative points of communication as seen in the picture

bad communication because doctor (communicator) doesn't respect patient due to wrong sitting in front of patient as crossing of hand and legs is not recommended 1

**Slide 14: 3 marks**

The object in the picture is an important item in infection control.

a. What is in the picture?

- safety box 1

b. What are the benefits of using it?

- For safe sharps( needles ,syringe) disposal 1

c. Mention disease that can spread by not using it?

- all diseases transmitted by blood as hepatitis B virus, hepatitis C virus ,HIV 1

**Slide 15: 2 marks**

a. What are these mothers doing after breast feeding their babies?

- baby eructation 0.5

b. What is the best method of the three in your opinion? Give reasons.

- ✓ position 1 is the best baby is upside to allow air easily to come out 0.5
- ✓ position 2: choking may occur. 0.5
- ✓ position 3: vomiting may occur. 0.5