

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

Slide 1: 2 marks

- a. What is this measurement?
 - ❖ Skin fold measurement 1
- b. What are their benefits?
 - ❖ anthropometric measures for nutritional assessment objectively 1
 - ❖ measures subcutaneous fat

Slide 2: 3 marks

- a. What is the measurement used in the picture?
 - ❖ Mid-upper arm circumference 1
- b. What are the benefits of measuring it?
 - ❖ Anthropometric measures for nutritional assessment objectively. 1
- c. Interpret the result of this measurement as seen in the picture.
The scale is at the green zone indicating normal nutrition status 1

Slide 3: 2 marks

- a. What is the chart present in the picture?
 - ❖ Vaccine cold chain monitor card. 1
- b. What are the benefits of using it? 1
 - ❖ 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 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 4: 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 possible source of infection? 1
 - ❖ Point common source epidemic.
- c. What other information you can get from epidemic curves in general?
- d. if agent is known and incubation period is known we can identify the time of exposure 1
- e. if agent is unknown and time of exposure is known we can identify the average incubation and we can know the agent 1

Slide 5: 2 marks

- a. What is the chart in the picture? 1
 - ❖ Growth chart
- b. Give your comment on it. 1
 - a. Curve is parallel to normal till age of 6 months
 - b. At age between 6-9 months , the curve begin to be abnormally bent indicating abnormality

Slide 6: 3 marks

This is an ulcer on the skin of a farm worker

- a. What is you diagnosis? 1.5
 - cutaneous anthrax malignant pustule
- b. Mention other workers who are exposed to this disease? 1.5
 - Butcher /veterinaries /occupation in contact with animal or handling infected materials .

Slide 7: 2 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 8: 2 marks

- a. Is this method of communication a good one? 0.5
 - ❖ yes, it is an effective communication
- b. Comment on positive and negative points of communication as seen in the picture. 1.5
 - doctor greets the patient by shaking hands and smiling
 - good eye contact
 - doctor respect the patient

Slide 9: 5 marks 1 mark each

In this fridge arrange the following items in the correct place as indicated by the numbers shown in the picture:

1. Ice bags , Polio Sabine
2. BCG vaccine , MMR
3. DPT vaccine
4. Water vials for vaccine and ice bags
5. Ice bags , water vials

Slide 10: 4 marks

- a. What is the family planning method in the picture? 1
 - oral contraceptive pills
- b. What are its advantages and disadvantages? 2
 - advantages: reversible method, most common use in Egypt , Decease incidence of ovarian cancers
 - disadvantages: Remembering to take it daily, weight gain, spotting, depression (not in old age , not in cardiac patients)
- c. Which type can be used during lactation? 1
 - Hormonal: progestin only pills, injectable "Depo-Provera", implant. IUDs , condom

Slide 11: 2 marks

- a. What is the vaccine in the picture? 1
oral polio vaccine Sabin
- b. How many doses are given during the first 18 months and when they are given? 1
 - a. 2,4,6
 - b. Booster at 18-24

Slide 12: 2 marks

These are a group of children aging 2-3 years suffering from malnutrition characterized by edema in the limbs and hair and skin changes.

- c. What is your diagnosis? 1
Kwashiorkor
- d. Mention methods of prevention of such cases 1
 - proper nutrition of the child
 - encourage breast feeding
 - supplementary feeding
 - nutritional education about proper feeding and weaning
 - Growth monitoring: longitudinal follow up of growth.
 - Specific protection
 - immunization
 - protein supplement
 - early diagnosis and treatment of predisposing factor
 - early diagnosis and treatment of infectious disease

Slide 13: 6 marks

The table shows results of a diagnostic test used for screening:

Test results	Disease present	Disease absent	Total
Positive	175	30	205
Negative	25	270	295
Total	200	300	500

- a. Calculate the following:
- Sensitivity = 87.5 % 1
 - Specificity= 90% 1
 - Positive predictive value= 85.4% 1
 - Negative predictive value = 91.5 % 1
 - Prevalence of the disease among the total examined persons= 40% 1
- b. Give your interpretation of the suitability of use of this test for screening 1
- Good screening test due to high Sensitivity and Specificity.