

## ASSESSMENT OF 30 MCQs

FPSC No : 73

## MCQS ON VACCINATIONS IN ADULTS

Submission DEADLINE: : 17 JULY 2018, 12 NOON

**INSTRUCTIONS**

- To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal ([www.cfps2online.org](http://www.cfps2online.org))
- Attempt ALL the following multiple choice questions.
- There is only ONE correct answer for each question.
- The answers should be submitted to the College of Family Physicians Singapore via the College Online Portal before the submission deadline stated above.
- There will be NO further extension of the submission deadline

**1. With regards to the influenza vaccine, which of the following statements is CORRECT?**

- A. Local guidelines recommend that influenza vaccines should be administered every 6 months to the elderly.
- B. Quadrivalent influenza vaccines are more efficacious because they provide protection against 3 strains of influenza A.
- C. Selection of influenza strains that are to be incorporated into the influenza vaccine every 6 months is based on the recommendations of an expert panel from Ministry of Health, Singapore.
- D. Based on current research, we expect to get a universal influenza vaccine in the next 12 months.
- E. Influenza vaccination in the elderly will reduce the hospitalizations associated with this infection.

**2 With regards to pneumococcal vaccination in the elderly, which of the following is CORRECT?**

- A. Conjugate pneumococcal vaccine should be administered before the polysaccharide vaccine.
- B. Both formulations of pneumococcal vaccines (conjugated and polysaccharide) are effective in the prevention of pneumococcal pneumonia.
- C. Conjugate pneumococcal vaccine should not be given within a week of starting an antibiotic.
- D. Pneumococcal vaccines (conjugated and polysaccharide) should not be co-administered with influenza vaccine.
- E. The combination of conjugate pneumococcal vaccine followed by polysaccharide vaccination is an example of heterologous prime-boost vaccination.

**3. Regarding varicella zoster vaccine for the elderly, which of the following statements is CORRECT?**

- A. Zostavax was specifically developed for middle aged adult.
- B. Zostavax is more effective in the prevention of herpes zoster in those older than 70 years compared to those aged 50 -59 years.

C. Zostervax is a killed/inactivated vaccine.

D. Shingrix, an adjuvanted herpes zoster subunit vaccine was reported in a clinical trial to have vaccine efficacy of 50% in those aged &gt;50 years.

E. Outcome measures for vaccines against herpes zoster should include the prevention of attacks of herpes zoster and postherpetic neuralgia.

**4. Which statement(s) is/are correct for yellow fever vaccination in travelers?**

- A. The current available yellow fever vaccine is a live attenuated vaccine
- B. Yellow fever vaccines does not need to be administered in persons aged > 60 years because the elderly will have been exposed and developed pre-existing antibodies to yellow fever
- C. Complications of yellow fever vaccination such as YELAND and YELAVD are more common in the young (<12years)
- D. Yellow fever vaccine needs to repeated every 10 years for those traveling to endemic countries
- E. Yellow fever vaccination also provides protection against some other flaviviruses

**5. About meningococcal vaccination, which of the following statement(s) on vaccination is CORRECT?**

- A. Meningococcal vaccinations are highly recommended in the elderly who travel to developed and developing countries.
- B. There are numerous Dengvaxia trials conducted in the elderly and it should be recommended in those >65 years.
- C. Meningococcal Serotype B vaccine should be given to elderly if they have not already received it.
- D. Meningococcal vaccines induces a mild meningitis-like illness after administration.
- E. A valid meningococcal vaccination certificate is required for Hajj/Umrah pilgrims traveling to Saudi Arabia.

- 6. About invasive pneumococcal disease, which of the following sites is an example?**
- Pleural space.
  - Nasal sinuses.
  - Middle ear.
  - Bronchial airways.
  - Laryngeal space.
- 7. About the progression of non-bacteremic pneumonia to bacteremic pneumonia, what is the percentage of cases that this can happen?**
- 5-25%.
  - 10-30%.
  - 15-35%.
  - 20-40%.
  - 25-45%.
- 8. About risk factors implicated in the development of pneumococcal pneumonia, which of the following is NOT a risk factor?**
- Advancing age.
  - Alcohol dependence.
  - Smoking.
  - Hypersplenism.
  - HIV disease.
- 9. A two component research guided educational intervention by Ho et al in 2017 showed the importance of overcoming barriers. Which of the following was NOT one of such barriers studied?**
- Perceived seriousness of pneumonia.
  - Knowledge of symptoms of pneumonia.
  - Self efficacy.
  - Concerns of effectiveness of vaccine.
  - Cost of vaccine.
- 10. With regards to the currently low uptake of pneumococcal vaccines in Singapore, what has been introduced to increase the rate of vaccination?**
- Medisave allowability for pneumococcal vaccination.
  - Making pneumococcal vaccination compulsory.
  - Subsiding people who are smokers.
  - Subsiding people with chronic disease complications.
  - Organising health campaigns on pneumococcal vaccinations.
- 11. With regards to meningococcal vaccination, which of the following statements is CORRECT?**
- All travelers to Saudi Arabia during Hajj and Umrah are required to have a certificate of vaccination with quadrivalent meningococcal conjugate vaccine no more than 5 years before arrival.
  - Meningococcal disease is high risk to those travelling to the African meningococcal belt during the dry season from December to June.
  - MenACWY-D (Menactra) is approved for use in persons aged 55 years and above.
  - There are currently no effective vaccines against meningococcal serogroup B.
  - Among the meningococcal conjugate vaccines, only Menveo (MenACWY CRM) has the approved lowest age limit.
- 12. With regards to Yellow Fever, which of the following statements is CORRECT?**
- Has case fatality rate of about 50%.
  - Is spread by Anopheles mosquito.
  - Epidemics should be controlled by isolation of infected cases.
  - An effective live attenuated yellow fever vaccine is available.
  - Has an incubation period of 6-14 days.
- 13. An engineer is going to work for the local power company in Myanmar. In addition to the usual vaccines, which of the following do you consider the most appropriate disease to prevent?**
- Anthrax.
  - Plaque.
  - Japanese encephalitis.
  - Rabies.
  - Meningococcal meningitis.
- 14. Concerning typhoid vaccine**
- Ty21a vaccine should not be given concurrently with Mefloquine or antibiotics.
  - Injectable Vi capsular polysaccharide vaccine can be given by subcutaneously or intramuscular route.
  - Revaccination is recommended every 5 years for TyphimVi vaccine if there is continued exposure.
  - Ty21a vaccine may be given to immunocompromised patients.
  - Typhoid vaccine is still recommended for travellers to Eastern Europe.
- 15. About Japanese encephalitis (JE), which of the following statements is CORRECT?**
- JE vaccine is indicated only for travellers who spend one month or more in endemic areas during the transmission season.
  - Case fatality rate of JE encephalitis is 50% and neurologic sequela occurs in 30% of survivors.
  - Japanese encephalitis virus is transmitted by the Aedes mosquito.
  - There are 4 new JE vaccines available in Singapore.
  - In the past, transmission of JE occurs in pig farms and rice fields.

**16. Which of the following statements is MOST CORRECT?**

- A. A better education population will have more anti vaccine lobbyists.
- B. Morbidity and mortality rates due to communicable diseases declines with education.
- C. Non-communicable diseases are not affected by the advances made by any country.
- D. One of the key roles of primary care is preventive medicine.
- E. Social improvement alone will reduce mortality and morbidity rates of all diseases.

**17. A high quality primary care facility is characterized by ...**

- A. A high standard strategy marketing and pushing vaccine sales.
- B. Its strength in providing and promoting preventive measures such as vaccination during individual consultation
- C. Looking after special groups such as young children, care givers and special groups.
- D. Covering a wide spectrum of conditions.
- E. Strong internet and social media presence.

**18. There are many barriers preventing vaccine uptake. Which of the following is NOT one of them?**

- A. Anti-Vaccine lobbyists.
- B. Fake news on the internet and social media.
- C. Side effects of vaccines.
- D. Poor business model providing vaccination services.
- E. Doctor patient relationship.

**19. About healthcare workers which of the following is NOT CORRECT?**

- A. They are most happy to be vaccinated.
- B. They are always forgotten when it comes to vaccination.
- C. As frontline workers, they are at highest risk of contracting any communicable disease.
- D. They are as badly affected as caregivers and foreign domestic workers.
- E. They are vulnerable to work stress.

**20. About vaccination programmes, which of the following statements is MOST ACCURATE?**

- A. System recall will ensure that patients will take up vaccination.
- B. Research on vaccination in primary care is abundant and have helped push up vaccination rates
- C. Many programmes are successful in their own rights.
- D. We need more data and evidence to sharpen our vaccine promotion efforts.
- E. Less effective programmes will remain as there is no way to know them.

**21. Which of the DENV serotype(s) is prevalent in Singapore?**

- A. DENV-1.
- B. DENV-2.
- C. DENV-3.
- D. DENV-4.
- E. All four DENV serotypes.

**22. What is the age range of the individuals, who are at the highest risk for dengue in Singapore?**

- A. 9–16 years.
- B. 2–14 years.
- C. 12–45 years.
- D. 15–44 years.
- E. ≥65 years.

**23. What is the percentage of individuals with dengue, who remain asymptomatic?**

- A. 10%.
- B. 25%.
- C. 50%.
- D. 75%.
- E. 40%.

**24. What is the age indication for Dengvaxia® in Singapore?**

- A. 9–44 years.
- B. 12–45 years.
- C. 9–60 years.
- D. 12–60 years.
- E. 2–14 years.

**25. To attain adequate GMTs of neutralising antibodies with Dengvaxia®, \_\_\_\_\_**

- A. One dose of the vaccine is sufficient.
- B. All three doses must be completed.
- C. A booster dose must be given after the 3-dose schedule.
- D. Two doses of the vaccine are sufficient.
- E. Four doses of the vaccine are required.

**26. About the rabies vaccine, which of the following is CORRECT?**

- A. It is a live attenuated vaccine.
- B. It is a killed/inactivated vaccine.
- C. It is a toxoid.
- D. It is a polysaccharide vaccine.
- E. It is a conjugated vaccine.

**27. About exemptions from mandatory vaccination after the Disneyland Measles outbreak in 2014-2015, which of the following is CORRECT?**

- A. Medical, religious, and philosophical exemptions are all allowed.
- B. Only religious, and philosophical exemptions are allowed.
- C. Only religious exemptions are allowed.

- D. Only philosophical exemptions are allowed.
- E. Only medical exemptions are allowed.

**28. “Parents are free to raise their children in accordance with particular religious lifestyle.” This is in accordance to which of the following ethical concept?**

- A. Act utilitarian.
- B. Rule utilitarian.
- C. Respect for autonomy.
- D. Distributive justice.
- E. Beneficence.

**29. About myths and misconceptions, which of the following is the reason for vaccine refusal by some parents?**

- A. DTP vaccine causes autism.
- B. Thimerosal is toxic to the cardiovascular system.
- C. Inactivated polio vaccine (IPV) causes autism.
- D. Multiple vaccinations overwhelm the immune system.
- E. Adjuvant ingredients are unsafe-zinc and acetic acid.

**30. About vaccine refusal, which of the following is a feature of a vaccine hesitant parent?**

- A. Select only certain vaccines.
- B. Lack trust in healthcare provider.
- C. High safety concerns.
- D. High trust in health care provider.
- E. Child not immunized.

**FPSC No. 72**  
**“The Extended Consultation”**  
**Answers to 30 MCQs Assessment**

1. A	11. D	21. A
2. E	12. B	22. C and D
3. B	13. C	23. C
4. A	14. A	24. E
5. D	15. B	25. B
6. B	16. E	26. E
7. D	17. C	27. A
8. C	18. D	28. D
9. A	19. E	29. B
10. E	20. B	30. D