



CPD Challenge

Questions

Were you paying attention? Test your retentive capacities on issues raised in this edition of *Africa Health*. You can quietly test yourself, or – and we're particularly keen on this – you could make it a part or the foundation of a Journal Club in your department or health institution. Life-long learning is a collaborative exercise and the whole health team can be positively stimulated by being involved in such discussion.

Q1. Ebola coverage

- i. From Francis Omaswa's informed opinion piece about dealing with the Ebola outbreak in Uganda in 2000, name two of the three key lessons that he describes as the key learning points from the episode.
- ii. From Shima Ghoh's equally informed opinion piece, I was tempted to ask you to recount the scientific process used to produce the Zmapp...but that would be unfair (though I urge you to read it if you haven't). Instead: what is the means by which the Ebola virus attaches itself to human cells?
- iii. Name three of four products that will eliminate the virus at appropriate concentrations?
- iv. When faced with a possible Ebola patient what is the single most important measure you should take:
 - a. Always wear gloves
 - b. Use a disposable thermometer
 - c. Take time to get a full history from the patient
- v. In setting up isolation areas, what space should you ensure separates out each of the beds? Should it be:
 - a. 1 meter
 - b. 3 meters
 - c. 5 meters
- vi. Personal Protection Equipment (PPE) is vital for direct patient care of suspected or confirmed patients. Please list the different elements of protection available, and think about what you should use AT MINIMUM from arrival at your hospital gate, if your hospital is managing Ebola in its isolation unit.
- vii. Soiled bed linen of patients with Ebola should be incinerated after use. Is this statement true or false?
- viii. All medical waste (needles, syringes, tubing and other infectious waste) need to be carefully collected and buried in a designated pit of around

2m in depth. Should faeces, urine and vomit from the patient also be disposed off in this pit?

- ix. If in caring for a patient you think you might have had contact with any body fluids or blood, what should you do?

Q2. Non Ebola questions

- i. How many artemisinin combination therapies are now on WHO's recommended list?
- ii. How many vials of injectable artesunate would be needed world wide to treat all cases of severe malaria?
 - a. Just under 10 million
 - b. Between 15 and 25 million
 - c. Between 30 and 40 million

Q3. Clinical Review: STIs

- i. Syndromic management of STIs is the most accurate way to diagnose STIs in low resource settings. True or false?
- ii. Are there any effective vaccines currently available to prevent STIs?
- iii. Immunisation campaigns are expensive. Is it cost-effective to use HPV vaccines in sub-Saharan Africa?


Q4. Medicine Digest

- i. Mammography screening has been under pressure in recent years with questions about its benefits. In a large scale Norwegian study, invitation to modern mammography screening produced results which:
 - a. confirmed this view
 - b. provided no significant new evidence
 - c. went against the recent evidence
- ii. Name two of the three frequent causative pathogens for skin infections?

Answers

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Editorial pdf (757kb)

Opinion : Anti-gay law: prejudice based on what we fear or do not understand Prof Shima Gyoh delivers some reasoned thinking to the debate. *Shima Gyoh* pdf (803kb)

Opinion: 'Inclusive Africa' is the way forward Africa's future policy direction is best driven from within or via informed collaborative initiatives, says Francis Omaswa. *Francis Omaswa* pdf (719kb)

Newsdesk: A round-up of news including: The UNAIDS and Lancet Commission on AIDS and global health; the malaria 'master switch' revealed pdf (4.16mb)

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- Q2.**
- i. Five, with a sixth on the way.
 - ii. Between 30 and 40 million doses
- Q3.**
- i. False. Syndromic management of STIs can be very effective for certain syndromes, such as urethral discharge, but is far less accurate for other syndromes, including vaginal discharge. Syndromic management also fails to identify asymptomatic disease. While laboratory confirmation of disease is the gold standard, many settings do not have access to such services, making syndromic management a vital, but limited tool.
 - ii. Yes. There are currently vaccines effective against hepatitis B and against the human papillomavirus (HPV). Research is underway to develop vaccines against other STIs, including HSV-2, chlamydia, gonorrhoea, trichomoniasis and syphilis.
 - iii. Yes. While immunisation campaigns can be costly, the effect of protecting against future disease is important. Experiences in more developed countries have found that HPV vaccination programmes that achieve good coverage have a significant and rapid effect on reducing the incidence of genital warts in the population. Modelling studies show HPV vaccination is cost-effective, especially in low-income countries with high burden of cervical cancer. The high cost of the HPV vaccines and the novelty of reaching young girls age 9-13 for immunisation are significant challenges. However, GAVI has negotiated reduced prices for HPV vaccines and is offering financial support for low income countries to establish HPV programmes.
- Q4.**
- i. It revealed that modern screening may reduce deaths from breast cancer by around 28%
 - ii. The three are: Staphylococcus aureus, streptococci, and methicillin-resistant Staphylococcus aureus (MRSA).

- Q1.**
- i. a) the building and holding of public trust by the government and health personnel is the foundation for all control efforts.
b) recruitment of the support of community or village leaders working alongside the village health teams.
c) the introduction of new technology for quick field diagnosis of new infections.
 - ii. A glycoprotein.
 - iii. i) Heat; ii) alcohol-based products; iii) Sodium hypochlorite (bleach); and iv) calcium hypochlorite (bleaching powder)
 - iv. i) Always wear gloves...
 - v. i) Ensure at least 1 meter gap between beds
 - vi. PPE equipment includes: gloves, medical mask, goggles/face shield, an impermeable gown to cover clothing; closed, puncture resistant shoes (rubber boots); and possibly a waterproof apron for certain activities. If possible a stethoscope for each patient. In terms of what to wear where, best to refer you back to the second and third page of the guidelines as the answer is of course long!
 - vii. False. It needs to be handled with great care, but can be washed in the laundry, or (again with precautions) by hand in a drum. In exceptional circumstances it might be incinerated.
 - viii. No. Human waste and liquid waste from washing can be disposed of in the sanitary sewer or pit latrine. No further treatment is necessary.
 - ix. Stay calm. Immediately and safely stop any current task and leave the patient area. Remove PPE with great care, and then wash the affected site initially with soap and water (or eyewash solution if affecting the eye). Then report the incident to the local coordinator. You will then need to enter daily evaluation for 21 days before hopefully being cleared of suspicion.