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REGISTRARS

# Mastering your Fellowship

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## Abstract

The series, "Mastering your Fellowship", provides examples of the question format encountered in the FCFP(SA) examination. The series aims to help family medicine registrars and their supervisors prepare for this examination. Model answers are available online.

**Keywords:** FCFP(SA) examination, family medicine registrars

## Introduction

This section in the *South African Family Practice* journal is aimed at helping registrars prepare for the FCFP (SA) Final Part A examination (Fellowship of the College of Family Physicians) and provides examples of the question formats encountered in the written examination: Multiple Choice Question (MCQ) in the form of Single Best Answer (SBA - Type A) and/or Extended Matching Question (EMQ – Type R); Modified Essay Questions (MEQ)/Short Answer Question (SAQ), questions based on the Critical Reading of a journal (evidence-based medicine) and an example of an Objectively Structured Clinical Examination (OSCE) question. Each of these question types is based on the College of Family Physicians blueprint and the key learning outcomes of the FCFP programme. The MCQs will be based on the ten clinical domains of family medicine, the MEQs will be aligned with the five national unit standards, and the critical reading section will include evidence-based medicine and primary care research methods.

This month's edition is based on unit standard 5 (conduct all aspects of health care in an ethical and professional manner), unit standard 2 (evaluate and manage a patient according to the bio-psycho social approach), unit standard 4 (facilitate the learning of others regarding the discipline of family medicine, primary health care, and other health-related matters) and unit standard 1 (critically appraising qualitative research). The theme for this edition is **Infectious Diseases**.

We suggest that you attempt answering the questions (by yourself or with peers/supervisors), before finding the model answers online: http://www.safpj.co.za/.

Please visit the Colleges of Medicine website for guidelines on the Fellowship examination:
http://www.collegemedsa.ac.za/view_exam.aspx?examid=102

We are keen to hear about how this series is assisting registrars and their supervisors in preparing for the FCFP (SA) examination. Please email us your feedback and suggestions.

## 1. MCQ (multiple choice question: single best answer):

A 16-year-old mother, who received no antenatal care, presents with her 6-month old child who is diagnosed with severe acute malnutrition and pneumonia. You provide extensive counseling for HIV testing of the child, but the mother refuses to provide consent. The most appropriate next step is to:

a) Respect the mother's wishes.
b) Seek permission to test from the Department of Social Development.
c) Seek permission to test from the Children's Court.
d) Seek permission to test from the maternal grandmother.
e) Seek permission to test from the medical manager.

### *Short answer:*

c)

### *Long answer:*

Understanding HIV testing in children is often complex and many healthcare workers struggle with understanding the Children's Act (38 of 2005). Accordingly, the Act stipulates that no child may be tested except if it is in the best interests of the child. In the scenario, there is clear benefit in testing because antiretroviral treatment is easily available in the public health care sector. Consent for testing may be provided by a child above 12 years of age. Children below 12 years of age may provide consent, if the child is found to be of sufficient maturity to understand the benefits, risks and social implications of testing. If the child is not of sufficient maturity, the parent or guardian provides the consent. In special circumstances the provincial head of social development and the child protection organisation arranging placement for a child may provide consent for HIV testing. When a child is being treated at a hospital and the child has no parent or a designated child protection organisation is not provided, the medical/hospital manager may provide consent to test a child less than 12 years of age who lacks sufficient maturity. In circumstances where a parent unreasonably withholds consent, permission to test the child needs to be sought from

the Children's Court. For emergencies, the medical/hospital manager may provide consent.

It is important to bear in mind the context of this case. One is dealing with a teenage mother who may have very valid reasons for refusing the HIV test. A positive test may serve as a surrogate marker of her status and the stigma associated with being labelled HIV positive. Having to deal with a teenage HIV positive mother is a very challenging problem in our setting. Fortunately, most antenatal programmes in South Africa counsel and test all patients, often repeatedly, during pregnancy and breastfeeding if one is HIV negative. However, there still exists a significant percentage of women who receive sub-optimal antenatal care due to many social reasons. When dealing with such situations, it is imperative that one involves the multidisciplinary team.

### *Further reading:*


- Government of South Africa. Children's Act: No. 38 of 2005. Pretoria: Government Printer, 2006. http://www.plusto.com/uploads/5780/docs/Childrens-Act.pdf
- National Department of Health. National HIV Counselling and Testing (HCT) Policy Guidelines. Pretoria: NDoH, 2015. http://www.health-e.org.za/wp-content/uploads/2015/07/HCT-Guidelines-2015.pdf


## 2. SAQ (short answer question): The Family Physician as a Care Provider

**Presenting complaint:** Siyanda is 12 years old. He is complaining of night sweats but says that he is not coughing. On examination he is underweight (less than minus 2 Z score), has oral candida and matted lymph nodes in the right posterior cervical triangle. His chest sounds clear. He has no organomegaly.

**Past medical history:** Siyanda was admitted to hospital with suspected TB based on a suggestive chest X-ray in 2014. At that admission he was found to be HIV-positive and was started on ABC / 3TC / EFV – 2 weeks after starting TB treatment. He completed 6 months of TB treatment. The table shows Siyanda's results since 2014. (See table below.)

In August 2017, he was changed to AZT/3TC/LPV/rtv. The community service medical officer (CSMO) has just seen Siyanda in February 2018 and has reviewed his results from January 2018 and he comes to you for advice.

2.1 What issues would you expect the CSMO to present to you in his comprehensive assessment of Siyanda? (8)

2.2 Has Siyanda failed second line treatment? Justify your answer. (2)

2.3 If required, what factors would you take into consideration before starting a third line regimen? (2)

2.4 Given the issues identified in question 2.1, draw up a comprehensive management plan for today's visit. (8)

## Answers

*2.1 What issues would you expect the CSMO to present to you in his comprehensive assessment of Siyanda?* *(8)*

**Summary** of the following (1/2 mark for each):

### *A. History:*

Clinical: Presentation, current symptoms, past medical history, current medication, adherence, side effects.

Individual: Ideas – about his condition, what he thinks is wrong with him, concerns and expectations.

Contextual: Where he lives, schooling, family support.

### *B. Relevant findings on clinical examination:*

Height, weight, general examination, any stigmata of HIV, opportunistic infections common with low CD4 (e.g. oesophageal candidiasis), which would suggest clinical failure and clinical staging.

### *C. Any relevant special investigations available:*

FBC (Hb as currently on AZT, WCC – indicative of infection, platelets – exclude thrombocytopaenia), U + E (exclude HIVAN-HIV Associated Nephropathy).

### *Assessment:*

Clinical:

- Evidence of clinical and possibly virological failure on second line agents secondary to poor adherence
- Possible TB lymphadenitis
- Underweight

Individual: Teenager, to what extent has he disclosed his status, what is his understanding of HIV, does he understand implications of being positive, how adherent is he to his medication and what influences his adherence.

Contextual: Uncertain about support.

*2.2 Has Siyanda failed second line treatment? Justify your answer.* *(2)*

No. Siyanda has a VL > 1000 copies which is suggestive of virologic failure and therefore failure of his second line treatment. However, Siyanda has not been on a protease inhibitor PI for a year and so cannot yet be considered to have failed second line treatment. Treatment failure is defined as a VL > 1000 copies/ml on two measures taken 2–3 months apart. Patient should have been on the PI for at least 1 year before resistance to PI can be considered.

*2.3 If required, what factors would you take into consideration before starting a third line regimen?* *(2)*

| | 10/2014 | 04/2015 | 12/2015 | 02/2016 | 09/2016 | 04/2017 | 08/2017 | 11/2017 | 01/2018 |
|---|---|---|---|---|---|---|---|---|---|
| CD4 | 7 | 10 | 79 | 10 | | 4 | 4 | | 116 |
| CD4% | 0.72 | 0.47 | 4.5 | 0.49 | | 0.2 | 0.8 | | 6.03 |
| VL c/ml | 1400 000 | 201399 | 529450 | 431244 | 382984 | 549738 | 1576299 | 375307 | 1283127 |
| VL log | 6.15 log | 5.30 log | 5.72 log | 5.63 log | 5.58 log | 5.82 log | 6.18 log | 5.57 log | 6.11 log |

Adherence interventions should be intensified and adherence checks done.

Resistance testing to confirm the presence of resistance to the PI being used (resistance to PI is unusual in patients on a PI for under 1 year).

Ensure that patient continues to take medication when the resistance testing is done as the 'wild type' HIV is more fit and outgrows the resistant mutant population which therefore cannot be detected within some weeks after cessation of ARTs

*2.4 Given the issues identified in 2.1, draw up a comprehensive management plan for today's visit.* *(8)*

***Clinical***

- Continue with the current ART medication.
- Treat TB as well as any new opportunistic infections (fluconazole if oesophageal candidiasis) if identified.
- Need to double the lopinavir and ritonavir (LPV/rtv) dose if started on TB treatment.
- Add co-trimoxazole prophylaxis.
- Nutritional support and supplementation.

Appropriate special investigations depending on when these were last done:

- FBC (Hb as currently on AZT, WCC – indicative of infection, platelets – exclude thrombocytopaenia).
- LFT (possible TB- may need to start Rifafour (RHZE)).
- U + E (exclude HIV associated nephropathy).
- Fine Needle Aspiration Biopsy of lymph nodes (looking for a diagnosis of TB).
- CXR looking for evidence of TB, sputa for geneXpert (looking for diagnosis of TB).
- Hep B serology (need to know hepatitis status as may need to continue with TDF if patient has chronic active hepatitis).
- Repeat the Viral Load in August 2018 (1 year after Protease Inhibitor was started).
- If VL still raised in August 2018 despite good adherence send blood for resistance testing and seek expert advice with regards to treatment choice.
- Discuss assessment with patient and family. Impress upon them the important of adherence.

The **individual** issues identified in assessment (2.1) need to be explored with him

i. **These include issues around Disclosure.**

ii. **His understanding about HIV and being HIV positive:** What does he understand about being HIV positive? Importance of adherence?

iii. **Addressing his feelings, fears, expectations.**-

iv. **Addressing adherence issues identified.**

The plan also needs to address any contextual **issues** identified such as social and psychological support.

Reference: Meintjes G, Moorhouse M, Carmona S, Davies N, Dlamini S, Van Vuuren C, et al. Adult antiretroviral therapy guidelines 2017. Southern African Journal of HIV Medicine. 2017 [accessed on 27 Sep 2017];1-28. Available at: http://www.sajhivmed.org.za/index.php/hivmed/article/view/776/969

## 3. Critical appraisal of qualitative research

Read the accompanying article carefully and then answer the following questions (total 30 marks). As far as possible use your own words. Do not copy out chunks from the article. Be guided by the allocation of marks with respect to the length of your responses.

Williams M, Van Rooyen DRM, Ricks EJ. Provision of antiretroviral therapy for children in Nelson Mandela Bay: Health care professionals' challenges. Afr J Prm Health Care Fam Med. 2018;10(1):a1490. Available at: https://doi.org/10.4102/phcfm.v10i1.1490

3.1 Did the study address a clearly focused question? Discuss. (2)

3.2 Is the research method (study design) appropriate for answering the research question? Discuss. (3)

3.3 Was the context clearly described? Please explain. (2)

3.4 Was the sample size used in the study appropriate to its research question? Discuss. (4)

3.5 Describe the difference between purposive and convenience sampling, and evaluate if the authors justified their sampling choice. (5)

3.6 Which key area(s) of data collection have not been described? (2)

3.7 Critically appraise and discuss the trustworthiness of the study. (6)

3.8 Discuss how the authors addressed the issue of anonymity in their research paper. (2)

3.9 Critically appraise whether the study enables you to judge the transferability of the findings to your own context. (4)

***Recommended answers:***

*3.1 Did the study address a clearly focused question? Discuss.* *(2)*

Yes: the study aimed to provide an understanding of challenges for health care professionals (HCPs) in providing antiretroviral (ART) services for children attending primary care clinics. The question was focused on a specific population and context, namely the HCPs providing ART for HIV-positive children at clinics in the Nelson Mandela Bay (NMB) Health District.

*3.2 Is the research method (study design) appropriate for answering the research question? Discuss.* *(3)*

Yes: The researchers aimed to explore and describe the experiences of these HCPs. They employed a "qualitative,

exploratory, descriptive and contextual design to understand what supported the phenomenon being studied and share the participants' experiences". Qualitative research is helpful with regard to exploring a phenomenon or a behaviour that is poorly understood, in order to interpret it from the perspective of those who have a direct involvement. The research method employed in this study should therefore be appropriate. One may argue, however, that qualitative research by its nature is contextual and exploratory or descriptive (and therefore only used one of the descriptors, such as exploratory). It would have been appropriate for the authors to position their work in a qualitative methodology such as phenomenology ethnography.

*3.3 Was the context clearly described? Please explain. (2)*

The authors provided a thick description of the context, which helps the reader to appreciate the research setting (and make deductions regarding the study findings' transferability). The authors provided a contextual description in the latter half of the introduction, as well as in the methods sections. Enough information is available to understand the context.

*3.4 Was the sample size used in the study appropriate to its research question? Discuss. (4)*

The researcher interviewed a range of HCPs (11 professional nurses, four doctors and four pharmacists). However, no mention of saturation was made, which makes it difficult to assess how the authors judged that the number interviewed was adequate.

Generally, for individual interviews, a sample size of between five and 15 interviewees is adequate to obtain a sufficient range of responses and experiences, until a level of so-called data 'saturation' is reached, beyond which no significantly new information is being produced. This can be discussed by the research team after each batch of five interviews has been completed and a decision can be made regarding whether or not to continue. An alternative approach to the size of the sample is to perform a preliminary analysis of the data after each interview, developing new ideas and hypotheses in an iterative process which can then be tested in subsequent interviews.

*3.5 Describe the difference between purposive and convenience sampling, and evaluate if the authors justified their sampling choice. (5)*

Convenience sampling (also known as availability sampling) is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in a study. Convenience sampling can be used, as determined by the context of the recruitment process, but a more directed approach gives better results.

Purposive sampling allows you to choose to interview those who are key informants by virtue of their position, or who are known for their opinions and views and are not afraid to voice them. These are so-called 'information-rich' participants, as compared with those who are known to be quiet or withdrawn.

The authors employed a purposive sampling method, but did not specify the type of purpose sampling used. The researchers purposively included six clinics in NMB in the Eastern Cape from which to interview HCPs. Although not explicitly mentioned, it appears as if the sampling was done based on criteria, by selecting clinics which were situated at a considerable distance from the regional hospital, as well as proximity of facility closest to the home of the caregivers of HIV-positive children (to limit transport costs and time out of work). However, it is unclear which criteria were used to select the HCPs. A statement is made, that "professional nurses are responsible for a large portion of the work involved in providing antiretroviral therapy to HIV-positive children, owing to a lack of pharmacists and medical practitioners in PHC clinics". However, the reader is unsure if this statement serves to support the discrepancy in numbers between the different HCP categories or if the unequal selection of HCPs was based on which HCP category would be most likely available to be involved with the ART care of HIV-positive children in the PHC facility.

*3.6 Which key area(s) of data collection have not been described? (2)*

Interviews were conducted and recorded in off-duty times (presumably not to interrupt service delivery, but not sufficiently described).

No explicit mention is made of the nature of the data, except for referring to the data of the field journal. It is unclear how the interviews were recorded (audio vs. video) and whether these recordings were transcribed. It is important to mention the method of transcription, as access to the recordings should be kept confidential and anonymous (especially when using a professional transcription service).

Furthermore, no mention was made of recruitment issues (e.g. why some people chose not to take part).

*3.7 Critically appraise and discuss the trustworthiness of the study. (6)*

Table 1 shows the four main criteria for appraising the trustworthiness of a qualitative study.

In terms of credibility, the researchers employed triangulation, by using multiple healthcare worker perspectives (medical doctors, pharmacists and professional nurses) to help produce a more comprehensive set of findings. The use of the narratives from miscellaneous participants supported data source triangulation.

Transferability is the extent to which the findings are meaningful to the reader and can be transferred to their own context. It was enabled by providing a thick description of the context and types of participants.

Dependability was ensured by the co-coding procedures, which included two independent coders, who helped recode the findings with the researchers during the data

analysis stage. The data analysis method followed the steps suggested by Creswell, in which the analysis process is considered to conform to a general contour, termed the 'data analysis spiral'. The steps of this spiral were defined sufficiently clearly for an audit trail – the process should be replicable by someone else.

In terms of confirmability, the researchers utilised triangulation as mentioned. Reflexivity is particularly important in terms of confirmability. Reflexivity refers to recognition of the influence a researcher brings to the research process. It highlights potential power relationships between the researcher and research participants that might shape the data being collected, particularly when the researcher is a healthcare professional or educator and the participant is a patient, client, or student. It also acknowledges how a researcher's gender, ethnic background, profession and social status influence the choices made within the study, such as the research question itself and the methods of data collection. In this article, a description of the authors' contributions provides some detail of the PhD candidate and first author who conducted the interviews. Her affiliation is noted as the department of nursing science at a university within the NMB district. However, no explicit description of the first author's reflexivity is provided.

**Table 1:** Criteria for trustworthiness of qualitative research

| Criterion | Strategy employed |
|---|---|
| Credibility | • Prolong engagement<br>• Peer briefing<br>• Triangulation<br>• Member check |
| Transferability | • Providing thick description<br>• Purposive sampling |
| Dependability | • Create an audit trial<br>• Triangulation |
| Confirmability | • Triangulation<br>• Practise reflexivity |

*3.8 Discuss how the authors addressed the issue of anonymity in their research paper. (2)*

In terms of anonymity, the names of the PHC clinics were not provided. Some detail of the study participants is provided, such as gender, age and type of HCP. This information is sufficiently sparse to protect the identity of the participants, yet sufficient enough to aid the reader with assessing the transferability of the study findings. Issues of confidentiality and anonymity can become quite complex when data constitute personal reports of experience or perception; the need to minimise harm may involve not only protection from external scrutiny but also mechanisms to mitigate potential distress to participants from sharing their personal stories.

*3.9 Critically appraise whether the study enables you to judge the transferability of the findings to your own context. (4)*

Transferability is the extent to which the findings are meaningful to the reader and can be transferred to their own context. It is enabled by providing a thick description of the context and types of participants. As mentioned above, the context and participants are described in sufficient detail. This helps the reader to relate his or her own context to that of the context of the study participants.

The model answer is dependent on the student's (reader's) own context.

The following relates to what might be transferred in terms of the study's recommendations. If the reader finds himself or herself in a urban PHC setting in the Eastern Cape province or one of the other South African provinces with a similar socio-economic profile and health system, he or she may relate with the study's conclusions which specify the need for health system strengthening (including issues of staff or team performance and management support), as well as implementing or standardising paediatric ART care for PHC clinics which includes a focus on motivating the caregivers of the children on ART. These recommendations are mainly aimed at HCPs and PHC managers within the health system; more explicit recommendations for future research would have been a useful addition.

***Further reading:***


- Reid S, Mash B. African primary care research: qualitative interviewing in primary care. African Journal of Primary Health Care & Family Medicine. 2014;6(1):1-6.
- Mabuza LH, Govender I, Ogunbanjo GA, Mash B. African Primary Care Research: Qualitative data analysis and writing results. African Journal of Primary Health Care & Family Medicine. 2014;6(1):1-5.
- Kuper A, Lingard L, Levinson W. Critically appraising qualitative research. BMJ. 2008;337:a1035.
- CASP Checklists. Critical Appraisal Skills Programme [homepage on the Internet]. c2018. Available at: https://casp-uk.net/casp-tools-checklists/.
- The Center for Evidence-Based Management. Critical Appraisal of a Qualitative Study. Resources and Tools. [homepage on the Internet]. c2018. Available at: https://www.cebma.org/resources-and-tools/.
- Hannes K, Lockwood C, Pearson A. A comparative analysis of three online appraisal instruments' ability to assess validity in qualitative research. Qualitative Health Research. 2010;20(12):1736-43.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care. 2007;19(6):349-357. Available at: http://www.equator-network.org/reporting-guidelines/coreq/


## 4. OSCE scenario: Management of malaria

***Objective of station:***

This station tests the candidate's ability to take a focussed history and manage a patient with uncomplicated malaria.

***Type of station***

Integrated consultation

***Equipment list:***

1 Table and two chairs for office consultation

2 Simulated male patient (age ~ 25–30 years)

***Instructions for candidate***

*History / context*

You are working in the outpatient department of your local district hospital. Your next patient is a walk-in who did not have an appointment.

Please take a focussed history and manage the patient accordingly.

Examination findings or lab results will be given on request.

## Instructions for the examiner

Objectives: This station tests the candidate's ability to take a focussed history and manage malaria.

This is an integrated consultation station in which the candidate has 14 minutes.

Familiarise yourself with the assessor guidelines which detail the required responses expected from the candidate. No marks are allocated. In the mark sheet, tick off one of the three responses for each of the competencies listed. Make sure you are clear on what the criteria are for judging a candidates' competence in each area.

Provide the information on the patient's notes sheet as and when asked for by the candidate.

This station is 15 minutes long. The candidate has 14 minutes, then you have 1 minute between candidates to complete the mark sheet and prepare the station.

Please switch off your cell phone.

Please do not prompt the student.

Please ensure that the station remains tidy and is reset between candidates.

***Reference:***

1. National Department of Health. Guidelines for the treatment of malaria in South Africa. 2016 [accessed on 12 June 2018]. Available at: http://www.nicd.ac.za/index.php/201617-national-malaria-guidelines/.

## Mark sheet

| Exam number of candidate: |
|---|

| Competencies (Delete what is not applicable) | Candidate's rating | | |
|---|---|---|---|
| 1. Gathering information - history<br>Comment: | Not Competent | Competent | Good |
| 2. Gathering information – physical exam findings and investigations<br>Comment: | Not Competent | Competent | Good |
| 3. Clinical reasoning<br>Comment: | Not Competent | Competent | Good |
| 4. Management<br>Comment: | Not Competent | Competent | Good |
| 5. Doctor-Patient relationship | Not competent | Competent | Good |

***Comments:***

***The following contributed positively/negatively to the candidate's performance:***

***Examiner's name:*** ***Examiner's signature:***

## Guideline for assessors

| Competencies | Details | | |
|---|---|---|---|
| | Not Competent | Competent | Good |
| 1. Gathering information | • Not enough information to suspect malaria | • Adequate information to strongly suspect malaria | • Detailed travel history with clear ability to identify risk of malaria, and associated risks |
| 2. Physical examination & Investigation<br>• Request relevant clinical information<br>• Observations<br>• General findings<br>• Side room and lab requests | • Inadequate information gathered | • Gathers enough information to formulate a working diagnosis | • Detailed and relevant information requested, rational use of investigations, demonstrating a clear understanding of diagnostic criteria |
| 3. Clinical reasoning<br>• Uncomplicated malaria<br>• Concern about malaria deaths<br>• Expect proper treatment | • Unable to make a diagnosis of malaria | • Makes a diagnosis of malaria OR includes malaria in the differential diagnosis | • Three stage/ comprehensive assessment<br>• Makes a definitive diagnosis of malaria |
| 4. Management<br>• Oral Coartem – correct dose for three days<br>• Take with meals/milk<br>• Alternative Quinine with Doxycycline or Clindamycin | • Wrong treatment | • Includes anti-malaria agents in the management plan, although not clear or comprehensive | • Clear, comprehensive management of malaria<br>• Discusses future malaria prevention.<br>• Does safety netting |
| Doctor-Patient relationship | • Biomedical approach only | • Some psychosocial issues addressed | • Comprehensive biopsychosocial approach<br>• Good communication skills<br>• Patient centred |

## Guide for examiner

Common malaria symptoms and signs include:

- fever, chills, perspiration, rigors (cold shivers/hot sweats)
- headache
- muscle/joint aches
- malaise (a general feeling of discomfort, illness, or lack of well-being)
- lethargy, lassitude, fatigue (an unusual feeling of weakness and tiredness)
- loss of appetite (in older children and adults), poor feeding (in young children)
- abdominal discomfort, diarrhoea, nausea, vomiting
- cough (in young children)
- splenomegaly (in patients from areas of high intensity malaria transmission)

### *Diagnosis*

A diagnosis of malaria cannot be confirmed or excluded clinically. Since the clinical presentation is non-specific and may mimic many other diseases, each patient's blood should be examined immediately using a malaria antigen rapid diagnostic test (RDT) or microscopy of thick and thin blood smears to confirm or exclude the diagnosis. However, a negative smear or RDT does not necessarily exclude the diagnosis. Repeat smears or RDTs should be examined regularly and urgently (without waiting for fever peaks) until the diagnosis is confirmed, the patient has recovered, or another definitive diagnosis has been made. A blood test for parasites should be done irrespective of the time of the year or whether or not the patient has taken chemoprophylaxis or travelled to a malaria endemic area.

### *Treatment*

Patients should receive prompt treatment with artemether-lumefantrine (Coartem) (or oral quinine if artemether-lumefantrine is contraindicated or unavailable).

Dosage or Artemether-Lumefantrine (> 65 kg)

4 tabs stat, 4 tabs after 8 hours, 4 tabs BD for 2 days (24 tabs)

NB. Should be taken with meal/glass of full cream milk.

Quinine – 10 mg/kg 8 hourly po X 7-10 days. With doxycycline 100 mg bd or clindamycin 10 mg/kg bd for 7-10days.

### *Role play – Instructions for actor (standardised patient)*

Appearance (including dress) and behaviour (emotions and actions):

Looks tired, weak, sweating, having a fever.

*Opening statement:*
"Please doctor help me, I am feeling terrible. My head feels as if it wants to burst and I am feeling fluish with hot/cold spells."

*History:*
Open responses: Freely tell the doctor …
You are 42-years old. You have been feeling unwell for the last 3 days. You have a headache, whole body is painful, muscles and joints are painful, and you feel weak and have on and of fever especially in the evenings. When you feel hot you also sweat a lot. You also have chills and rigors (feel hot and cold and shiver).

Closed responses: Only tell the doctor if asked –
You went on a business trip to the DRC 2 weeks ago. You stayed in the residence of your business partner. You did not take any

medication and did not notice any bites. You drank only bottled water.

*Ideas, concerns and expectations:*
Could this be malaria? You arranged this trip in a hurry and did not take any medication. prior to your departure. You need the doctor to find out what is wrong with you and treat you for it.

Ask about medication and also state your fear of getting sick and not being able to work – big business deals pending.

*Medical history:*
Healthy man. No previous medical conditions or illnesses. Have tested negative for HIV 2 months ago.

*Medication history:*
No chronic medication. Did not use any medication at all.
Did not take any malaria prophylaxis.

*Social history:*
Non-smoker and uses alcohol socially over weekends.

*Family history:*
None

### *Patient notes*

1. Observations if asked for:
   BP 125/80 mmHg
   Pulse 105 beats per minute
   Temp 38.5˚C
   Blood sugar 6.5 mmol/l
   Weight 70 kg
2. General examination if asked for:
   Fully awake, orientated, hot to touch and sweaty.
   No signs of anaemia, jaundice
   No meningism
   CVS, Resp, abdomen normal
3. Side room examinations if asked for:
   (Specific investigations must be requested by the candidate)
   Hb = 14 g/dl
   Blood sugar 6.5 mmol/l
   Rapid Malaria test positive
4. Laboratory tests:
   (Specific investigations must be requested by the candidate)
   FBC/diff count including platelets – Hb – 14.5, WBC – normal, Platelets - 100
   U&E - Normal
   LFT - Normal
   Malaria thick and thin smears – Plasmodium falciparum – positive. Parasite count 1%
   Malaria Ag test – Positive

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