Mastering your Fellowship

M Naidoo,[1] KB von Pressentin,[2] T Ras,[3] H Mabuza[4]

[1] *Department of Family Medicine, University of KwaZulu-Natal, South Africa*
[2] *Division of Family Medicine and Primary Care, Stellenbosch University, South Africa*
[3] *Division of Family Medicine, University of Cape Town, South Africa*
[4] *Department of Family Medicine, Sefako Makgatho Health Sciences University, South Africa*
Corresponding author, email: naidoom@ukzn.ac.za

The series, "Mastering your Fellowship", provides examples of the question format encountered in the written and clinical examinations, Final Part A of the FCFP(SA) examination. The series is aimed at helping family medicine registrars 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 will provide 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); 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 presented 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 1 (critically appraising quantitative research, leader in clinical governance) and unit standard 2 (evaluate and manage a patient according to the bio-psycho-social approach). The theme for this edition is infectious diseases and more specifically tuberculosis.

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:
https://www.cmsa.co.za/view_exam.aspx?QualificationID=9

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 37-year-old HIV positive, ART naïve, male patient presents with jaundice and nausea four weeks after starting first line TB treatment based on a positive GeneXpert test of the sputum which confirmed RIF sensitivity. He is alert with normal vital signs but has a tender hepatomegaly. His bilirubin = 34 umol/l and his ALT = 206 IU/l. He is also on cotrimoxazole two tablets daily. The most appropriate next step in his management, while investigating the cause, is to stop:

a. TB treatment

b. All drugs

c. All drugs and start STR, MOX, EMB

d. RIF and add MOX

e. INH and add MOX

ART: Antiretroviral treatment	RIF: Rifampicin
ALT: Alanine transaminase	STR: Streptomycin
MOX: Moxifloxacin	EMB: Ethambutol

Answer: b)

Explanation:

The case presented is a common scenario in clinical practice in South Africa. Hepatotoxicity results from toxicity of the drug itself or through and immune mediated response. Predictable drug induced liver injury (DILI) is a dose related phenomenon while unpredictable or idiosyncratic responses, which is more common, is thought to be a hypersensitivity reaction. Rifampicin may infrequently cause a dose related complication resulting in a rise in the unconjugated bilirubin. Pyrazinamide causes both dose dependent and idiosyncratic responses while INH produces a metabolite which is sometimes toxic to the liver.

Risk factors for DILI include age greater than 35 years, a positive hepatitis B surface antigen, use of alcohol, patients who are slow acetylators, disseminated TB infection, hepatitis C virus infection and co-infection with HIV. Traditional medicine usage and the co-administration of other known hepatotoxic drugs may also predispose the patient to DILI. Drug induced liver injury may be classified as mild, moderate or severe based on ALT and bilirubin levels and the presence of symptoms.

The patient in the case presented above has symptoms and has an ALT level above five times the upper limit of normal so this patient will be classified as having severe DILI. The National TB Guidelines recommend the cessation of TB treatment and other potentially toxic drugs (cotrimoxazole) and advocate admission and monitoring of such patients until the ALT < 100 IU/l. One may then re-challenge the patient with individual TB drugs starting with RIF as follows:

• Start Rifampicin 10 mg/kg/day (max 600 mg/ day)

• Repeat ALT on day 3

• If normal, add Isoniazid 5 mg/kg/day (max 300 mg/ day) on day 4 to 6

• Repeat ALT on day 7

• If normal, add Ethambutol 15mg/kg/day on day 8–10

• Check ALT on day 10

• If normal consider Pyrazinamide 25 mg/kg/day

The consensus statement from the HIV clinicians' society suggests the replacement of standard TB treatment with MOX, EMB and STR in cases of DILI but the 2014 National Department of Health TB guidelines takes a conservative approach and suggests that we stop all treatment and allow the liver to recover before challenging with a single drug.

Further reading:

1. Jong E, Conradie F, Black A, Menezes C, John MA, Meintjes G. Consensus statement: management of drug-induced liver injury in HIV-positive patients treated for TB: guideline. Southern African Journal of HIV Medicine. 2013 Sep 1;14(3):113-9.

2. South African Department of Health. National Tuberculosis Management Guidelines 2014. Pretoria: National Department of Health 2014.

2. SAQ (short answer question): The family physician's role as a leader and manager

As a district family physician, in your outreach to one of the Community Health Centres you see the need for the implementation of proper tuberculosis screening in children exposed to TB.

2.1 As a leader overseeing clinical governance in the district, list measures you would take to ensure that the relevant team in the clinic is appropriately managing children exposed to TB. (4)

2.2 Describe how you would explain the pitfalls in the performance and interpretation of the various Mantoux results to your clinicians. (6)

2.3 The South African National Core Standards provide a framework for clinical governance related to management of TB. List five aspects from the core standards that speak to clinical governance that could be applied in this scenario. Give an example for each aspect. (10)

Suggested answers:

2.1 As a leader overseeing clinical governance in the district, list measures you would take to ensure that the relevant

team in the clinic is appropriately managing children exposed to TB. (4)

• Involve clinicians in all categories (registrars in Family Medicine, medical officers, community service doctors and interns), nurse clinicians and community health workers (CHWs). Ensure collaboration of the team with clear roles; frequent scheduled meetings to monitor progress and address challenges. The skill to execute and interpret the screening test (Mantoux) is to be mastered by all clinicians and not relegated to nurses. (2)

• The pharmacy department needs to ensure that medical supplies (in this case: the tuberculin skin test kits with alcohol swabs, syringes and needles) are readily available and ensure that the drug stock availability is consistent. This involves an oversight role in corporate governance and supply chain management. (1)

• Collaboration with facility management (CEO and Clinical Manager) to ensure administration logistics and HR: ensuring staff complement. This again relies on developing a strong relationship with managers and providing an oversight role in corporate governance and HR. (1)

2.2 Describe how you would explain the pitfalls in the performance and interpretation of the various tuberculin skin test results to your clinicians. (6)

• The results should be read within 48–72 hours after administering the injection, but closer to the 72 hours to avoid a false negative reading. (1)

• It should be the horizontal induration (hard swelling) that is measured, not just the visible skin change. (1)

• The PPD result of less than 5 mm, though it implies a negative result, could also mean recent TB infection not yet detectable by the test. It could also mean severe immunosuppression leading to failure to mount an immune response: severe malnutrition, corticosteroid therapy, cancer therapy, infections (HIV, including severe TB). In a child that is ill, a negative test does not exclude infection with TB. (1)

• In severe immunosuppression, a PPD result of 5 mm or greater can be considered positive. (1)

• A false positive PPD test can result from a previous natural infection with M. tuberculosis, cross-reaction from non-tuberculous mycobacteria or the BCG vaccine. (1)

• False negatives in up to 20% of people may result from immunosuppression, live vaccination from, for example, measles, polio within the last four weeks, recent or current viral infections and poor administration technique. (1)

2.3 The South African National Core Standards provide a framework for clinical governance related to management of TB. List five aspects from the core standards that speak to clinical governance that could be applied in this scenario. Give an example for each aspect. (10)

• Implementation of patient care guided by protocols designed to meet patients' needs. Proper screening of children younger than six years is mandatory if they present with symptoms and/or signs suggestive of TB, have a positive contact history, or leads to a high index

of suspicion among health workers, including children with loss of weight and respiratory infections including pneumonia. (2)

- Clinical management of priority health conditions – entailing national priorities, including the United Nations SDGs (Sustainable Development Goals) for maternal and child health, HIV and tuberculosis. Proper screening of children for TB and other infections leads to an increase in pick up rate, timeous management and reduction of mortality and morbidity. (2)

- Clinical leadership provided by the health workers (in this case the Family Physician and his/her team and the support systems) is aimed at improving patient care. (2)

- Management of clinical risks and implementation of preventive intervention, identification of patients with special needs or at high risk, e.g. pregnant women, children and the mentally ill. In this case, children below six years is the high-risk group for TB infection. (2)

- Infection prevention and control – which entails implementing the Infection Prevention and Control Program to reduce, for example, the spread of respiratory infections, including TB. (2)

[20]

Further reading:

1. Mash B, Blitz J. (Eds). South African Family Practice Manual (3rd Ed). Hatfield, Pretoria, Van Schaik: 2015.

2. Mash R, Blitz J, Malan Z, Von Pressentin K. Leadership and governance: learning outcomes and competencies required of the family physician in the district health system. South African Family Practice 2016;1(1):1-4.

3. National Department of Health. National Core Standards for Health Establishments in South Africa. Abridged version.

3.   Critical appraisal of quantitative 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.

Mntonintshi M, O'Mahony D, Mabunda S, Namugenyi KA. Undiagnosed tuberculosis in patients with HIV infection who present with severe anaemia at a district hospital. African Journal of Primary Health Care & Family Medicine. 2017;9(1):1-6.

Available from: https://phcfm.org/index.php/phcfm/article/view/1406

3.1   Explain the scientific background and rationale for the study reported. (3 marks)

3.2   Critically appraise the authors' description of the study setting. (3 marks)

3.3   Provide definitions of a case report and a case series. (3 marks)

3.4   Which potential contributions do case series make to the literature? (2 marks)

3.5   Critically appraise the method of sampling study participants in this case series. (4 marks)

3.6   Discuss the method of identifying and measuring the outcome of interest in the participants included in the case series. (5 marks)

3.7   Critically appraise the authors' reporting in the results section. (4 marks)

3.8   Discuss the value of the study findings for your own practice using the READER format. (6 marks)

(Total: 30 marks)

Suggested answers:

3.1   Explain the scientific background and rationale for the study reported. (3 marks)

The authors highlighted the global challenge of tuberculosis (TB) and HIV co-infection, and the need for early diagnosis of TB in HIV-infected individuals. The fact that TB is often undiagnosed (only diagnosed during screening and at post-mortem), contributes to the burden of HIV-related adult deaths, especially in Sub-Saharan Africa.

TB may present in HIV-infected individuals with anaemia, and South African national guidelines recommend ruling out TB in HIV-patients who present with anaemia. However, these guidelines do not specify the investigations required to exclude TB, particularly extra-pulmonary TB, which is as common as pulmonary TB in HIV-infected patients.

Therefore, the authors aimed to determine the prevalence of undiagnosed TB in HIV-positive patients with severe anaemia presenting at a district hospital in the Eastern Cape Province and to identify the optimal investigations for diagnosing TB in these patients.

3.2   Critically appraise the authors' description of the study setting. (3 marks)

The authors provided a superficial description of the study setting, which makes it difficult for the reader to relate to the study setting. There is not enough information provided to understand if Mthatha General Hospital meets the criteria of a typical district hospital (it was classified as a district hospital in the abstract). Information on its bed size as well as available inpatient services are missing.

Reference is made to the availability of two family physicians and a radiologist, who helped interpreting the chest x-rays and abdominal ultrasounds in the study. It is not clear if this radiologist was based at this hospital, which would be an anomaly for a district hospital. Reference to a specialist cardiology clinic is also made, but it is unclear if this service is on-site or based at the referral centre.

Information on the population served by the district hospital is provided, which helps the reader to understand the profile of the community ("predominantly rural, of low socio-economic status and with a HIV prevalence of 20% in the reproductive age group"). However, only information on the HIV prevalence is provided; no information on

TB prevalence is provided. The study sample should be described in sufficient detail so that other researchers can determine if it is comparable to the population of interest to them. It would have been useful to add information on the TB/HIV routinely collected data, as typically reported in the required monthly reports.

3.3   Provide definitions of a case report and a case series. (3 marks)

A case report is the smallest publishable unit in the literature, which describes the clinical course of one individual, which may include particular exposures, symptoms, signs, interventions or outcomes.

A case series reports aggregated individual cases in one publication. A case series is a type of descriptive observational study in which only patients with the outcome are sampled (either those who have an exposure or those who are selected without regard to exposure), which does not permit calculation of an absolute risk (there is no control group). The outcome could be a disease or a disease related outcome.

The above are contrasted to analytical observational studies, such as cohort studies where sampling is based on exposure (or characteristic), and case-control studies where there is a comparison (or control) group without the disease.

3.4   Which potential contributions do case series make to the literature? (2 marks)

Case series are uncontrolled study designs known for increased risk of bias but have profoundly influenced the medical literature. Concerns about weak inferences and the high likelihood of bias associated with such reports have resulted in minimal attention being devoted to developing frameworks for appraising, synthesising and applying evidence derived from case series. Nevertheless, such observations remain integral to advancing medical knowledge. Case series are usually starting points for future research with more robust designs.

Additional information (not part of the model answer):

"The Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach clearly separates the certainty of evidence from the strength of recommendation. This separation allows decision-making based on lower levels of evidence. For example, despite low certainty evidence (derived from case series) regarding the association between aspirin and Reye's syndrome in febrile children, a strong recommendation for using acetaminophen over aspirin is possible."

From: Murad MH, Sultan S, Haffar S, Bazerbachi F. Methodological quality and synthesis of case series and case reports. BMJ evidence-based medicine. 2018;23(2):60-3.

3.5   Critically appraise the method of sampling study participants in this case series. (4 marks)

The authors should provide clear inclusion (and exclusion criteria where appropriate) for the study participants. The inclusion/exclusion criteria should be specified (e.g., risk,

stage of disease progression) with sufficient detail and all the necessary information critical to the study.

In this study, a convenience sample of 50 consecutive patients was chosen. Studies that indicate a consecutive inclusion are more reliable than those that do not.

In this study, a case was defined as a patient aged 18 years or older with HIV-infection and severe anaemia who after treatment by the doctors on duty was not investigated for TB. Patients on TB treatment or who had active or recent haemorrhage (within the previous three months) were excluded.

One may therefore state that the study population was described sufficiently and a case definition was provided. However, the completeness of a case series contributes to its reliability. The authors discussed this in the limitations section of the paper. We do not know however, how the sample of 50 patients relates to the target or total population. Nevertheless, it would not be ethical to conduct a case series with a much larger sample size as this will not serve to enhance the generalizability for this type of study design.

3.6   Discuss the method of identifying and measuring the outcome of interest in the participants included in the case series. (5 marks)

Many health problems are not easily diagnosed or defined, and some measures may not be capable of including or excluding appropriate levels or stages of the health problem. In this paper, the results section describes the method of measuring both anaemia and TB. A case in this series is defined as a HIV-positive adult patient with severe anaemia, defined as a haemoglobin level less than 8 g/dL.

The outcome of interest is undiagnosed TB ('TB that is only diagnosed during screening, at post-mortem or that is missed during an investigation'). Here one has to determine if the measurement tools used were validated instruments as this has a significant impact on outcome assessment validity. The method of measurement of the condition should be done in a standard (i.e., same way for all patients) and reliable (i.e., repeatable and reproducible results) way.

The outcome of undiagnosed TB is assessed using observer reported measures (symptom screen and opinion-based interpretation of chest x-ray and abdominal ultrasounds by two family physicians and a radiologist), which has the risk of over- or under-reporting. The authors state that "a clinical diagnosis of TB was made on clinical evidence without bacteriological confirmation of disease".

Fortunately, the outcome is also assessed using validated microbiological measures (Bactec® Mycobacterium TB blood culture; and first void urine TB culture) performed by laboratory tests which were performed by the National Health Laboratory Service.

The authors made attempts to ensure reliability by using pre-defined abdominal ultrasound diagnostic criteria and employing a statistical method of inter-rater agreement for

chest x-ray reading. The two family physicians had moderate to slight agreement ratings compared with the radiologist, which negatively affects the reliability of the chest x-ray method of measuring the outcome of interest.

Extra-pulmonary TB in the pleural cavity and pericardium was diagnosed by more reliable methods (although one may argue that diagnosis of TB pericarditis at a specialist cardiology is also rater-dependent).

3.7 Critically appraise the authors' reporting in the results section. (4 marks)

The case series should clearly describe relevant participant's demographics. The authors describe the baseline characteristics of the patients in Table 1 as well as in the text. This information helps the reader to understand the stage of HIV disease in this case series in terms of viral load and CD4 count. The case definition included severe anaemic, and all patients had a haemoglobin level of less than 8 g/dL. The anaemia typing is useful, as only 63% had normocytic anaemia, which is typically the anaemia of chronic disease, such as TB.

Other findings presented in the results section include the TB screening findings (80% positive with one or more symptoms), as well as the overall TB prevalence of 86% in this case series. The Venn diagram in Figure 2 shows an overlap of both pulmonary and extra-pulmonary TB site involvement in 24 (around 50%) of the patients included in the series.

Figure 1 provides a visual assessment of the mean time (in days) to TB diagnosis by test modality. The tests with the highest diagnostic yield and the shortest period to diagnosis were chest x-ray, ultrasound and sputum Xpert.

Therefore, one may conclude that there was a clear reporting of both demographics and clinical information of patients, as well as the outcomes of the cases (TB tests results).

3.8 Discuss the value of the study findings for your own practice using the READER format. (6 marks)

External validity is the validity of applying the conclusions of a scientific study outside the context of that study. In other words, it is the extent to which the results of a study may be generalised to other situations and to other people. External validity is an important property of any study, as the aim is to facilitate making general conclusions of value to the clinicians and patients in similar contexts.

The model answer here would be constructed around the external validity for the family physician working in the district health system. The study setting is described incompletely (the authors' description of Mthatha General Hospital lacks information, as discussed above). However, the authors highlight the fact that their study described the optimal combination of tests to rapidly diagnose TB in HIV-infected patients with severe anaemia was chest x-ray, ultrasound (abdomen, pericardium and lower chest) and sputum Xpert, which may readily be done in a district hospital.

The READER format may be used to answer this question:

Relevance to family medicine and primary care?

Education – does it challenge existing knowledge or thinking?

Applicability – are the results applicable to my practice?

Discrimination – is the study scientifically valid enough?

Evaluation – given the above, how would I score or evaluate the usefulness of this study to my practice?

Reaction – what will I do with the study findings?

The answer may be seen as a subjective response but should be one that demonstrates a critical reflection on the possible implication of the research for the registrar's practice within the South African public health care system. It is acceptable for the registrar to suggest how his/her practice might change, within other scenarios after graduation (e.g., general private practice). The reflection on whether all important outcomes were considered is therefore dependant on the registrar's own perspective (is there other information you would have liked to see?).

A model answer may be written from the perspective of the family physician employed in the district health system.

Relevance to family medicine and primary care:

This study is relevant to the African primary care context. The district hospital represents a key employment setting of family physicians and managing HIV and TB co-infection in the sub-district community speaks to the core function of high-quality, family physician-led primary care teams.

Education – does it challenge existing knowledge or thinking:

This study highlights the need for family physicians to be well-equipped to respond to TB screening results in HIV-patients with severe anaemia (including interpreting chest x-rays and performing ultrasound investigations), as these patients present to the district hospital as complicated patients in need of early TB diagnosis. The inter-rater comparison between the family physicians and the radiologist indicates that more training may be required to enhance the family physicians' rating ability.

Applicability – are the results applicable to my practice:

The intended target audience is district hospital clinicians; however, the findings are also applicable to family medicine training programmes and clinical trainers, to ensure that registrars receive adequate exposure and training to be suitably equipped for the district hospital context. The authors also recommend that the South African national TB/HIV guidelines incorporate these specific tests to diagnose TB in patients with HIV and severe anaemia.

Discrimination – is the study scientifically valid enough:

The authors stated several limitations, which make the results of this study not generalisable: the sample was non-random and there was no control group; patients were seen only once and other causes of anaemia may have been diagnosed later. More robust research may be required; however, as stated above, the

Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach clearly separates the certainty of evidence from the strength of recommendation. The recommendation to consider this evidence in district hospital clinical setting may be moderate, despite the relatively low certainty of evidence presented by this study design.

Evaluation – given the above, how would I score or evaluate the usefulness of this study to my practice:

This descriptive study is useful to the district health system and the training of family physicians. The authors set out to diagnose TB (pulmonary or extra-pulmonary) in patients who normally may not have been diagnosed with TB, and only had severe anaemia as a possible clinical clue for underlying TB. Positive TB screening questions in HIV-positive patients with severe anaemia should prompt early chest x-ray and ultrasound investigations as indicated, together with other appropriate microbiological confirmatory tests.

Reaction – what will I do with the study findings:

One would have to compare this study to similar research conducted within the South African district health system. Combining appropriately selected clinical and microbiological tests to diagnose previously "undiagnosed TB" in HIV patients with severe anaemia should be considered when these patients present to the district hospital setting. A high clinical index of suspicion should be maintained to ensure early diagnosis and treatment, from both the individual patients as well as the public health perspectives, so as to address the TB-HIV pandemic more efficiently.

Further reading:

- Mash B, Ogunbanjo GA. African primary care research: quantitative analysis and presentation of results. African Journal of Primary Health Care & Family Medicine. 2014;6(1):1-5.
- Pather M. Evidence-based family medicine. In Mash B (Ed). Handbook of Family Medicine (4th ed). Cape Town: Oxford University Press, 2017; p.430-53.
- Greenhalgh T. How to read a paper: the basics of evidence-based medicine. John Wiley & Sons; 2014.
- Schuster T. How to conduct observational studies. In Goodyear-Smith F, Mash B (Ed). How to do primary care research (1st ed). Boca Raton, FL: CRC Press, 2019; p.195-202.
- Joannabriggs.org. (2019). Critical Appraisal Tools - JBI. [online] Available at: http://joannabriggs.org/research/critical-appraisal-tools.html [Accessed 19 August 2019].

4. OSCE (Objectively Structured Clinical Examination) scenario: Communicable diseases

Objective of station:

This station tests the candidate's ability to:

1. Manage a patient who is defaulting TB treatment

2. Apply behaviour change counselling skills

Type of station

Integrated consultation

Equipment list:

1. Role player

2. Clinical notes

Instructions for candidate

You are the family physician working at a Community Health Centre. The Medical Officer in the TB clinic asks you to consult with this patient, who is reported defaulting on his TB treatment.

You do not need to examine this patient – all relevant examination findings will be provided on request.

Instructions for the examiner

Objectives: This station tests the candidate's ability to:

1. Manage a patient who is defaulting TB treatment

2. Apply behaviour change counselling skills

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 candidate's competence in each area.

When the candidates asks for relevant examination and investigation findings, provide the following:

Examination: generally well; weight 72 kg (BMI 23); vitals all within normal limits; respiratory examination: NAD; abdominal exam: NAD; neuro exam: NAD

Investigations: only investigation is a 2-month-old Gene-Xpert: positive, drug sensitive TB; finger prick Hb from 2 months ago: 12.8

Please switch off your cellphone.

Please do not prompt the student.

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

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.

Further reading:

Primary Care EML, 2018. Ch 10.16

Marking template for consultation station

Exam number of candidate:			
Competencies (delete what is not applicable)	**Candidate's rating**		
	Not competent	**Competent**	**Good**
1. Establishes and maintains a good doctor-patient relationship Comments:			
2. Gathering information: history, relevant exam findings, investigation results Comments:			
3. Clinical reasoning: synthesis of data into an assessment Comments:			
4. Management: apply behaviour change counselling skills Comments:			
Overall comments:			
Examiner's name:	**Examiner's signature:**		

Guidance for Examiner

Some general descriptors of competencies

Establishes a good doctor-patient relationship:

Competent: establishes and maintains rapport with the patient; is respectful.

Good: establishes rapport that displays empathy, respect, and engages as an equal partner with the patient.

Gathering information:

Competent: gathers sufficient clinical information: history/ examination/investigations to understand the reasons for this current problem.

Good: in addition, has a structured, comprehensive approach that allows clear risk identification and stratification, explores the patient's perception and experiences and identifies relevant contextual issues.

Clinical reasoning:

Competent: identifies the key clinical problems: defaulting TB treatment at risk of clinical deterioration and drug resistance; alcohol abuse (no need for rehab; contemplative stage).

Good: identifies the TB and alcohol-related issues, but also incorporates the ongoing individual and contextual stressors (loneliness; need for home-based care).

Management:

The **competent candidate** will counsel the patient (using any behaviour change methods) on the risks of defaulting and advise on an alcohol intervention strategy, with a definite follow-up plan.

A **good candidate** will, in addition, advise on possible community-based resources to address the loneliness and home-based care needs.

Role play – Instructions for actor

You are a 46-year-old man, neatly dressed.

Opening statement: "The other Dr asked me to come see you. She's worried about my TB medication…"

Freely tell the Dr:

- You have been on treatment for 7 weeks and feel well.
- The cough and tiredness that started with the TB has disappeared completely. This is the first time you have TB.
- You were told that you needed treatment for 6 months, but you feel well now.
- That's why you skipped the last two weeks – you usually collected the meds every week from the sister in the TB clinic
  - If asked for a reason: your life is busy – you leave home to catch a taxi to work at 5am and return around 6pm. You have responsibilities at home, so can't always come to the clinic.

Only if asked:

- You are HIV negative – tested when the TB was diagnosed – no sexual relationships for two years.
- You have no other medical problems, no allergies, no admissions to hospital, and never had any surgery.
- The Dr might ask about your mood: you feel fine most of the time, and don't get anxious or angry easily.

- You smoke cigarettes, about 10/day since age 20 (about).
- You drink alcohol – a 'few beers' every day after work.
    - You don't drink before 5pm.
    - On weekends, it is a bit more, but not until you're drunk.
    - You recognise that it is not good for your health, and have thought of stopping, but enjoy it too much – it's your only pleasure besides your children. You don't think you are addicted.
    - If the Dr asks if you are willing to stop, say "*yes, but what else will I do to relax?*" You don't drink at all when your daughters visit, and don't experience withdrawals.

Home life:

- You moved in with your 78-year-old mother 3 years ago after your divorce.
- Your mother is frail, and needs help with walking, washing, cooking and cleaning the house – you do this most days after work.
- You have 3 children (all girls: 16, 12 and 8 years) and see them one weekend a month – you have a good relationship with them – they live with their mother.

Social life:

- You have no real friends, only drinking buddies at the shebeen down the road.
- You used to run marathons, but since the divorce, not feeling motivated. It would be nice to get back into this….

Work life:

- You work as a spray painter at a bodyworks workshop.
- You are good at your job – been doing it for 15 years.
- It is professionally run, and you always wear protective gear, and go for full medicals every year.
- Your TB or drinking has not affected your work in any way.