

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 (Fellowship of the College of Family Physicians) (SA) Final Part A examination 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); 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 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 focuses on **mental health** and is based on unit standard 1 (critically appraising quantitative research), unit standard 2 (evaluate and manage a patient according to the biopsychosocial approach) and unit standard 5 (conduct all aspects of health care in an ethical and professional manner).

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. Extended Matching Question (EMQ) Theme: Managing aggression and psychosis

1.1 A 56-year-old male presents to the emergency centre with a history of abnormal behaviour which included wandering

off and living on the street and walking about without any clothes. This is the first episode. On examination his vital signs and physical examination are normal, he willingly states that he has special powers to heal others, hears voices which guide him, and is not aggressive. He believes that admission to hospital will help him heal patients. There is no history of alcohol or drug abuse.

- 1.2 A 35-year-old female who is a known mental health care user defaulted her monthly injections at the local clinic for the last three months and now presents to your emergency centre with disruptive behaviour. She believes that certain people are conspiring to kill her and she reports hearing voices. She denies any drug or alcohol abuse. Her vital signs and physical examination are normal.
- 1.3 A 23-year-old male who is a known epileptic and a regular defaulter of his sodium valproate presents to the emergency centre with aggression and is openly violent. The police report that they found him on the street after his friends reported that he had had two seizures after binge drinking alcohol. He violently rejects any attempts to calm him.

For each of the patient scenarios listed ABOVE choose the most likely therapeutic option from the list BELOW. Each option may be used once, more than once, or not at all.

- A. Oral lorazepam
- B. Intravenous lorazepam
- C. Intramuscular lorazepam
- D. Oral haloperidol
- E. Intramuscular haloperidol
- F. Intravenous haloperidol
- G. Oral risperidone
- H. Intramuscular zuclopenthixol acetate (Acuphase)
- I. Intravenous lorazepam and haloperidol

2. SAQ (short answer question): the family physician's role as care provider

You are working as a family physician at a rural district hospital. A 22-year old man is brought in by ambulance with a history of having been found eating discarded meat. He presented with dehydration, diarrhoea and confusion. After stabilising him with intravenous fluids in the ward and correcting electrolyte deficiencies, you receive the collateral history: he is intellectually disabled, with a history of being sexually abused by his father as a child. He had been placed in several foster homes by the social workers, but ran away and is now living on the street. He had been arrested previously for petty theft. He looks malnourished and unkempt. Answer the following questions with reference to the Mental Health Care Act, MHCA (Act 17 of 2002).

(Total 20 marks)

- 2.1 His renal function tests show that he has dehydration and he refuses to keep his intravenous line in situ. What is your first priority in managing this patient in terms of the MHCA? (3 marks)
- 2.2 Describe the type of admission under the MHCA and explain your choice. (2 marks)
- 2.3 Why does the MHCA determine that he should be observed for 72 hours, and not be transferred for admission directly into a psychiatric unit at your referral centre? (2 marks)
- 2.4 Describe which documentation should be completed during his MHCA 72-hour admission period. (3 marks)
- 2.5 He has absconded through the window whilst under the MHCA admission. How would you approach this scenario? (4 marks)
- 2.6 How does the DSM V define intellectual disability? (1 mark)
- 2.7 How would you approach his long-term management and which colleagues would you involve in his inter-professional management plan? (5 marks)

3. Critical appraisal of 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.

Govender RD, Schlebusch L. Suicidal ideation on seropositive patients seen at a South African HIV Voluntary counselling and testing clinic. African Journal of Psychiatry 2012;15: 94-8. Available from: <https://www.ajol.info/index.php/ajpsy/article/view/75572>.

- 3.1 Critically discuss the authors' reasons for doing yet another study on HIV. (2 marks)
- 3.2 What were the objectives of the study? (2 marks)
- 3.3 The study design is not stated in the manuscript. Clinical research can be classified as experimental, observational, descriptive and/or analytical. How would you classify this study? Motivate your answer. (4 marks)

- 3.4 Comment critically on 'participants/setting' under the methods section and the implications of this for the results of the study. (4 marks)
- 3.5 Two scales are used in this study. Outline issues which must be taken into consideration before an existing scale can be used in a research project and how the reader can be sure that the tools are valid in the context of the study. (2 marks)
- 3.6 Discuss the management of ethical issues in this study and any special issues that need to be considered in a study of this nature. (2 marks)
- 3.7 In the results the average BDI scores for HIV positive patients dropped from 15.2 (initially) to 14.2 at 6 weeks while suicidal ideation increased from 17% to 23%. What explanation could be given for these findings? (2 marks)
- 3.8 Page 96, paragraph 5 states: "There was a significant association between ethnicity and HIV test results ($p < 0.001$) The African ethnic group was significantly more likely to test HIV positive than the other ethnic groups in the sample studied. What conclusions would you make from this statement? (2 marks)
- 3.9 Do the results presented address the objectives of the study? (2 marks)
- 3.10 What conclusions can you draw from this study? (2 marks)

4. OSCE scenario Theme: Mental health

Instructions for candidate:

History/context

You are working in the emergency department of the district hospital. You consult with this young man for the first time. He is accompanied by his mother.

Please conduct a focussed consultation to demonstrate:

1. Your ability to formulate a working diagnosis – you must take an appropriate history and perform an appropriate examination.
2. Your ability to counsel the patient on your comprehensive management plan.

Model answers to questions

Question 1

Short answers:

- 1.1 G
- 1.2 F
- 1.3 B

The scenarios depicted above are common scenarios facing primary care physicians and one needs to have a structured approach to the management of these patients.

When dealing with aggressive or psychotic patients the approach is as follows.

- i. Assessment: Exclude a physical cause for the presentation.
- ii. Security: Ensure that you are able to manage the situation with adequate safety and security.
- iii. Containment by de-escalating the situation with a calm demeanour, confidently leading and controlling the team, containing the environment and then using physical and/or pharmacological restraint.
- iv. With an uncooperative patient who resists sedation ensure that at least six assistants are used. Five security guards will each restrain a limb and the head while a nursing assistant will assist with the administration of the sedation.
- v. Ensure that the patient is fully sedated and that mechanical restraint is no longer needed.
- vi. Prescribe maintenance sedation 6–8 hourly.
- vii. Vital signs should be monitored 2–4 hourly depending on the level of sedation.
- viii. Maintain hydration and nutritional status of the patient.
- ix. After initial sedation, examination, monitoring and work-up are needed to arrive at a definitive diagnosis.
- x. If the patient refuses sedation or does not display sufficient insight to give consent, and delirium has been excluded after performing the focussed history and examination, sedate the patient after ensuring completion of one MHCA 04 (usually filled in by a relative), two MHCA 05 forms (filled in by two health care providers) and one MHCA 07 (filled in by the head of the health establishment).

In the first scenario a 56-year-old psychotic patient presents with first onset psychoses. He is not openly aggressive and seems amenable to oral medication. Due to his age and the possibility of an underlying general medical condition, oral risperidone is preferred as it is better tolerated.

The second patient, a known mental health care user, presents with aggression and psychosis. The preferred treatment is intravenous haloperidol to gain rapid control of the situation. This is preferred to the Acuphase due to the long half-life of zuclopenthixol acetate. During the next 72 hours the patient needs to be examined and observed and sedating the patient with a long acting anti-psychotic may not allow one to do this. In addition, one needs to identify precipitants of the decompensation which may be more than the defaulting of the chronic medication.

The patient in the third scenario presents most likely with a post-ictal confusional state. One needs to exclude head injury, electrolyte and blood glucose abnormalities and then sedate the patient with intravenous lorazepam to gain rapid control of the situation. Physical restraint may be needed.

Further reading:

- Naidoo M. Managing common conditions: Management of a patient with psychosis and mania (chapter 6). In: Mash B, ed. Handbook of Family Medicine. 4th edition. Oxford University Press Southern Africa; 2017:327-30.

Question 2

Model answer:

2.1 His renal function tests show that he has dehydration and he refuses to keep his intravenous line in situ. What is your first priority in managing this patient in terms of the MHCA? (3 marks)

The guiding principle in terms of the Mental Health Care Act (MHCA) should be the best interest of the patient (MHCA user). The MHCA makes provision for emergency admission, where the user is ill and any delay in care may result in serious harm. Here we have someone who is in need of medical treatment to prevent death or disability, and would thereby put himself at risk should he refuse the treatment he needs. The medical treatment should be continued in the best interests of the patient (beneficence), but the patient is not capable of making an informed decision, i.e., is not legally competent (lack of autonomy), which requires admission under the MHCA (to honour the legal requirements of the Act, which is aimed at protecting the rights of mental health service users).

2.2 Describe the type of admission under the MHCA and explain your choice. (2 marks)

This mental health care user qualifies for involuntary (compulsory) inpatient care. He is incapable of making an informed decision and is unwilling to accept or opposes the health services he requires. Involuntary admission is required as he requires care, treatment and rehabilitation services for his or her health or safety, or for the health and safety of other people.

2.3 Why does the MHCA determine that he should be observed for 72 hours, and not be transferred for admission directly into a psychiatric unit at your referral centre? (2 marks)

Provision is made by the MHCA for a 72-hour assessment period which may enable a user to recover from an illness that may have played a role in causing the abnormal behaviour or threatens the ongoing wellbeing of the patient before being committed to a psychiatric hospital. During this period, the patient needs to be observed, maybe sedated or restrained if required, must be treated for any co-morbid illnesses, and other causes for delirium/dementia need to be excluded. The MHCA also stipulates the frequency of assessments which need to be documented by the relevant health practitioners and the head of the health establishment. The health establishment is held accountable by the mental health review board to adhere to the prescriptions of the MHCA.

2.4 Describe which documentation should be completed during his MHCA 72-hour admission period. (3 marks)

The application for involuntary admission under the MHCA requires an applicant to complete form 04, as well as two mental health care practitioners to complete form 05. A 72-hour assessment period is instituted once the head of

the health establishment grants application for involuntary care (form 07).

Within 12 hours of the end of the assessment period, the mental health care practitioners should complete a form 06, which signifies a written report to the head of the health establishment and indicates the clinician's recommendations on the physical and mental health status of the user. If the head believes that the user's mental health status warrants further involuntary care, treatment and rehabilitation services as an inpatient, the head must request the review board to approve such services (form 08). Should involuntary outpatient services be required, a form 09 is to be completed by the head. Alternatively, the head may decide to discharge the user if recommended by the clinicians and a form 03 is completed.

2.5 He has absconded through the window whilst under the MHCA admission. How would you approach this scenario? (4 marks)

The South African Police Service (SAPS) has an important role to play if an involuntary user absconds from hospital. According to the MHCA, the head of the health establishment must contact the SAPS urgently to locate, apprehend and return the user to the health establishment. The SAPS must comply with the request. When requesting the assistance, the SAPS must be informed of the estimated level of dangerousness of the involuntary mental health care user. A member of the SAPS may use such constraining measures as may be necessary and proportionate in the circumstances when apprehending a person or performing any function in terms of this section.

Upon return, the user needs to be reviewed for injuries or new problems. The health professional needs to investigate the cause for the escape (adequate sedation or restraints provided). This should be treated as a critical incident, which may warrant a risk analysis, root cause analysis and/or morbidity and mortality meeting with the relevant role players to prevent future recurrences.

The head of the health establishment should be informed about the incident, as the MHCA specifies that the head should submit a request in writing to the relevant review board for an order for transfer of an involuntary mental health care user to a health establishment with maximum security facilities if the user has:

- previously absconded or attempted to abscond; or
- inflicted or is likely to inflict harm on others in the health establishment.

The MHCA also states that if a state patient has absconded or is deemed by the head of the relevant designated health establishment to have absconded, the head of that health establishment must, in writing notify the Registrar or Clerk of the Court concerned and the official *curator ad litem* (Director of Public Prosecutions of a province in whose jurisdiction the State patient is detained), within 14 days of having notified the SAPS.

2.6 How does the DSM-V define intellectual disability? (1 mark)

"Intellectual disability involves impairments of general mental abilities that impact adaptive functioning in three domains or areas. These domains determine how well an individual copes with everyday tasks:

- The conceptual domain includes skills in language, reading, writing, math, reasoning, knowledge, and memory.
- The social domain refers to empathy, social judgment, interpersonal communication skills, the ability to make and retain friendships, and similar capacities.
- The practical domain centers on self-management in areas such as personal care, job responsibilities, money management, recreation, and organizing school and work tasks.

While intellectual disability does not have a specific age requirement, an individual's symptoms must begin during the developmental period and are diagnosed based on the severity of deficits in adaptive functioning. The disorder is considered chronic and often co-occurs with other mental conditions like depression, attention-deficit/hyperactivity disorder, and autism spectrum disorder."

Background information:

"In the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-V), the diagnosis of intellectual disability (intellectual developmental disorder) is revised from the DSM-IV diagnosis of mental retardation. The significant changes address what the disorder is called, its impact on a person's functioning, and criteria improvements to encourage more comprehensive patient assessment.

The revised disorder also reflects the manual's move away from a multi-axial approach to evaluating conditions. Using DSM-IV, mental retardation was on Axis II to ensure that clinicians identified associated impairments alongside other mental disorders. With DSM-V, all mental disorders will be considered on a single axis and given equal weight." (Source listed below.)

2.7 How would you approach his long-term management and which colleagues would you involve in his inter-professional management plan? (5 marks)

From the definition of intellectual disability above and the clinical scenario described, it is unlikely that this mental health user will regain sufficient level of autonomy to avoid being a danger to himself or others. It is likely that he is impaired in all three domains: conceptual, social and practical.

His 72-hour observation period as part of the involuntary admission under the MHCA provides an opportunity for you to engage with the relevant role players, either individually but ideally as a team, where you discuss his long-term care plan:

- Mental health professionals: professional nurse and psychiatrist who may advise you and the head of the

health establishment on whether he needs involuntary care as an inpatient or outpatient, as well as the need for long-term psychiatric medication.

- Social worker: you may have a social worker as part of the facility team, or as part of a local NPO (non-profit organisation) or the department of social development. Ideally, this patient's home and community context needs to be re-assessed, in order to make a decision about whether he may stay with family or in a licensed and authorised community facility for mental health care users. Such facilities should obtain a license to operate from the provincial department concerned. He qualifies for a social grant, but this will need to be administered by a guardian. This social grant may help fund his placement in a long-term, licensed community facility.
- Occupational therapist: this allied health colleague may assist the user in assessing his ability to do protected work under supervision.
- Dietician: his poor nutritional status will benefit from the input of a dietician to determine the nutritional therapy programme.
- Physiotherapist: he may benefit from chest physiotherapy to produce sputum for GeneXpert to exclude pulmonary tuberculosis (he is at risk as his poor nutritional status may decrease his immunity and increase his susceptibility).

Further reading:

- Mental Health Care Act 17 of 2002. Available from: http://www.hpcs.co.za/Uploads/editor/UserFiles/downloads/legislations/acts/mental_health_care_act_17_of_2002.pdf (last accessed 20 March 2018).
- Zabow T. How to manage a patient under the Mental Health Care Act (chapter 50). In: Mash B, Blitz J, eds. South African Family Practice Manual. 3rd ed. Cape Town: Van Schaik; 2015:190-7.
- American Psychiatric Association. Intellectual Disability. Available from: https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/DSM/APA_DSM-5-Intellectual-Disability.pdf (last accessed 20 March 2018).

Question 3

Model answers:

- 3.1 Critically discuss the authors' reasons for doing yet another study on HIV. (2 marks)**
- Not really a study on HIV, but rather a study on suicidal ideation and depression in HIV positive patients.
 - Suicide ideation and depression are common in SA as is HIV. Although an association has been reported between HIV and depression there is little work that has been done in SA thus justifying the need for this study (as stated in the article).

3.2 What were the objective(s) of the study? (2 marks)

To investigate depression and suicide ideation in HIV positive patients.

To improve suicide prevention and intervention strategies in HIV positive patients.

3.3 The study design is not stated in the manuscript. Clinical research can be classified as experimental, observational, descriptive and/or analytical. How would you classify this study? Motivate your answer (4 marks)

There are a number of different ways in which studies can be classified. Figure 1 provides an algorithm for the classification of clinical research. There are however other algorithms for the classification of clinical research, although the principles are the same (Figure 2).

Using the algorithm from Figure 1, a study would be considered to be experimental if the investigator assigns exposure. This did not happen in this study so this study would be considered to be an **observational study**. Observational studies are then considered to be either analytical or descriptive depending upon whether or not there is a comparison group.

An analytical study compares differences in groups between those exposed and those unexposed. In this study they could have compared depression and suicide ideation in those who were HIV positive and those who were HIV negative. However, they have only reported on the depression and suicidal ideation in those who were HIV positive and there was no comparison group. This means that this was not an analytical study.

A descriptive study is limited to description of the population and the disease in the population and can provide information on prevalence and incidence. This type

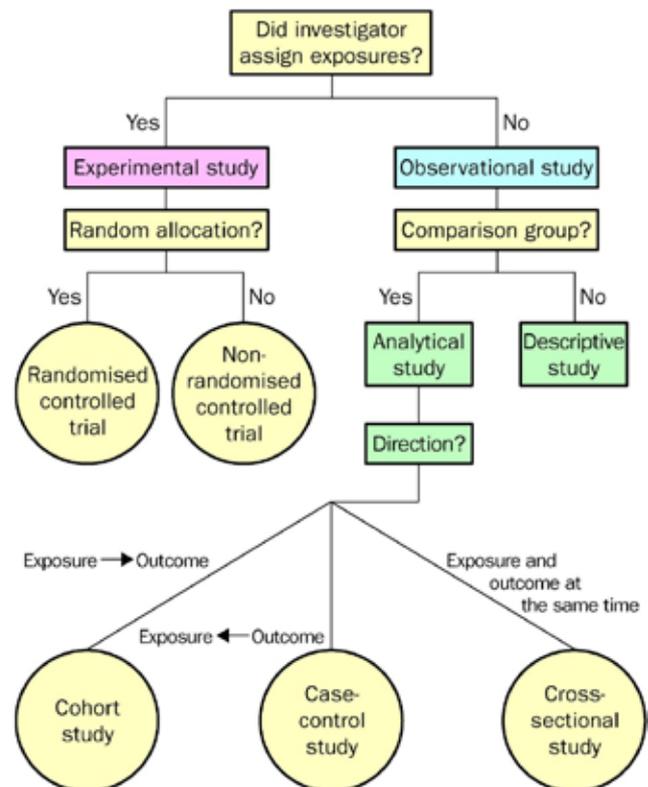


Figure 1. Classification of clinical research
Reference: Grimes DA, Schulz KF. An overview of clinical research: the lay of the land. The Lancet. 2002;359(9300):57-61.

of study cannot establish causal relationships. In this study the authors are only describing the presence/absence of depression and suicidal ideation in HIV positive patients at two points in time six weeks apart. This would be considered to be a **descriptive study**.

Using the algorithm from Figure 2 this would be considered to be a descriptive study and not an observational study as it did not observe differences between exposed and unexposed groups in the population.

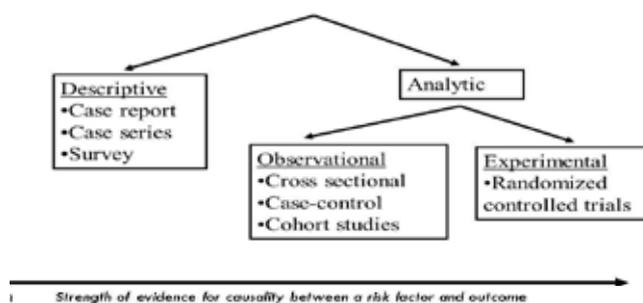


Figure 2. Hierarchy of study types

Reference: Bibbins-Domingo K. Types of study designs: from descriptive studies to randomized controlled trials. Online presentation, available from URL: <http://tigr.ucsf.edu/courses/tigr/syllabus/courses/65/2008/02/06/Lecture/notes/Bibbins-Domingo%20Types%20of%20study%20designs.ppt> (accessed 16 April 2018).

It is not clear from the methodology exactly how this study was conducted. If the cohort of patients was given the questionnaire to complete at baseline and again at 6 weeks this would be considered to be a repeated cross sectional study with data collected at two points in time. If, however, the cohort of patients was tracked and one was able to determine which patients were initially not suicidal or depressed but became suicidal and/or depressed over the subsequent 6 weeks (when the repeat questionnaire was completed) this would be considered to be a surveillance study.

3.4 Comment critically on 'participants/setting' under the methods section and the implications of this to the results of the study. (4 marks)

- It is not clear from this manuscript who the study sample represents (who is the study population? – is it all patients referred for HIV counselling?) and the baseline characteristics of the study population. It is therefore not possible to generalise and draw conclusions about HIV and education and HIV and traditional beliefs as this may be dependent upon the site of the clinic and those who participated.
- There is no indication of the sample size needed to be able to draw conclusions about the prevalence of depression and suicidal ideation among HIV positive patients.
- There are no clear inclusion and exclusion criteria. The manuscript states that patients (? all / ? some/ ? when it was convenient) referred for Voluntary Counselling and Testing (VCT) over a 3-month period were asked to participate in the study. It is not clear how many patients were referred for VCT over a 3-month period,

how many patients were approached and how many agreed to participate. All of these selection issues have the potential to bias the results.

- The study setting is not well described in the methods section (although some detail is provided in the introduction).

3.5 Two scales are used in this study. Outline issues which must be taken into consideration before an existing scale can be used in a research project and how the reader can be sure that the tools are valid in the context of the study. (2 marks)

Before using a scale that has been developed by someone else, it is important to obtain permission to use that scale and to acknowledge those who developed the scale. In addition, it is important to validate the scale in the local context to ensure that the tool is transferable and appropriate to the local context. It is useful to pilot the tool in the local context (particularly if it was developed in a different context).

When using a tool, it is important to give some detail about where the tool comes from and whether it has been validated for use in the current context.

3.6 Discuss the management of ethical issues in this study and any special issues that need to be considered in a study of this nature. (2 marks)

The study was approved by the ethics committee, informed consent was obtained and pre- and post-test counselling was provided. However, no mention is made of how patient anonymity was managed. Although counselling was provided, in a study of this nature it is important to provide (or be able to refer to) appropriate psychological services should patients be identified as at risk of suicide and this is not covered in the manuscript.

3.7 In the results the average BDI scores for HIV-positive patients dropped from 15.2 (initially) to 14.23 at 6 weeks while suicidal ideation increased from 17% to 23%. What explanation could be given for these findings? (2 marks)

No explanation is given in the manuscript as to why depression improved overall while suicidal ideation increased.

However depressed people are often more at risk of suicide when they start to improve because their energy levels and sense of agency increase leading them to act on their suicidal ideation which might be an explanation for the findings.

3.8 Page 96, paragraph 5 states: "There was a significant association between ethnicity and HIV test results ($p < 0.001$) The African ethnic group was significantly more likely to test HIV positive than the other ethnic groups in the sample studied. What conclusions would you make from this statement? (2 marks)

Although these results are reported as significant, it is difficult to make any conclusions from the results presented as we are not sure how many from other ethnic groups were involved in the study. The population served by the clinic

is likely to be mainly black clients with traditional beliefs as stated at the bottom of first paragraph in the discussion: 'The ethnic distribution in the study was to be expected, as it reflects the demographics of the population served by the VCT clinic where the research was done.'

3.9 Do the results presented address the objectives of the study? (2 marks)

There were 2 stated objectives of the study:

i To investigate suicide ideation and depression amongst HIV positive patients

The study reported that 17% of patients had suicidal ideation initially and 23% had suicidal ideation after 6 weeks. The average BDI score of 15.20 suggests that a significant number of HIV positive patients were depressed. One could argue that in reporting these findings the study addressed this objective.

However, it is difficult to interpret the significance of the depression and suicide ideation among those who are HIV positive as the study gives no indication as to the level of depression and suicide among those who are HIV negative (although the authors state that the figure is higher than in the general South African population) suggesting that it is the HIV positive status that is the difference.

In addition, it would have been useful if more information had been presented on the percentage of people in different categories as per the scales and not just the mean values, as the association between socio-economic and demographic factors and these mental health outcomes would have been of more relevance to the aim.

Most of the results section reports on associations between testing positive for HIV and socio-economic and demographic variables. Almost nothing is said about suicidal ideation and depression and the relationship between these variables. It seems there is a mismatch between the aim of the study and the results.

ii To improve suicide prevention and intervention strategies in HIV positive patients

Not much detail is given about any prevention and intervention strategies although the authors suggest that vulnerability of HIV positive patients to suicide should be assessed and that suicide prevention and management strategies should be implemented. In addition, they suggest that certain socio-demographic variables could be used as indicators for high levels of suicidal ideation (low level of education, traditional beliefs, black African). However, no results are presented to support this.

3.10 What conclusions can you draw from this study? (2 marks)

Depression was common among those in this study who were HIV positive.

Suicidal ideation was common among those in this study who were HIV positive.

Suicidal ideation increased over time among those in this study who were HIV positive.

The associations found in this data may be true of this group of patients but it is not clear whether they can be generalised to any larger study or target population. I think one must be very cautious about generalising these associations to the risk of acquiring HIV in people in general.

Further reading:

- Pather M. Continuing professional development (chapter 13). In: Mash B, ed. Handbook of Family Medicine. 3rd ed. Cape Town: Oxford University Press Southern Africa; 2011: p. 406-29.
- Riegelman RK. Studying a Study and testing a test. How to read the medical evidence. 5th ed. Lippincott Williams & Wilkins 2005.
- Resources. Centre for Evidenced Based Health Care [homepage on the Internet]. c2018. Available from URL: <http://www.cebh.co.za/teaching-resources/>
- Greenhalgh T. How to read a paper: The basics of evidence-based medicine. 5th ed. Wiley & Blackwell 2014.
- Glasziou PP, Del Mar C, Salisbury J. Evidence-based practice workbook. 2nd ed. Blackwell Publishing; 2007.
- Katzenellenbogen J M, Abdool Karim S. Epidemiology. A research manual for South Africa. 2nd ed. Cape Town, South Africa: Oxford University Press; 2007.

Question 4

Model answer:

The following key elements should be available to the supervisor/examiner who is facilitating the station.

4.1 Objective of station

This station tests the candidate's ability to:

1. Apply diagnostic reasoning in assessing a patient with substance use disorder and depression.
2. Manage this patient as appropriate to District level care.

4.2 Instructions for the examiner

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

Familiarise yourself with the Assessor Guidelines which details 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.

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 cellphone.

Please **do not** prompt the student.

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

4.3 Marking template for consultation station

Exam number of candidate:			
Competencies	Candidate's rating		
	Not competent (0)	Competent (1)	Good (2)
1. Gathering information: history Comments:			
2. Gathering information: mental state exam – substance use disorder (addiction) and depression Comments:			
3. Clinical judgement: assessment and explanation Comments:			
4. Explaining and planning: evidence-based interventions Comments:			
Total			/8
General comments:			
Examiner's name:	Examiner's signature:		

4.4 Assessor Guidelines

Competencies	Candidate's rating		
	Not competent	Competent	Good
Gathering information: history	Is only biomedical.	Comprehensive, includes psychosocial issues. Identifies with the patient as the primary, and gets sufficient collateral from the mother.	Has effortless conversational style. While centred on the patient, engages actively with the mother; able to set boundaries. Enquires on risk taking behaviours: criminal activity, sexual behaviour, etc.
Gathering information: mental state exam	Incomplete, not sufficient information elicited.	Asks patient's permission for mother to stay in the room. Logical approach: elicits enough information to make a diagnosis. Uses screening questions to identify substance addiction. Quantifies the substance use.	Comprehensive and logical approach, includes any other risk factors. Elicits information sensitively, respecting the dignity of the patient.
Clinical Judgement: assessment and explanation	Unable to make a diagnosis OR makes a diagnosis of substance abuse or depression, but not both.	Makes a diagnosis of substance abuse AND depression. Explains this to the patient.	Asks permission if mother can be included in the discussion. Comprehensive assessment: bio, psycho, social. Effective communication using reflexive and active listening, employing simple language. Identifies risk factors.
Planning: Evidence-based interventions	Doctor-centred approach – only considers biomedical issues, and no/little consideration to patient preferences.	Identifies depression and anxiety as being key to long term management. Offers structured programme for detox and rehab counselling – outpatient or inpatient.	Actively explores patient preferences and social acceptability (collaborative). Incorporates risk factors: HIV, legal, long-term mental health. Mentions specific interventions – 12 steps, matrix...

4.5 Instructions to role player/standardised patient

You are a 20-year-old engineering student, living with your mother who is an administrative assistant at the university.

You are attending the emergency room because your mother wanted you to come.

You are well dressed, aware of surroundings. You are not able to express yourself freely with your mother in the room.

Opening statement

"I'm here because my mother insisted that I come. I don't think there's anything wrong with me."

Mother interjects: "He is here because he is addicted to drugs, Doctor, and he is destroying his life!"

History

Open responses: You are a student, but did not register for this year because you didn't have the energy. You failed all your courses last year, and you are considering finding a job.

Mother: He is on a full scholarship because he was a very good student at school – it's his friends at university who are using drugs, and he is following them.

Closed responses:

- **Admit to using drugs:** crystal meth (crystal methamphetamine, or "Tik") – most days of the week.
 - Currently three times a day. Last used five days ago, when she found out.
 - Started beginning of 2017 – weekends only, then gradually became more.
 - You've tried stopping on your own before, but always end up using again.
- **Mood:** You feel drained and without energy.
 - You have no motivation to do anything.
 - You don't enjoy any activities.
 - You have been feeling low and depressed ever since your father died 3 years ago.
 - You feel like your life is not worth anything.
 - You have thought about harming yourself, but never made any plans.
- **Sexual:** You occasionally engage in random, unprotected sexual encounters at campus parties; drugs are always involved.
- **Social support:** Your father died 3 years ago due to cancer. He was an alcoholic. You and your mother are alone.
- **Concerns:** You don't want to feel like this – you know that you have potential. You want to stop hurting your mother.
- **Substances/Habits:** You don't like alcohol, or the smell of cigarettes.
- **Diet:** You eat whatever is available – mostly home-cooked food, drink lots of coffee with no sugar – occasionally take-aways depending on finances.
- **Your weight does not bother you.**

4.6 Additional resources for examiner

4.6.1 DSM-V diagnostic criteria: Major Depressive Disorder:

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

Note: Do not include symptoms that are clearly attributable to another medical condition.

1. Depressed mood most of the day, nearly every day.
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
3. Significant weight loss when not dieting or weight gain,
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt nearly every day.
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day.
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

C. The episode is not attributable to the physiological effects of a substance or to another medical condition. ***Clinical judgement must be applied***

D. Note: Criteria A-C represent a major depressive episode.

4.6.2 Criteria for Substance Use Disorders

Substance use disorders span a wide variety of problems arising from substance use, and cover 11 different criteria:

1. Taking the substance in larger amounts or for longer than you're meant to.
2. Wanting to cut down or stop using the substance but not managing to.
3. Spending a lot of time getting, using, or recovering from use of the substance.
4. Cravings and urges to use the substance.
5. Not managing to do what you should at work, home, or school because of substance use.
6. Continuing to use, even when it causes problems in relationships.
7. Giving up important social, occupational, or recreational activities because of substance use.
8. Using substances again and again, even when it puts you in danger.
9. Continuing to use, even when you know you have a physical or psychological problem that could have been caused or made worse by the substance.
10. Needing more of the substance to get the effect you want (tolerance).

11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

Severity of Substance Use Disorders

The DSM-V allows clinicians to specify how severe or how much of a problem the substance use disorder is, depending on how many symptoms are identified. Two or three symptoms indicate a mild substance use disorder; four or five symptoms indicate a moderate substance use disorder; and six or more symptoms indicate a severe substance use disorder. Clinicians can also add "in early remission," "in sustained remission," "on maintenance therapy," and "in a controlled environment."

Further reading:

- Mash B. How to screen for mental problems (chapter 52). In: Mash B, Blitz J, ed. South African Family Practice Manual. 3rd

ed. Cape Town: Van Schaik; 2015:201-7.

- Mash B. How to screen for an alcohol drinking problem (chapter 53). In: Mash B, Blitz J, editors. South African Family Practice Manual. 3rd ed. Cape Town: Van Schaik; 2015:208-10.
- Reynolds CR, Kamphaus RW. Major Depressive Disorder. Pearson Clinical [homepage on the Internet]. Available from: https://images.pearsonclinical.com/images/assets/basc-3/basc3resources/DSM5_DiagnosticCriteria_MajorDepressiveDisorder.pdf (last accessed 20 March 2018).
- Hartney E. A Guide to DSM 5 Criteria for Substance Use Disorders. Verywell Mind [homepage on the Internet]. Available from: <https://verywellmind.com/dsm-5-criteria-for-substance-use-disorders-21926> (last accessed 20 March 2018).

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