

Mastering your Fellowship

Mergan Naidoo^{1*}, Klaus B von Pressentin², Tasleem Ras³, Michele Torlutter⁴

¹Department of Family Medicine, University of KwaZulu-Natal

²Division of Family Medicine and Primary Care, Stellenbosch University

³Division of Family Medicine, University of Cape Town

⁴Division of Family Medicine, University of the Witwatersrand

*Corresponding author, email: naidoo@ukzn.ac.za

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 1 (critically appraising quantitative research) unit standard 2 (evaluate and manage a patient according to the bio-psycho-social approach), unit standard 3 (facilitate the health and quality of life of the family and community) and unit standard 5 (conduct all aspects of health care in an ethical and professional manner). The theme for this edition is **Surgery and Anaesthetics**.

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 42-year-old female patient with advanced breast cancer dies in your ward. Her husband approaches you expressing anger that you did not refer her to oncology in time. He is verbally abusive to the nursing and medical staff and threatens litigation. You ask to speak to him confidentially. The next most appropriate step is to:

- Apologise on behalf of the department for the lack of oncology services.
- Ask him if he is angry about his wife's death.
- Ask him what he misses about his wife.
- Calm him down and enlighten him on the complaints procedure.
- Ask him to explain what he thinks caused his wife's death.

Short answer:

- c) Ask him what he misses about his wife?

Long answer:

As clinicians working in the healthcare environment one often deals with death and dying. Ideally bereavement planning should start before the death of the patient. The emotional responses from loved ones need to be managed carefully and should not be seen as a personal affront. The grieving process is often associated with anger. This anger may be indicative of the type of relationship the bereaved shared with the deceased. Conflict in the relationship may sometimes present in the grieving party as anger, resentment and self-blame. Guilt and anger may be linked to emotional and spiritual pain the individual maybe experiencing. The anger maybe directed towards themselves, god, healthcare personnel and other family members. Sometimes anger against themselves results in a feeling of desperation and suicidal ideation so it is important to explore such feelings during the consultation. The anger may also be due to the perception of physical and emotional abandonment. Worden advises that angry grieving loved ones often do not respond to questions

such as, "Are you angry that she died?" The loved one may not be aware of his feeling of anger as the emotions may be in turmoil at this stage. Worden further suggests that the individual may respond to questions such as: "What do you miss about her?" and "What don't you miss about her?" Such questions may tap into feelings that the individual has towards his loved one and may create an opportunity for dialogue. This will allow the bereaved to link his feelings to people and events and bring meaning. Using a facilitative approach which includes active listening, the healthcare provider may be able to assist the bereaved in dealing with his feelings. Allow the bereaved to tell his story and additional questions to facilitate the consultation include:

"How was her illness for you?"

What are you thinking at this time?"

How did you cope with your wife's constant discomfort?"

When she was dying, what were you experiencing?"

Tell me about what it was like for you when your wife died?"

Excessive amount of anger maybe due to an abnormal grief reaction and should be recognised. One should be sensitive in first de-escalating the present emotional turmoil before exploring the feelings and expectations. Hildebrand advises that one can deal with anger by dealing with the whole family together and suggests that this is an effective way of reaching out to the entire family.

Further reading:

- Nieuwmeyer S. Module 3: Managing loss, grief and bereavement. Hospice Palliative Care Association of South Africa.
- Watson, M. S. (2005). Oxford handbook of palliative care. Oxford; New York, Oxford University Press.

2. SAQ (short answer question): The family physician and ethical and professional decision making.

You are the family physician assigned to anaesthetics in a rural district hospital for the night. You are requested to review a 14-year-old girl in the emergency room who has come in with lower abdominal pain and vaginal bleeding. The surgeon has booked her for an evacuation of the uterus (EVAC). She is accompanied by her parents. She is sobbing and not responding to questions. Her parents reluctantly leave the room so that you may examine her. You console her and ask her more about the pregnancy. She breaks down again, and with gentle probing she reveals that she had a 'back street abortion' the previous day. Her last period was about four months ago. She is still bleeding vaginally and complains of dizziness. Her pulse is 112 bpm, BP 92/50 mmHg, Temperature 37.4 degrees Celsius. The notes from the surgeon reveal that there were retained products of conception on ultrasound, but there were no products in the vagina, and the cervical os is open. The ward Haemoglobin (Hb) is 6.9 mg/dl. There is no blood bank on site, but you have access to emergency blood. There is an EVAC list that patients can be booked on every morning. (Total 20 marks)

- 2.1 What is the appropriate response to this patient's condition, and what should you do as the anaesthetist? (4)
- 2.2 What route of anaesthesia is most appropriate for her? Motivate your choice. (4)

- 2.3 If she had presented for a legal termination of pregnancy, in terms of the Choice on Termination of Pregnancy Act, 1996, how should a practitioner usually advise a minor attending for termination, and what is covered by this consent? (3)
- 2.4 You have strong religious beliefs about termination of pregnancy and are not happy to be involved in the procedure. What rationale could you use for managing a situation like this, and what are your ethical obligations in this particular case? (4)
- 2.5 You note her age. What are your further legal obligations to this patient? (5)

Suggested answers:

- 2.1 **What is the appropriate response to this patient's condition, and what should you do as the anaesthetist? (4)**

Immediately begin **resuscitation** of the patient. Obtain basic blood tests for surgery (renal function and electrolytes, full blood count, as well as septic screen, rhesus, syphilis and human immuno-deficiency virus testing). Crossmatch and order blood, and **begin transfusion** of emergency blood before surgery as patient is actively bleeding with low Hb.

Book for theatre immediately as there is active bleeding with a low Hb and haemodynamic instability, also consider the possibility of **septic abortion**. Do not wait for morning.

- 2.2 **What route of anaesthesia is most appropriate for her? Motivate your choice. (4)**

She is haemodynamically unstable and bleeding, therefore **spinal/saddle anaesthesia** is contra-indicated. She probably had a greater than **sixteen week pregnancy** (increased intra-abdominal pressure and decreased lower oesophageal tone due to pregnancy), and is **not starved**. For both of these reasons she will require a **rapid sequence induction** with cricoid pressure and intubation, rather than gas induction or use of a laryngeal mask airway (LMA).

- 2.3 **If she had presented for a legal termination of pregnancy, in terms of the Choice on Termination of Pregnancy Act, 1996, how should a practitioner usually advise a minor attending for termination, and what is covered by this consent? (3)**

For the usual consent of a minor presenting for TOP, the practitioner should advise the minor to **consult with parents, guardian**, or family members before a pregnancy is terminated, but this remains at the discretion of the minor, and termination **cannot be denied if this is not done**. Consent for TOP is signed by the patient, **irrespective of age**. When patients sign consent, they do so not only for the TOP itself, but for **any procedure that may arise as a result of complications** e.g. surgical evacuation of the uterus, hysterectomy etc. (3)

- 2.4 **You have strong religious beliefs about TOP, and are not happy to be involved in the procedure. Could you refuse to assist in this case because of your religious beliefs? Motivate the factors involved in your decision. (4)**

Doctors are **not compelled** to participate in TOP services. They are however compelled to **refer** women to doctors who do participate in the TOP service. All doctors are however expected to participate in the **management of emergencies**, whether associated with TOP or not, and in the case of this young girl, one **cannot refuse** emergency care.

2.5 You note her age. What are your further legal obligations to this patient? (5)

Pregnancy in any minor should raise suspicion of **social and family issues**. These should be **actively investigated** before discharge and loss to follow-up, bearing in mind the biopsychosocial impact and risks associated with pregnancy, childbirth, and child rearing in this age group. A **social worker** should be involved. Also remember your obligations in terms of the **Sexual Offences Act of 2007**, and that sex between twelve and fifteen years is considered statutory rape, and sixteen is the age of consent. However, note that according to a constitutional court ruling in 2013, (*The Teddy Bear Clinic for Abused Children and Another v Minister of Justice and Constitutional Development and Another*, [2013] ZACC 35), that dealt with statutory rape laws to consensual sexual acts when both parties are younger than the age of consent, the court struck down as unconstitutional the provisions of the Criminal Law (Sexual Offences and Related Matters) Amendment Act, 2007 that made it a crime for children between the ages of 12 and 16 to engage in consensual sexual activity with other children in the same age range. The court found that these laws infringed the rights to dignity and privacy and the best interests of the child principle. This applies to children over the age of twelve, and where the age gap is not more than two years. So in this case you will need to find out who the father is, how old the father is, if the sex was consensual, and what the age gap between the mother and father is? If there is a **possibility of rape/statutory rape, it must be reported to police directly** or the medical practitioner faces a five year prison term / fine / or both. Note it is a crime to perform TOP without being qualified or in an **unapproved facility**. This should be reported / investigated.

Further reading:

- Choice of Termination of Pregnancy Act, 1996, amended 2008 <https://pmg.org.za/files/bills/071121B21B-07.pdf>
- Sexual Offences Act, 2007 https://www.saps.gov.za/resource_centre/acts/downloads/sexual_offences/sexual_offences_act32_2007_eng.pdf
- Children's Act, 2005 <http://www.justice.gov.za/legislation/acts/2005-038%20childrensact.pdf>
- Obstetric Anesthesia, Clinical Anesthesiology, 4th edition, Morgan & Mikhail

3. Critical appraisal of quantitative research

Read the accompanying article carefully and then answer the following questions. 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.

Van der Spuy K, Crowther M, Nejthardt M, Roodt F, Davids J, Roos J, Cloete E, Pretorius T, Davies G, Van der Walt J, Van der Westhuizen C. A multicentre, cross-sectional study investigating the prevalence of hypertensive disease in patients presenting for elective surgery in the Western Cape Province, South Africa. South African Medical Journal. 2018;108(7):590-5. DOI:10.7196/SAMJ.2018.v108i7.13022.

Available from: <http://www.samj.org.za/index.php/samj/article/view/12331>.

- 3.1 Was the sample frame appropriate to address the target population? (3 marks)
- 3.2 Were study participants sampled in an appropriate way? (3 marks)
- 3.3 Was the sample size adequate? (3 marks)
- 3.4 What is the purpose of the PRISMA diagram? (3 marks)
- 3.5 Were the study subjects and the setting described in detail? (3 marks)
- 3.6 Were valid methods used for the identification of the condition? (3 marks)
- 3.7 Was the condition measured in a standard, reliable way for all participants? (3 marks)
- 3.8 Was there appropriate statistical analysis? (3 marks)
- 3.9 Discuss the authors' interpretation of the hypertensive treatment compliance analysis. (3 marks)
- 3.10 Discuss the value of the study findings for your own practice. (3 marks)

(Total: 27 marks)

Suggested answers

3.1 Was the sample frame appropriate to address the target population? (3 marks)

In this study, the target population was adult patients presenting for elective surgery in the Western Cape.

The study population was adult patients presenting for elective surgery (non-cardiac and non-obstetric) in seven hospitals (public sector, secondary and tertiary levels of care).

The sample frame was all such patients presenting during a 1-week period. (In statistics, a sampling frame is the source material or device from which a sample is drawn.)

The description of the sample frame is found in the methods section: adult, non-cardiac, non-obstetric patients who were admitted the day before surgery in the study week.

This question relies upon knowledge of the broader characteristics of the population of interest and the geographical area. One should also assess the inclusion and exclusion criteria (day-case surgery and patients not requiring anaesthetics), as well as the sampling method (looks like all eligible patients were invited to enrol).

One has to reflect on how representative this particular week was to assess the target population. The exact time frame was not specified (it was only specified that it was a working

week: from 07h00 on Monday to 19h00 on Friday of the week chosen for the study) – one may argue that seasonal variation and other factors (measured and not measured) may have introduced bias, which may impede the sample frame's ability to reflect the target population. For prevalence studies, the time period has to be considered, given that some conditions may peak at a particular season (e.g., the incidence of influenza in different seasons and years). Here, one may argue that the prevalence of hypertension should not be affected by seasonal variation and therefore one may argue that the sample frame was appropriate. Although one may ask why only one week was selected and not a longer period with the opportunity to collect data from a larger sample, which may be more representative of the target population.

Additional information from references (not part of marking schedule):

"It is important to define your study population clearly before considering how you will sample from this population. Some researchers will also define a target population, which is the broadest population to which they would like to generalise their findings and then their study population, which is the population to which they actually have access. Often it is not possible to collect data from the entire study population and a representative sample must be selected, from whom data will be collected. The study population should be described in terms of people (who is included?), place (where are these people?) and, sometimes, time (over what time period?)."

"Certain diseases or conditions vary in prevalence across different geographic regions and populations (e.g. women vs. men, socio-demographic variables between countries). The study sample should be described in sufficient detail so that other researchers can determine if it is comparable to their population of interest."

3.2 Were study participants sampled in an appropriate way? (3 marks)

The researchers did not employ any sampling method (probability or non-probability sampling). Therefore, one may argue that the participants were sampled appropriately as there was no sampling and all eligible study participants at the seven hospitals who presented during the study for pre-operative assessment were invited to participate.

In selecting a representative sample, it is important to ensure that participants from the target population have an equal probability of being selected. Probability sampling is any sampling procedure that specifies the probability that each member of a population has of being selected.

The only element of convenience was the week chosen for the study (as mentioned above).

3.3 Was the sample size adequate? (3 marks)

No mention of sample size calculation was made. If collecting quantitative data with a view to testing a hypothesis or assessing the prevalence of a disease or problem, a minimum sample size should be calculated. If you are planning a purely descriptive study then your only

concern is to estimate the variables you are interested in with sufficient precision so that you obtain a reasonably accurate picture of the situation in the larger target population. The calculation will tell you the size of the sample required to do this.

Here the researchers aimed at measuring the point prevalence of hypertension (measure of interest). The authors mention some information on the prevalence of the hypertension in the introduction; however, no justification was provided for not calculating the sample size.

Additional information from Joanna Briggs reference (not part of marking schedule): "The larger the sample, the narrower will be the confidence interval around the prevalence estimate, making the results more precise. An adequate sample size is important to ensure good precision of the final estimate. Ideally we are looking for evidence that the authors conducted a sample size calculation to determine an adequate sample size. This will estimate how many subjects are needed to produce a reliable estimate of the measure(s) of interest. For conditions with a low prevalence, a larger sample size is needed. Also consider sample sizes for subgroup (or characteristics) analyses, and whether these are appropriate. Sometimes, the study will be large enough (as in large national surveys) whereby a sample size calculation is not required. In these cases, sample size can be considered adequate."

3.4 What is the purpose of the PRISMA diagram? (3 marks)

Here the authors used the PRISMA diagram to describe the different levels of the recruitment process, from assessment for eligibility, inclusion and exclusion criteria, and then assessment for hypertension and whether it was diagnosed or not, as well as controlled or not. It provides the reader with a visual guide on how the recruitment process was conducted and which data became part of the data set analysed.

Additional information from Equator reference (not part of marking schedule): PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses. PRISMA focuses on the reporting of reviews evaluating randomized trials, but can also be used as a basis for reporting systematic reviews of other types of research, particularly evaluations of interventions. The PRISMA diagram is used typically to describe the inclusion and exclusion of studies during a systematic review.

3.5 Were the study subjects and the setting described in detail? (3 marks)

The study subjects were described in reasonable detail: "All adult, non-cardiac, non-obstetric patients admitted the day before elective surgery during the study period" who presented to the seven hospitals. Table 2 provides information on the demographics of the sample (age, gender, ASA rating, degree of hypertensive target organ involvement). More information on the socio-demographic profile of the study participants would have been useful, as hypertension is a condition which may be influenced

by level of education and access to primary health care. The demographic information provided is very biomedical in nature and does not reflect the socio-demographic factors which influence hypertension control and treatment adherence.

More detail on the setting could also have been provided, in order to guide the reader on the generalizability of the study findings. Six out of the seven hospitals are designated as secondary level of care and one is providing tertiary care. All seven reside in the Western Cape province of South Africa. However, more detail on bed size, number of elective surgeries per year, number of operating theatres, size of drainage area (population served) and data on human resources (anaesthetics, medical officers, nursing staff, etc.) would have been useful.

3.6 Were valid methods used for the identification of the condition? (3 marks)

Yes, the authors used validated tools for diagnosing hypertension as well as assessing adherence to treatment.

For hypertension, the South African Hypertension Practice Guideline was used. This is the accepted national guideline for diagnosing and managing hypertension in both private and public health care settings.

Compliance with medical therapy was assessed using the Morisky Medication Adherence Questionnaire. The authors did not specify whether the instrument was validated or translated for the Western Cape context. It is not clear where the questionnaire was developed (first world/high income country vs. low- and middle income country) and for which level of education (level of language usage). It would have been good to know if the tool was administered by a researcher or research assistant, or whether it was self-administered (i.e. completed by the participant).

Additional information from Joanna Briggs reference (not part of marking schedule): "Here we are looking for measurement or classification bias. 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. If the outcomes were assessed based on existing definitions or diagnostic criteria, then the answer to this question is likely to be yes. If the outcomes were assessed using observer reported, or self-reported scales, the risk of over- or under-reporting is increased, and objectivity is compromised. Importantly, determine if the measurement tools used were validated instruments as this has a significant impact on outcome assessment validity."

3.7 Was the condition measured in a standard, reliable way for all participants? (3 marks)

The South African Hypertension Practice Guideline was used to guide the measurement of blood pressure in the study subjects. A standardised technique was used; however, this is a multicentre study, which involved a number of researchers. It is not clear how each study site ensured that the same technique was used consistently for each participant. Were the equipment standardised? No mention of inter- and intra-observer reliability testing was made. The

contribution of each author was described; however, blood pressure readings are typically measured by the nursing colleagues, who may have different levels of experience and training. During a typical week, at least two shifts of nursing staff are working during the day, with additional nursing staff working at night. The pre-operative assessment is usually conducted in the ward; however, at some hospitals, the pre-operative assessment may be conducted in the outpatients department. No explicit mention of a study protocol is made, which is aimed at ensuring a consistent practice at each of the study sites. In conclusion: the authors describe a standard approach in the methods section, but did not acknowledge the normal variance in routine practice.

Additional information from Joanna Briggs reference (not part of marking schedule): "Considerable judgment is required to determine the presence of some health outcomes. Having established the validity of the outcome measurement instrument (see item 6 of this scale), it is important to establish how the measurement was conducted. Were those involved in collecting data trained or educated in the use of the instrument/s? If there was more than one data collector, were they similar in terms of level of education, clinical or research experience, or level of responsibility in the piece of research being appraised? When there was more than one observer or collector, was there comparison of results from across the observers? Was the condition measured in the same way for all participants?"

3.8 Was there appropriate statistical analysis? (3 marks)

The numerator and denominator values are reported in the tables, especially table 2 with the participant characteristics. An alpha (p-value) of 0.05 was used as the cut-off for significance when comparing the characteristics of normotensive and hypertensive participants. It is not clear whether the data was normally distributed or not, as the authors describe both test options for continuous variables, when comparing the two groups in table 2. The confidence intervals for the prevalence of hypertension and target organ involvement were not reported.

For the analysis of compliance in patients on hypertensive treatment, the confidence intervals were provided.

No sub-analysis was done for the different sites; however, the small numbers would have made a sub-analysis per site difficult.

Additional information from Joanna Briggs reference (not part of marking schedule): "Importantly, the numerator and denominator should be clearly reported, and percentages should be given with confidence intervals. The methods section should be detailed enough for reviewers to identify the analytical technique used and how specific variables were measured. Additionally, it is also important to assess the appropriateness of the analytical strategy in terms of the assumptions associated with the approach as differing methods of analysis are based on differing assumptions about the data and how it will respond."

3.9 Discuss the authors' interpretation of the hypertensive treatment compliance analysis. (3 marks)

In this study, with its small sample and using a questionnaire which we do not know if it had been validated for this context, the authors attributed the main reason for non-compliance to patient factors. Adherence to treatment data on 156 patients on anti-hypertensive treatment were collected. The questions "to elicit non-compliance" (those questions presented in table 5) were closed questions, which limits the interpretation of the data. A Likert scale or qualitative comments may have provided more information on issues of non-compliance (it would have been useful to the reader to provide the questionnaire as an addendum). The reasons for non-compliance were categorised according to the World Health Organisation's categories, and were applied to only 39 hypertensive patients on treatment. This small sub-group analysis had wide confidence intervals for the five categories, which limits the interpretation further, as the confidence interval reflects the range in which lies the true mean value of a measure for the population of interest. The small sample size and wide confidence intervals should have been considered as an important limitation by the authors. Therefore, the reader should interpret the findings on the compliance analysis with caution.

3.10 Discuss the value of the study findings for your own practice. (3 marks)

This is an individual assessment which is dependent on the candidate's own context. A general interpretation could be as follows:

The pre-operative anaesthesia assessment has the potential of identifying undiagnosed hypertension, assessing degree of control and presence of hypertensive complications in existing patients on hypertensive treatment, as well as provide an opportunity for a person-centred conversation around factors which may influence adherence to care. Factors affecting adherence include patient and non-patient factors, such as system factors, treatment factors and condition-related factors. This pre-operative assessment provides an opportunity for improved care coordination between different levels of care, provided that the findings from the assessment are communicated with the primary care team. The screening for undiagnosed and poorly controlled hypertension during pre-operative assessments may also be replicated in district hospitals, in order to maximise the health promotion and prevention opportunities during every contact with the health system.

Further reading:

- Govender I, Mabuza LH, Ogunbanjo GA, Mash B. African primary care research: performing surveys using questionnaires. *African journal of primary health care & family medicine.* 2014;6(1):1-7.
- Munn Z, Moola S, Lisy K, Riitano D, Tufanaru C. Methodological guidance for systematic reviews of observational epidemiological studies reporting prevalence and cumulative incidence data. *International journal of evidence-based healthcare.* 2015;13(3):147-53.
- Joannabriggs.org. (2018). Critical Appraisal Tools - JBI. [online] Available at: <http://joannabriggs.org/research/critical-appraisal-tools.html> [Accessed 31 July 2018].

[appraisal-tools.html](http://joannabriggs.org/research/critical-appraisal-tools.html) [Accessed 31 July 2018].

- Equator-Network.org. (2018). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. [online] Available at: <http://www.equator-network.org/reporting-guidelines/prisma/> [Accessed 31 July 2018].

4. OSCE scenario: Surgery

Objective of station:

This station tests the candidate's ability to manage a patient with peripheral vascular disease (PVD) at primary care level by examining his/her ability to gather information, apply clinical reasoning, and use communication skills to address the problem.

Type of station

Integrated consultation

Equipment list

1. Table and two chairs for office consultation
2. Male simulated patient (late middle age)

Instructions for candidate

History/context

You consult with Mr D, a 55-year-old man, who made an appointment at the community health centre.

Please consult (history and focussed exam) with this patient, and advise him of the best way forward to address his problem.

Instructions for the examiner

Objectives: This station tests the candidate's ability to manage a patient with PVD at primary care level by examining his/her ability to gather information, apply clinical reasoning, and use communication skills to address the problem

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

Familiarize 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 candidates' competence in each area.

Provide the information on the Patient's notes sheet after the candidate has examined the patient.

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:

- Coetzee F. Chapter 6.13: Peripheral vascular disease. In: Mash B, editor. *Handbook of Family Medicine.* 4th ed. Cape Town: Oxford University Press Southern Africa; 2017: p. 315 - 318.

Mark sheet

Exam number of candidate:

Competencies (Delete what is not applicable)	Candidate's rating		
1. Gathering information - history Comment:	Not Competent	Competent	Good
2. Gathering information – physical exam Comment:	Not Competent	Competent	Good
3. Clinical reasoning Comment:	Not Competent	Competent	Good
4. Explaining and Planning Comment:	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 • History	Inadequate detail to suggest diagnosis and risk factors	Adequate to make a diagnosis and identify ongoing risk factors	<ul style="list-style-type: none"> Comprehensive, covers psychosocial issues Patient centred
2. Physical examination • General • Vascular	<ul style="list-style-type: none"> poor technique not comprehensive 	<ul style="list-style-type: none"> solid technique covers most aspects 	<ul style="list-style-type: none"> solid technique efficient patient centred examines for extra pathology e.g. respiratory system
3. Clinical reasoning • Diagnose peripheral vascular disease • Risk factors: diet, smoking • Investigations: lipid profile, Haemoglobin	• Does not make diagnosis or identify risk factors	• Makes diagnosis and identifies risk factors	<ul style="list-style-type: none"> Three stage/ comprehensive assessment Makes a definitive diagnosis of PVD and risk factors Identifies any other risks to patient e.g. COPD/lung cancer
4. Explaining and Planning • Plan going forward – Doppler, blood test • Lifestyle changes – motivational interviewing • Ongoing monitoring	• Dr-centred	<ul style="list-style-type: none"> Patient-centred Biomedical aspects comprehensively covered 	<ul style="list-style-type: none"> Patient centred Biopsychosocial aspects covered comprehensively Structured plan in place to address lifestyle issues

Role play – Instructions for actor (standardised patient)**Appearance (including dress) and behaviour (emotions and actions)**

Overweight male

Opening statement

"I have pains in my legs that are troubling me."

History**Open responses: Freely tell the doctor ...**

You are 55-years old, and work as a construction foreman. For the last five months, these leg pains have been getting worse. Especially when you're on site, and walking, your calves are painful.

Closed responses: Only tell the doctor if asked –

- Leg pain gets better with rest
- No night-time pain
- You smoke a pack a day – since age 25 years
- You don't consume alcohol at all
- You eat mostly home cooked food. You love fizzy cooldrinks. Drink about 2L/day
- You have no health problems

Ideas, concerns and expectations

You're worried because it is affecting work – you must work as you are the breadwinner – you have two kids at university.

Medical history

Healthy man. No previous medical conditions or illnesses.

Medication history

No chronic medication.

Family history

None

Behaviour change: if the doctor talks about stopping smoking, you are reluctant at first, but if s/he convinces you of the importance, you can be convinced to quit.

Patient notes

1. Vital signs:

BP 145/95

Pulse 86 beats/minute

Weight 98 kg

Random HGT: 5.9 mmol/L

2. Once examination has been done adequately, inform the candidate:

"Assume you found the following:

- Good femoral pulses
- Good popliteal pulses
- Very faint dorsalis pedis and posterior tibial pulses"

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