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REGISTRARS

Mastering your Fellowship

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Abstract

The series, "Mastering your Fellowship", provides examples of the question format encountered in the written examination, Part A of the FCFP(SA) examination. The series aims to help 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); Modified Essay Questions (MEQ)/Short Answer Question (SAQ) and questions based on the Critical Reading of a Journal (evidence-based medicine). 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 5 (ethics, medical legislation and professionalism), unit standard 4 (teaching and learning) and unit standard 1 (critically appraising qualitative research). We suggest that you attempt answering the questions (by yourself or with peers/supervisors), before finding the model answers online: http://www.safpj.co.za/.

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

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

1. SBA (single best answer question) Theme: Medical legislation

A 13-year-old child presents with a genital ulcer syndrome. After the appropriate counselling on safe sexual practice and contraception, the patient implores you not to disclose your clinical findings to her mother. Her boyfriend is 15 years old. You

decide to comply with the patient's request. The legislation that most appropriately supports your decision is:

- a) Children's Act 38 of 2005
- b) Criminal Law (Sexual Offences and Related Matters)
 Amendment Act 5 of 2015
- c) Health Professions Act 56 of 1974
- d) National Health Act 61 of 2003
- e) Promotion of Access to Information Act 2 of 2000

Short answer = d

Long answer:

Section 14 of the National Health Act (NHA) deals specifically with the issue of patient confidentiality and states: "All information concerning a user, including information relating to his or her health status, treatment or stay in a health establishment, is confidential." Rule 13 of the Health Professional Council of South Africa (HPCSA) Ethical Guide states that medical practitioners may only divulge confidential information without the patient's consent when specific circumstances apply. These include:

- To satisfy a statutory provision (e.g. notification of a communicable disease under the NHA)
- ii. To comply with a court order
- iii. To protect the public interest
- iv. With the patient's consent

The Children's Act 38 of 2005 states that children who are 12 years or older and who have the maturity to understand the implications of their condition/treatment may consent on their own. This act deals with the age of consent and also specifies that "information about a child's virginity, HIV status and contraceptive use should not be divulged without the child's consent". This act makes specific provision for HIV status, virginity and contraceptive use, without encompassing other aspects

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of confidentiality in clinical care, which is more appropriately covered in the NHA.

The Ethical Guidelines of the Health Professions Council of South Africa also discusses confidentiality but refers one to the statutory clauses in the NHA.

The Criminal Law (Sexual Offences and Related Matters) Amendment Act 5 of 2015 was amended in 2015 to include a new definition of consensual sexual intercourse with adolescents (statutory rape):

"15. (1) A person ('A') who commits an act of sexual penetration with a child ('B') who is 12 years of age or older but under the age of 16 years is, despite the consent of B to the commission of such an act, guilty of the offence of having committed an act of consensual sexual penetration with a child, unless A, at the time of the alleged commission of such an act, was—

- (a) 12 years of age or older but under the age of 16 years; or
- (b) either 16 or 17 years of age and the age difference between A and B was not more than two years."

This amendment in effect takes away the statutory requirement of notifying this case as one of statutory rape.

Further reading:

- Health Professions Council of South Africa, Guidelines for Good Practice In The Health Care Professions Confidentiality: Protecting And Providing Information. Obtainable from: http://www.hpcsa.co.za/downloads/conduct-ethics/rules/confidentiality protecting providing info.pdf
- Consent to Medical Treatment in South Africa. An MPS Guide.
 Obtainable from: http://www.medicalprotection.org/docs/default-source/pdfs/Booklet-PDFs/sa-booklets/consent-to-medical-treatment-in-south-africa---an-mps-guide.pdf?sfvrsn=4
- Act No. 5 of 2015: Criminal Law (Sexual Offences and Related Matters) Amendment Act. Obtainable from: http://www.gov.za/sites/www.gov.za/files/38977 7-7 Act5of2015CriminalLaw a.pdf
- 2. SAQ (short answer question): demonstration of the ability of the family physician to plan and implement a teaching activity

As a family physician in a sub-district, you are concerned about the number of school children who have undiagnosed and unmanaged Attention Deficit Hyperactivity Disorder (ADHD). You know that unmanaged ADHD contributes to children dropping out of school, teenage pregnancies and drug abuse.

Using the headings given below, describe how you would plan and implement a four hour training session for 16 doctors in the sub-district on the topic of ADHD in school age children.

- 2.1 Describe six learning outcomes you want the doctors to achieve in the four-hour session. Two outcomes should relate to each of the following aspects – knowledge; skills; and attitude or behaviour. (6)
- 2.2 From each of the three aspects (knowledge; skills; and

- attitude or behaviour), describe the learning methods you will use to achieve these learning outcomes and justify your choice for each. (6) (Please give three different learning methods.)
- 2.3 After the workshop a doctor in the group asks if you would be willing to mentor her with regard to patients she sees with ADHD. Describe how you might make use of Kolb's learning cycle in mentoring her. (Reminder: the cycle consists of concrete experiences, reflective observation, abstract conceptualisation (thinking/generate a hypothesis about the meaning of our experiences) and active experimentation (planning/doing something/'testing' the hypotheses adopted). (8)

Suggested answers:

2.1 Describe six learning outcomes you want the doctors to achieve in the four-hour session. Two outcomes should relate to each of the following aspects: knowledge; skills; and attitude or behaviour. (6)

Learning outcomes are important to direct the learning towards what we want to achieve by the end of the session. Outcomes should clearly state what the person should be able to accomplish by the end of the session. Bloom's taxonomy classifies learning outcomes in progressive degrees of complexity across three domains of learning (cognitive-knowledge, action-psychomotor and emotive-attitudes). Outcomes should be defined at the appropriate level of complexity (i.e. to describe something is not the same as to demonstrate it), be specific and achievable in the training time available, take cognisance of the learning needs of the doctors and be relevant to practice circumstances and the community served.

The outcomes should relate to knowledge, skills, attitudes that are required for the accurate diagnosis and optimal management of children with ADHD. Describing outcomes requires a good knowledge of the subject matter.

Possible learning outcomes are numerous and the marks are allocated to meet the criteria mentioned above. Outcomes should be described in ways that allow measurement of the outcome. Avoid vague terms such as "be familiar with".

A marking grid is often used as a variety of answers may be acceptable for this question as possible learning outcomes are numerous. The answers are rated according to Table I .

Table I. Rating of answers

	Outcome given			
Score	0	1	2	
Definition	Is deficient in several areas: level of complexity required, specific, achievable, needed, relevant to the context, important for ADHD.	Includes most of the areas: level of complexity required, specific, achievable, needed, relevant to the context, important for ADHD.	Includes all the areas: level of complexity required, specific, achievable, needed, relevant to the context, important for ADHD.	

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Knowledge outcomes might be:

At the end of this training session participants will be able to:

- 1. Describe the epidemiology of ADHD.
- 2. Discuss the causes and pathophysiology of ADHD.
- Illustrate the implications of undiagnosed and untreated ADHD on learning, social functioning and addictive behaviour.
- Select, with reasons, tools used for assessing and monitoring symptoms of ADHD such as SNAP or Vanderbilt.
- Appraise local protocols used in the management of children with ADHD and the rationale for such management.

Skills outcomes might be:

At the end of this training session participants will be able to:

- Conduct an interview with a child and family to help diagnose ADHD.
- 2. Test hearing and visual problems.
- Identify other causes of hyperactivity and learning problems.

Attitudinal or behavioural outcomes might be:

At the end of this training session participants will be able to:

- Demonstrate support and empathy toward children and parents of children with ADHD.
- Recognise feelings evoked in them by hyperactive children and how to respond to these feelings.
- 3. Role-model firm, calm communication with children who are hyperactive.
- 2.2 From each of the three aspects (knowledge; skills; and attitude or behaviour), describe the learning methods you will use to achieve these learning outcomes and justify your choice for each. (6) (Please give three different learning methods.)

There are many different learning methods that can be used effectively for particular learning outcomes and contexts. Marking is done using a rubric that looks at principles rather than the specific method mentioned. Learning methods should enhance higher order thinking; be creative; relate to practice and stimulate further questions and thinking.

Knowledge outcome

At the end of this training session participants will be able to:

Illustrate the implications of undiagnosed and untreated ADHD on learning, social functioning and addictive behaviour.

Learning method. I would use a brief lecture, to the group as a whole, based on scientific research on the effect of undiagnosed ADHD.

Justification. Although a lecture is not a very effective learning method as learners are not sufficiently active, it is efficient for communicating factual information. One can encourage learners to be more active by encouraging the audience to participate and ask questions.

Skills outcome

At the end of this training session participants will be able to:

Identify other causes of hyperactivity and learning problems.

Learning method. Role play. Participants will be divided into eight pairs to role-play history taking. The role play scenarios will be of children who have symptoms of poor focus, impulsivity and hyperactivity that are not due to ADHD. Examples can include children with anxiety, untreated allergies, poor sleep, use of medications or drugs, family and social circumstances, intellectual disability and normal variations. Two aspects of learning a new skill are important:

- 1. Modelling of the skill by the presenter through, for example, demonstration or use of video.
- Practising of the skill by the participants simulation needs to be combined with useful feedback afterwards. Feedback should be given in a structured and skilful way using for example Pendleton's method or ALOBA.

Justification. Participants will learn by doing. Although different people have different learning styles and role play is not comfortable for some, it will allow experience of finding causes of symptoms similar to those of ADHD, that are not due to ADHD.

Attitudinal or behavioural outcome

At the end of this training session participants will be able to:

Demonstrate support and empathy toward children and parents of children with ADHD.

Learning method. Experiential learning. Participants will watch a video of parents of a child with ADHD where the parents describe their experience of parenting a child with ADHD. Participants will then discuss the video and role play consultations with parents

Learning method				Justification for learning method	
Mark	0	0.5	1	1	
Outcome with regard to learning method:	Inappropriate to outcome; overly passive	Appropriate; active learning	Appropriate; enhances higher order thinking; creative; relates to practice; stimulates further questions and thinking	Justification shows understanding of adult learning or other learning theories	

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while receiving feedback from colleagues for the empathy they demonstrate.

Justification. Although this takes time, participants gain insight into the parent's perspective. The video serves as an experience and the discussion allows reflection on this experience. Role play will give the participants the opportunity to experience interviews as both the parent and the doctor.

2.3 After the workshop a young doctor in the group asks if you would be willing to mentor her with regard to patients she sees with ADHD. Describe how you might make use of Kolb's learning cycle in mentoring her. (Reminder: the cycle consists of Doing, Feeling, Looking, Thinking.) (8)

Mentoring has many definitions. It implies a professional relationship with a less experienced colleague with the aim being the development of the colleague as a professional (which includes personal development). It is an ongoing relationship characterised by support, challenge, feedback and respect and is focused on concrete work experience.

A marking rubric would be used to assess whether responses are appropriate or not.

	Explains what it is 1		Explains application to the scenario 1
Feeling	Concrete experience		Mentee conducts and reports on a consultation with a patient/family with ADHD.
Looking	Reflection, observation		Mentee describes the consultation to mentor, what happened, what went well, what didn't go so well.
Thinking	Abstract conceptualisation	PLUS	Mentee is encouraged to think about what it means, what have they learnt? Plan something new to add change next time.
Doing	Active experimentation		Mentee sees another pt/family with ADHD and tries something new based on the learning above.

One might start with **Kolb's "Concrete experiences" step**. This is the concrete experience, namely a consultation the doctor has with a child and parent or parents where a diagnosis of ADHD is made. Ask the doctor to describe a consultation that she has had with a child with ADHD.

The next step, "Reflective observation", is where the younger doctor is helped to reflect on the consultation. She may look at her learning needs in terms of knowledge, skills, or attitude and her emotional experience of the consultation. She may identify her frustration and anger that the parents did not stop the child when he drew on her consultation room wall.

The "Abstract conceptualisation or thinking stage" is when abstract conceptualisation takes place. She may be helped to make sense of her own lack of action. She may feel that as the doctor, she had to show kindness and acceptance of her patient rather than set her own boundaries about the child's behaviour in her space.

In the "Active experimentation or doing step" there is active experimentation. The young doctor is helped to plan how she

would respond to a child's challenging behaviour in the future. She might even role-play how she might set firm boundaries for, and be assertive towards, such a child and in so doing set an example for the parents.

Further reading:

Mash B, Blitz-Lindeque J. South African Family Practice Manual.
 Van Schaik; 2015. Chapters 174 and 176.

3. Critical appraisal of research

Please answer the questions related to the following article:

Khuzwayo LS, Moshabela M. The perceived role of ward-based primary healthcare outreach teams in rural KwaZulu-Natal, South Africa. Afr J Prm Health Care Fam Med. 2017;9(1), a1388. https://doi.org/10.4102/phcfm.v9i1.1388

Available from http://www.phcfm.org/index.php/phcfm/article/view/1388/html

Total: 38 marks

Introduction (6 marks)

3.1 What motivated the authors to conduct this study? (2)

The limited available information on user perceptions of services provided by the WBOTs in rural households in South Africa.

3.2 Critically appraise the stated aim of the study. (4)

There is a discrepancy in the abstract and introduction. In the abstract, the aim is stated as "to explore community awareness and perceptions of WBOTs as well as people's motivation to engage and use WBOT services". In the introduction it is "to explore awareness and perceptions of WBOTs...", the latter statement giving the impression that it is the perceptions of the WBOTs themselves that is under study. Furthermore, the study text reports neither on the awareness nor on the motivation of the community regarding the phenomenon under study.

Methods (26 marks)

3.3 Critically appraise the procedure used to obtain the sample size of the study. (2)

It is stated that the sample comprised four FGDs and 16 key informants. This is followed by the definition of the participants: "community leader", "household member". However, no mention is made on how the researchers decided on the four FGDs and the 16 participants. Did they reach data saturation?

3.4 What do the authors mean by "Participants were purposively selected"? (4)

In qualitative research, purposive sampling refers to the purposeful recruitment of participants who are likely to be information-rich regarding the phenomenon of interest. This implies a non-probability sampling rather than probability sampling (unlike in the quantitative research approach). There are various approaches used in purposive sampling: snowball sampling, purposeful random sampling and criterion-based sampling.

3.5 The authors indicate that they used "inductive categories" in their data analysis. Briefly outline how this method differs from "deductive" data analysis. (4)

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"Inductive" analysis used in qualitative studies refers to analysis of data through description and interpretation leading to development of new concepts or theory, while "deductive" analysis implies that the researcher came to the analysis with a pre-determined list of ideas, codes or categories that they then looked for in the data.

One could describe inductive as the development of new concepts or theory and deductive as the testing of existing concepts or theory.

3.6 What are the characteristics of the "in-depth interview" technique used in this study? (6)

In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a phenomenon of interest.

It explores the phenomenon of interest in terms of an individual's experiences, views, beliefs, ideas, etc which are not amenable to quantification.

The interviewer uses communication skills (active listening, openended questions, clarification questions, reflective summaries and facilitative non-verbal responses) to enable an "in-depth" exploration and understanding of the person's perspective.

An unstructured in-depth interview would allow the person to explore the topic in whatever way they choose after an initial opening question, a semi-structured interview would use an interview guide to identify certain topics that should be explored during the interview. This type of interview does not use a structured questionnaire, which requires a set of questions to be asked and answered in a prescribed sequence as is usually used to collect quantitative data.

3.7 Critically appraise this study with respect to its trustworthiness. (10)

Two marks for justifiable critical appraisal of each of the key areas: study design, setting, selection of participants, data collection, data analysis.

Study design

The type of qualitative research is not clearly stated; one would assume that this is phenomenological qualitative research using focus group discussions and in-depth interviews. There is no explanation of why it was thought necessary to have both FGDs and in-depth interviews in the design.

Setting

There is no thick description of the study setting in terms of the communities being served or the WBOTs themselves.

Selection of participants

Purposeful sampling is outlined and the desired participants defined as well as the criteria (knowledge and experience of WBOTs) required.

There is no clear description of the practical process used to actually select the community members and leaders. It sounds like the community leaders were selected and they then selected

the household members. A combination then of criterion-based and snowball sampling, but this is not clear.

The numbers interviewed are clear but how these numbers were justified is not stated. Was there an attempt to ensure saturation of data?

Data collection

The interview guide is not described in any detail or provided as a supplementary file. The interview process is described.

Data analysis

The analysis is described, but is confusing. How the transcripts were checked for accuracy is not described. There seems to be a blend of both inductive and deductive approaches. It is not clear what is meant by power and proof coding. The steps followed in the QDA are not clear and how the terms, codes, categories and themes were used. Triangulation of the two data sources is not described. Member checking, respondent validation or the roles of the different researchers in the QDA process is not described. The reflexivity of the researchers is not described.

In conclusion, the description of the methods is not sufficient to ensure the trustworthiness of this article in terms of its credibility, transferability, dependability or confirmability.

Important background information (not part of the model answer)

The whole methods section speaks to the trustworthiness of the study and one might not expect this to be discussed explicitly in a separate section. If one was appraising a RCT, one would apply a checklist to the description of the methods to ensure all key aspects were covered; one would not necessarily expect the topic of scientific validity to be addressed separately.

Key issues should be addressed in the methods or judged from the article:

- i. Was the relationship of the researchers to the topic addressed and their reflexivity?
- ii. Was there sufficient engagement with the topic over time or sufficient people interviewed, saturation?
- iii. Was there sufficient thick description of the setting?
- iv. Was there sufficient description of the people selected and interviewed/observed justifiable purposive sampling.
- v. Was there sufficient description of the data collection and analysis steps that they could be repeated?
- vi. Was the analysis checked by others; was the interpretation checked by the respondents; was there any possibility to triangulate the findings?

Discussion/Conclusion (6 marks)

- 3.8 Is this study likely to change your practice? Use the READER format to motivate your answer. (6)
- Relevance: Is it about family medicine?
- Education: Does it challenge my knowledge?
- Applicability: Does it apply to my situation?

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- Discrimination: What is the scientific value of the article?
- Evaluation: What is my evaluation, based on the above?
- Reaction: How can I use this information?

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Further reading:

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- Mabuza LH, Govender I, Ogunbanjo GA, Mash B. African Primary Care Research: Qualitative data analysis and writing results. African Journal of Primary Health Care and Family

Medicine. 2014 Jan;6(1):1-5.

- Pather M. Chapter 13: Continuing professional development. In: Mash B, editor. Handbook of Family Medicine. 3rd ed. Cape Town: Oxford University Press Southern Africa; 2011: p. 406-429.
- Studying a Study and Testing a Test. How to read the medical evidence. Fifth Edition. Richard K Riegelman. Lippincott Williams and Wilkins 2005.
- Resources. Centre for Evidenced Based Health Care [homepage on the Internet]. c2015. Available from URL: http://www.cebhc.co.za/teaching-resources/
- Greenhalgh T. How to read a paper: The basics of evidencebased medicine. John Wiley and Sons; 2014 Feb 26.