

APPENDIX A - CONSENT AND QUESTIONNAIRE

Participant's information & informed consent document

STUDY TITLE: A multi-method study to explore perceptions and attitudes towards neuroanatomy in an undergraduate medical curriculum

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SUPERVISORS: Dr JC Lubbe and Prof MC Bosman

INSTITUTION: Department of Anatomy, University of Pretoria

Dear Anatomy lecturer

I am a PhD student in the Department of Anatomy, University of Pretoria. You are invited to volunteer to participate in my research project, by completing the following questionnaire regarding the exploration of perceptions and attitudes of both staff and students towards neuroanatomy in the South African undergraduate medical curriculum. This letter provides you with information to help you decide whether you want to take part in this study. Before you agree you should fully understand what is involved. You should not agree to take part unless you are completely happy about what we are requesting from of you.

The aim of this study is to investigate the attitudes of anatomy lecturers, undergraduate and postgraduate students towards the teaching and learning of neuroanatomy in the medical curriculum. This study will further examine the perception of students on the importance of neuroanatomy as it relates to their future careers as well as the current teaching and assessment practices used by anatomy lecturers at South African Universities.

This study involves answering some questions regarding your personal opinion towards the facilitation and learning of neuroanatomy, the relevance of neuroanatomy as part of the medical curriculum and the current teaching approaches and strategies that you are making use of.

We would like you to complete an anonymous online questionnaire. This may take

about 10 - 20 minutes. Please do not enter your name on the questionnaire. This will ensure confidentiality and anonymity. The Research Ethics Committee of the University of Pretoria, Faculty of Health Sciences granted written approval for this study (nr 587/2018). This study has been structured in accordance with the Declaration of Helsinki, of which a copy may be obtained from the primary investigator, should you wish to review it.

This questionnaire consists of the following three parts:

- Section A: General information which involves answering some questions about your age, teaching experience etc.
- Section B: Current teaching approaches, assessment and coursework which involves answering some questions about your teaching methods.
- Section C: Perceptions and attitudes towards neuroanatomy which involves answering some questions about your personal view towards neuroanatomy and its place in the medical curriculum

Your participation in this study is voluntary. You can refuse to participate, omit questions or stop at any time without providing any reason. As you do not type your name on the questionnaire, you give us the information anonymously. Once you have submitted the questionnaire, you cannot recall your consent as we will be unable to trace (identify) your information-sheet. Therefore, you will also not be identified as a participant in any publication that results from this study. There is no foreseeable physical discomfort or risk involved. If there are questions that are too sensitive for you to answer, you do not need to answer them. This study may help to make key recommendations towards the formation of a framework for a revised neuroanatomy module for undergraduate medical students, specific to the South African context.

Note: The implication of completing the questionnaire is that informed consent has been obtained from you. Thus, all information derived from you and all records from this study will be regarded as confidential (which will be depersonalised and anonymous) may be used for e.g. publication, by the researchers. If you have any questions concerning this study, you should contact the primary investigator, Mrs Gerda Venter at (+27)12 319 2536 or gerda.venter@up.ac.za.

If you are lecturing multiple Neuroanatomy modules, in the undergraduate medical curriculum, kindly complete this questionnaire separately for each of your courses.

We sincerely appreciate your help.

Yours truly,

Gerda Venter

Consent to participate in this study:

- I confirm that the person requesting my consent to take part in this study has informed me about the nature and process, any risks or discomforts, and the benefits of the study.
 - I have received, read and understood the attached written information leaflet about the study.
 - I am aware that the information obtained in the study, including personal details, will be anonymously processed and presented in the reporting of results.
 - I am participating willingly.
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- o I agree (1)
 - o I do not agree (2)

Q2 The gender I identify with:

- o Male (1)
- o Female (2)
- o Prefer not to answer (3)
- o Other (4) _____

Q3 My current age in years:

Q4 The institution where I currently teach neuroanatomy:

- Sefako Makgatho Health Sciences University (1)
- University of Cape Town (2)
- University of KwaZulu-Natal (3)
- University of Pretoria (4)
- University of Stellenbosch (5)
- University of the Free State (6)
- University of the Witwatersrand (7)
- Walter Sisulu University (8)
- University of Limpopo (9)

Q5 My highest qualification: (Select from the list provided)

- BSc, B, or MBChB degree (1)
 - Honours degree (2)
 - Master's degree (3)
 - Doctorate degree (4)
 - Other (Please specify below) (5)
-

Q6 I have received / attended formal additional training in a Neuroanatomy course.

- No (1)
 - Yes (Please elaborate) (2)
-

Q7 I have received / attended formal additional training in an Educational course.

- No (1)
 - Yes (Please elaborate) (2)
-

Q8 I classify myself, based on my teaching experience of Neuroanatomy, as a (Select only the appropriate option)

- Beginner / Novice (1)
- Trainee (2)
- Proficient (3)
- Expert (4)

Q9 Give a short description of the Neuroanatomy course and the year-group of students which you teach. (e.g. Neuroanatomy for MBChB II students) PLEASE REMEMBER TO COMPLETE SEPARATE QUESTIONNAIRES FOR EACH YEAR GROUP / MODULE.

Q10 Is this a stand-alone neuroanatomy module?

- Yes (4)
- No (Please indicate the percentage that neuroanatomy contributes to the overall anatomy module) (5) _____

Q11 Regarding clinical relevance of my Neuroanatomy module,

- I teach clinical relevance in almost every session (1)
- I teach clinical relevance in most of the contact sessions (2)
- I teach clinical relevance in only a few of the contact sessions (3)
- I do not teach clinical relevance in my module (4)

Q12 I do provide the students with a study-guide for this Neuroanatomy module.

- Yes (1)
- No (2)

Q13 If yes, please specify the type of study-guide

- Departmental study-guide (1)
- School published study-guide (2)
- Commercially available study-guide (3)
- Open educational resource guide (OER) (4)

Q14 What is the PRESCRIBED literature for your Neuroanatomy module?

Q15 What is the RECOMMENDED literature for your Neuroanatomy module?

Q16 I provide the students with lecture notes in this Neuroanatomy module.

- Yes (1)
- No (2)

Q17 I recommend the use of the following internet-resources in this Neuroanatomy module. (Select only the appropriate options)

- E-books (1)
 - YouTube videos (2)
 - Blog articles (grey literature) (3)
 - Scientific journal articles (4)
 - Applications on electronic devices (5)
 - I do not encourage these resources (6)
 - Anatomy-related websites (7)
 - Other (Please elaborate) (8)
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Q18 How often do you include the use of the following devices, by students, in your facilitation sessions? (Select only the appropriate options)

Smartphone (1)	All contact sessions (1)	Most contact sessions (2)	Few contact sessions (3)	Never (4)
Tablet (2)	All contact sessions (1)	Most contact sessions (2)	Few contact sessions (3)	Never (4)
Laptop (3)	All contact sessions (1)	Most contact sessions (2)	Few contact sessions (3)	Never (4)
Desktop computer (4)	All contact sessions (1)	Most contact sessions (2)	Few contact sessions (3)	Never (4)
Audio response system (clickers) (5)	All contact sessions (1)	Most contact sessions (2)	Few contact sessions (3)	Never (4)

Q19 Which of the following core Neuroanatomy topics (as identified by FIPAE) are included in this Neuroanatomy module? (Select only the appropriate options)

- Development of the nervous system (1)
- Histology of the nervous system (2)
- Spinal cord (3)
- Brainstem (4)
- Cranial nerves (5)
- Diencephalon and the pituitary gland (6)
- Cerebral hemispheres, limbic system and reticular formation (7)
- Autonomic system (8)
- Ventricular system (9)
- Meninges (10)
- Blood vessels (11)

Q20 Does your module have a hybrid or blended approach?

- No (1)
- Yes (Please elaborate) (3)

Q21 The teaching method(s) included in this Neuroanatomy module is (Select all the appropriate options)

Q22 If 'other' is selected, please elaborate.

Q23 The time allocated for the following Neuroanatomy topics is adequate. Also indicate the amount of time spent (in hours) for each topic. (Select only the appropriate options)

	Enough time allocated to topic			Time allocated to topic
	Yes (1)	No (2)	Not applicable (3)	(in hours) (1)
Development of the nervous system (1)				
Histology of the nervous system (2)				
Spinal cord (3)				
Brainstem (4)				
Cranial nerves (5)				
Diencephalon and the pituitary gland (6)				
Cerebral hemispheres, limbic system and reticular formation (7)				
Autonomic system (8)				
Ventricular system (9)				
Meninges (10)				
Blood vessels (11)				

Q24 During assessment, if the Neuroanatomy forms part of a greater anatomy module, which percentage (%) does the Neuroanatomy component contribute to the final mark of this anatomy module?

Q25 I include the following type(s) of assessments in this Neuroanatomy module. (Select all the relevant options)

- Summative assessment(s) (1)
 - Formative assessment (2)
 - Continuous assessment (3)
 - Portfolios (4)
 - Peer-assessment (5)
 - Programmatic assessment (6)
 - Other (Please elaborate)
- (7) _____

Q26 In which format(s) is the Neuroanatomy assessment(s) for this course? (Select all the relevant options)

- Theory MCQ question paper (1)
- Theory short question written paper (2)
- Practical (spot) test (3)
- Computer-based theory test (4)
- Computer-based practical test (5)
- Computer-based test (theory and practical combined) (6)
- Oral assessment (7)
- Peer-assessment (8)
- Other (Please specify below) (9) _____

Q27 Indicate your level of agreement. (Select only the appropriate options)

	Strongly agree (1)	Agree (2)	Disagree (3)	Strongly disagree (4)
Neuroanatomy is an important component in my student's medical training. (1)				
Neuroanatomy is necessary for safe medical practice. (2)				
Neuroanatomy is of some use in the clinical setting, but its importance may be exaggerated. (3)				
Neuroanatomy is only of beneficial in certain medical specialities. (4)				
Neuroanatomy is so old-fashioned that it has no importance in contemporary Medicine. (5)				
Neuroanatomy is time wasted in the medical curriculum. (6)				
Neuroanatomy needs to modernise if it is going to be really useful in Medicine. (7)				
A very good doctor must have a good knowledge of Neuroanatomy. (8)				
It is impossible to conceive a good medical training without a major Neuroanatomy component. (9)				
It is not possible to make a reasonable medical diagnosis without a sound knowledge of Neuroanatomy. (10)				
Medicine could not exist without Neuroanatomy. (11)				
Only a limited neuroanatomical knowledge is required for safe medical practice. (12)				
Rather than studying Neuroanatomy, medical students should concentrate on clinical sciences. (13)				
Without a knowledge of Neuroanatomy, the doctor is of limited effectiveness. (14)				

Q28 Please write any suggestions/comments regarding your experience of this Neuroanatomy module in the box below.
