MD970-20 Research Methods in Clinical Education

26/27

Department
Warwick Medical School
Level
Taught Postgraduate Level
Module leader
Imogen Davies
Credit value
20
Module duration
9 weeks
Assessment
100% coursework
Study location
University of Warwick main campus, Coventry

Description

Introductory description

This module provides students with key skills to enable them to design research projects in clinical education settings. It covers the core practical elements of medical education research, providing students with knowledge of mixed methods study designs and a range of data collection and analysis methods applicable to medical education settings. Students also consider possible risks to a research study, including sampling and recruitment strategies, ethical considerations and personal research perspectives.

The module is delivered as blended learning. There are four face-to-face days on the University campus with additional core asynchronous activities online.

Module web page

Module aims

1. Students will be able to design a focussed research question to answer a practical problem from a clinical education context.
2. Students will be able to design a mixed methods study using at least two different data

collection methods
3. Students will be able to justify their choices, predict risks and suggest mitigating actions in their proposed research study design.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Note: Order of some sessions may change
All elements relate to clinical education.
Introduction and Assessment guidance
Writing Quantitative and Qualitative research questions
Quantitative and Qualitative research methods
Mixed methods research and study designs
Questionnaires
Sampling strategies
Ethical considerations in clinical education contexts
Risks to research integrity
Recruitment techniques and considerations
Personal research philosophy

Learning outcomes

By the end of the module, students should be able to:

- Develop a focused research question for a relevant area of clinical education
- Demonstrate a critical appreciation of qualitative, quantitative and mixed methods research approaches
- Justify choices of methods for data collection and analysis from different research paradigms and how they can be appropriately combined
- Predict, critically evaluate and reflect on issues of quality and rigour associated with methods of enquiry

Indicative reading list

Reading lists can be found in Talis

Specific reading list for the module

Subject specific skills

Ability to write a clinical education research question
Ability to design a mixed methods clinical education research study, including a questionnaire
Ability to predict and justify choices to mitigate against risks to the integrity of the study
Developing understanding of personal research philosophy and position

Transferable skills

Thinking and problem solving
Written communication
Organisation & time management
Independence and initiative
Adaptability/Flexibility

Study

Study time

Type	Required	Optional
Seminars	16 sessions of 1 hour 30 minutes (18%)	
Online learning (independent)	5 sessions of 2 hours (8%)	5 sessions of 1 hour
Private study	96 hours (74%)	
Total	130 hours	

Private study description

Students will organise their time to

- Read around the subject
  -Think about and plan their assignments
- Write their assignments

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

Assessment group A2

	Weighting	Study time	Eligible for self-certification
Assessment component			
Critical reflection on Questionnaire	20%	20 hours	No

Students will develop a clinical education-based research question and design a mixed methods study to answer the question comprising of one qualitative and one quantitative method and must include, for Part A, a questionnaire as one of the methods. Students can choose whether this is a qualitative or quantitative questionnaire, ensuring that the second method they choose for their mixed methods design in Part B is the other option.

Students will write a Critical reflection on their questionnaire design, which can include their experiences of piloting as part of the development process. Students will submit the Questionnaire as an appendix.

This assessment will be marked using the Essay Rubric - moderation.

Reassessment component is the same

Assessment component			
Structured critical analysis of a clinical education research study design	80%	50 hours	No

The second assignment - structured critical analysis of a clinical education research study design - focuses mainly on Part B in which students will select the alternative research paradigm (either qualitative or quantitative) to complete their mixed methods study design.

Students will write a critical analysis in the form of a structured essay of 2500 words with section topics as directed by the module leads, indicative sections being:

- Philosophical position
- Mixed-methods structure and Part B method of enquiry
- Data analysis
- Ethical considerations
- Issues of quality and rigour.

The marking rubric for this assignment is Essay Rubric - moderation.

Reassessment component is the same

Feedback on assessment

There will be opportunities for informal verbal formative feedback throughout the module.
Written feedback will be provided to students within the approved University timeframe via appropriate WMS approved routes.
We judge that it is achievable to provide written feedback on the students' first assignment before they submit their second assignment. This is because the cohort is usually less than 20 students, so 20 x 500 words = 10,000 words divided between two markers who will plan for a fast turnaround for this assignment.

The Senior Tutor is able to provide assistance in writing for students whose first language is not English or who have been out of academia for a significant time.

Availability

Courses

This module is Core for:

- Year 1 of TPCS-B9XD Masters in Medical Education