



MODULE SPECIFICATION

KEY FACTS

Module name	Foundations in Research Methods and Data Analysis
Module code	HRM020
School	School of Health sciences
Department or equivalent	Health Services Research and Management
UK credits	15
ECTS	7.5
Level	7

MODULE SUMMARY

Module outline and aims

The aim of this module is to provide you with understanding and skills in research to enable you to access and critically appraise evidence relevant to your particular field, as well as to plan a research study or service evaluation.

This course has been designed to meet the needs of clinical practitioners across the non-medical workforce and students pursuing qualifications in public health, health policy and health management. The course design and structure ensures there is a focus throughout on the applicability of the course content and materials to the varied clinical practice of the health professional workforce.

We aim to support you to achieve sufficient proficiency to:

- conduct a systematic literature search,
- to clarify and quantify the pertinent aspects of a health condition or service requirement and relate this to a feasible research question,
- to understand the main research designs and methods used in health services research and their differing purposes, strengths and weaknesses,
- to be able access and apply suitable criteria and frameworks to appraise the quality of different research designs and methods,
- to understand and apply appropriate methods to develop data collection instruments such as questionnaires, and interview and focus group topic guides
- to understand and apply basic approaches to the analysis of quantitative and qualitative research findings, including introductory knowledge of a commonly used statistical software package (SPSS)

Equal emphasis is given to the teaching of qualitative and quantitative research methods and study designs. Importantly, you will be guided and supported to conduct research in practice by producing a research proposal and an analysis-based report which will form the basis of the module mark

Content outline

The module covers the following:

- An introduction to research (problem statements, study designs)
- The research process (developing research questions, funding, how to plan and carry out a research project, getting research into practice)
- Searching for evidence (electronic databases, key words, inclusion and exclusion criteria)
- Critical appraisal skills (how to assess the quality of research)
- Conducting and presenting a literature review
- Ethics of research/research governance (ethical issues, research ethics approvals)
- Recognising and evaluating different study designs
- Choosing, interpreting and reporting analyses
- Basic quantitative statistics (probability, significance and confidence intervals, descriptive statistics, basic comparative parametric & non-parametric statistics)
- Qualitative methods (interviews and focus groups, developing and using a topic guide, interview techniques, conducting an interview)

WHAT WILL I BE EXPECTED TO ACHIEVE?

On successful completion of this module, you will be expected to be able to:

Knowledge and understanding:

- Demonstrate critical awareness of research methods and study designs
- Demonstrate confidence in formulating feasible and appropriate research questions
- Provide justification for whether qualitative, quantitative, mixed methods approaches are best suited to a particular research enquiry
- Understand the principles of quantifying health findings such as prevalence, proportional distribution, measures of central tendency, confidence intervals and statistical significance

Skills:

- Critically appraise research literature
- Design and use search strategies to conduct a systematic review

- Plan a research project or service evaluation, drawing on the available literature and expert guidance to determine design, methods and analysis approaches
- Have an understanding and basic working knowledge of analysing quantitative and qualitative data
- Use specialist software (SPSS) to enter research findings and conduct key analyses
- Be able to determine the appropriate approaches to analyse different types of research data

Values and attitudes:

- Consider the requirements for conducting rigorous research
- Understand the importance of health care delivery and health care resource distributions being based on robust high quality evidence
- Have regard for ethical issues relating to research in health and social care settings

HOW WILL I LEARN?

Overview of learning and teaching methods used, including proportion of contact/self-directed/placement hours.

Teaching pattern:

Teaching component	Teaching type	Contact hours (scheduled)	Self-directed study hours (independent)	Placement hours	Total student learning hours
Introduction to Research Methods and Applied Data Analysis	Lecture	15	60	0	75
Introduction to Research Methods and Applied Data Analysis	Workshop / Tutorial	15	60	0	75
Totals:		30	120	0	150

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessments

The assessments for this module are as follows:

1. A brief in-class assessment comprising multiple choice questions which cover basic knowledge across the range of topics taught. This will constitute 50% of your module mark.
2. An analytic report using methods of systematic enquiry to develop a proposal for literature review, service improvement or research project, incorporating some elements of data analysis. This will constitute 50% of your module mark.

In order to pass the module you must achieve a mark of at least 50%.

Assessment pattern:

Assessment component	Assessment type	Weighting	Minimum qualifying mark	Pass/Fail?
Analytic Report	Written Assessment	50%	50%	N/A
In-Class Test	Written Assessment	50%	50%	N/A

Assessment criteria

Assessment Criteria and Grade-Related Criteria for module assessments will be made available prior to the assessment taking place. More information will be available from the module leader.

Feedback on assessment

Following your assessment, marks and feedback will be provided in line with the Assessment Regulations and Policy. You will receive your mark and a summary of the group's performance (e.g. mean score and range) followed by your coursework with feedback sheet. Markers will be available to answer queries about the marks and feedback if these are not clear. A selection of all assessments will be internally moderated and sent to the external examiner. All initial marks will be therefore be provisional pending external examiner approval and assessment board.

More information on the timing and type of feedback that will be provided will be available from the module leader at the start of the module. Marks will normally be available within 4 weeks of hand in.

Assessment Regulations

The Pass mark for the module is 50%. The Programme Specification contains information on what happens if you fail the assessment, but in the first instance you should contact the module leader.

INDICATIVE READING LIST

Priority Reading

Aveyard, H., (2014) *Doing a literature review in health and social care: a practical guide*, 3rd Edition, Oxford University Press, Oxford

Bowling A. (2009) *Research Methods in Health: Investigating Health and Health Services*. Third edition. Buckingham, Open University Press.

Field, A. (2018) *Discovering Statistics using SPSS* (5th ed.). London: SAGE Publications

Pallant, J. (2010) *SPSS Survival Manual: A step by step guide to data analysis using SPSS*. (4th ed.). Buckingham: Open University Press.

Centre for Reviews and Dissemination, University of York (2008) [Systematic reviews: CRD's guidance for undertaking reviews in health care](https://www.york.ac.uk/media/crd/Systematic_Reviews.pdf)
https://www.york.ac.uk/media/crd/Systematic_Reviews.pdf

RECOMMENDED READING

Bland, M. (2000) *An Introduction to Medical Statistics*. Oxford, Oxford University Press.

Bryman A (2012) *Social research methods*, 4th Edition Oxford University Press, Oxford

Burns, N and Grove, S. (2007). *The Practice of Nursing Research*. Fifth edition. Philadelphia: W.B. Saunders.

Cresswell, J.W. (2007) *Qualitative Inquiry and Research Design. Choosing Among Five Approaches*. Second edition. Thousand Oaks, California, Sage

Cresswell, J. (2008) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Third edition. Thousand Oak, California, Sage.

Cresswell, J.W. and Plano Clark, V.L. (2011) *Designing and Conducting Mixed Methods Research*. Second edition. Thousand Oak, California, Sage.

Dawes, M. et al (2004) *Evidence-based Practice: A Primer for Health Professionals*. Oxford, Elsevier.

Denzin, N., Lincoln, Y. (eds.) (2018) *The Sage handbook of qualitative research*, 5th Edition, Sage, London

De Vaus, D.A. (2002) *Surveys in Social Research*. London, Routledge.

LoBiondo-Wood, G., Haber, J. (2009) Nursing Research Methods, Critical Appraisal and Utilisation. Seventh edition. London, Mosby

Melnyk BM and Fineout-Overholt E (2010) Evidence-based Practice in Nursing and Healthcare. A Guide to Best Practice. Second edition. Lippincott Williams and Wilkins, Philadelphia

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For use from: 2019-20

Appendix: see

CODES		
HESA Cost Centre	Description	Price Group
103	Nursing and allied health professions	C2
JACS Code	Description	Percentage (%)
X210	Research Skills	100%