

Branch Name:	Management
Program Code:	MS203
Course Title:	Research Methodology For Healthcare Professionals
Course Code:	1MS2030105
Pre-requisite Course:	Management Principles

Course Objective

1. To understand the fundamentals of research and scientific inquiry in healthcare
2. To develop the ability to formulate research problems, objectives, and hypotheses
3. To apply qualitative and quantitative research techniques
4. To use statistical tools for data analysis in healthcare research
5. To prepare and present research reports for academic and professional purposes

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
3	1	-	4	50	50	-	-	100

Course Contents:

Unit No	Topic	Total Hours	Weightage (%)
1	Introduction to Healthcare Research Meaning, objectives, and significance of research in healthcare, Types of research: basic, applied, clinical, operational, Research process and steps, Characteristics of good research, Literature review: sources (offline & online), use of databases and AI tools, Identification of research problem and gap	10	25%
2	Research Design and Measurement Research design: descriptive, analytical, experimental, Study designs in healthcare: cross-sectional, cohort, case-control, Variables and measurement scales (nominal, ordinal, interval, ratio), Reliability and validity, Hypothesis: formulation, types (null, alternative), testing basics	15	25%
3	Qualitative and Quantitative Research Methods Qualitative research: meaning, techniques (interviews, focus groups, observation), Quantitative research: descriptive and inferential statistics, Sampling concepts and methods (probability & non-probability), Sample size determination, Data collection tools: questionnaire design, scaling techniques (Likert scale), Ethical considerations in healthcare research	15	25%
4	Data Analysis and Research Reporting Data analysis using Excel/SPSS basics, Interpretation of statistical results, Structure of research report, Writing research proposals and reports, Referencing styles and plagiarism, Presentation of research findings	15	25%
	Total Hours	60	100%

Text Books

- R.C. Goyal – Research Methodology for Health Professionals
- Kothari C.R. – Research Methodology: Methods and Techniques

Reference Books

- Cooper & Schindler – Business Research Methods
- Panneerselvam R. – Research Methodology
- Arunangshu Giri & Debasish Biswas – Research Methods: Text & Cases

List of Open-Source Software/learning website:

- SPSS / Excel for data analysis
- Google Forms (data collection)
- PubMed / Google Scholar (literature review)
- WHO & NABH databases

Course Learning Outcomes (CLOs)

1. Identify and formulate research problems in healthcare settings by conducting systematic literature reviews and defining clear research objectives and hypotheses.
2. Apply appropriate qualitative and quantitative research designs to investigate healthcare-related issues and support evidence-based decision-making.
3. Analyze healthcare data using statistical tools and techniques to derive meaningful insights for managerial and clinical decision-making.
4. Design effective sampling strategies and develop reliable data collection instruments such as questionnaires and interview schedules.
5. Prepare structured research reports and communicate findings effectively using appropriate academic writing standards and presentation techniques.

Mapping of CLO with PO and PSO

Course Learning Outcomes	Program Outcomes (POs)							Program Specific Outcomes (PSOs)	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
CLO1		H		M		M		L	H
CLO2	H		L				L	M	
CLO3			M	L		M			M
CLO4	H	L			H		H	H	H

H: High, M: Medium, L: Low