



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2020/2021 ACADEMIC YEAR

FIRST TRIMESTER EXAMINATIONS

(DIRECT & UPGRADING)

FOR THE DEGREE

OF

BACHELOR OF SCIENCE IN PHYSIOTHERAPY

COURSE CODE: BSP 416

**COURSE TITLE: EVIDENCE BASED PRACTICE IN
PHYSIOTHERAPY**

DATE: -----

TIME: -----

INSTRUCTIONS TO CANDIDATES

Answer all Sections

Sec A: Multiple Choice Questions (MCQ) (20 Marks)

Sec B: Short Answer Questions (SAQ) (40 Marks)

Sec C: Long Answer Questions (LAQ) (40 Marks)

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

**SECTION A: MULTIPLE CHOICE QUESTIONS****(20 marks)**

- 1) In caring for patients, it is important for the physiotherapist to realise that evidence based practice is?
 - a. The only valid source of knowledge that should be used
 - b. Secondary to traditional or standard care knowledge
 - c. Dependent on patients values and expectations
 - d. Not shown to provide better patient outcomes
- 2) The physiotherapist is trying to identify common general themes relative to the effectiveness of cardiac rehabilitation for patients who have had heart attacks and have gone through cardiac rehabilitation programs. The physiotherapist conducts interviews with focus groups. What type of research is the physiotherapist conducting?
 - a. Evaluation research
 - b. Experimental research
 - c. Qualitative research
 - d. Quantitative research
- 3) The physiotherapist has used her PICO question to develop an evidence-based change in protocol for a certain physiotherapy procedure. However, to make these changes throughout the entire institution would require more support than is available at this time. What is the physiotherapist's best option?
 - a. Drop the idea of making the change at this time
 - b. Insist the management hire the needed staff to facilitate the change
 - c. Seek employment in another institution that may have the staff needed
 - d. Conduct a pilot study to develop evidence to support the change
- 4) In collecting the best evidence, the gold standard for research is?
 - a. The randomized controlled trial
 - b. The peer reviewed article
 - c. Qualitative research
 - d. The opinion of expert committees
- 5) Clinical effectiveness is about which of the following?
 - a. Undertaking research in order to determine effective outcomes.
 - b. Introducing new clinical procedures into practice.
 - c. Getting evidence of what works into everyday clinical practice and evaluating its effect on patient care.
 - d. Evaluating the best evidence.
- 6) Which of the following statements is not applicable to using an evidence-base in physiotherapy practice?
 - a. To ensure the best quality of care given is to patients.
 - b. To ensure that physiotherapy decisions are based on the best quality of evidence.
 - c. Evidence used in physiotherapy practice must be appraised for its validity and applicability.
 - d. The use of research evidence in physiotherapy practice does not need to be evaluated after it is used or implemented.
- 7) Which of the following methodologies explores a culture or aspects of a culture?
 - a. Grounded theory
 - b. Case study.
 - c. Ethnography
 - d. Randomized control trial

- 8) A public health physiotherapist is interested in determining which educational programs are needed in the aggregates served. The researcher personally interviews individuals who are walking on the streets in the community. This type of research design is:
- quasi-experimental.
 - survey.
 - case study.
 - ethnography.
- 9) Which of the following study titles reflects the use of a phenomenological methodology?
- Determining the role of the mentor as assessor in clinical practice.
 - The experience of being a student physiotherapist.
 - Evaluating the introduction of clinical supervision into a care home.
 - A systematic review of the evidence base for caring for older people with dementia.
- 10) One area not seen in the characteristics of EBP is:
- Provider expertise.
 - Client contribution.
 - Cost.
 - Decision-making scheme.
- 11) Critical thinking in physiotherapy can be defined as:
- The science of teaching ways of thinking about physiotherapy care.
 - The art of analyzing and applying information gathered to make decisions regarding physiotherapy care.
 - A method of making decisions about physiotherapy care.
 - The systematic process of thinking that results in optimal patient outcomes.
- 12) A physiotherapist is interested in understanding the meaning of the human experience of surviving polio. Subject recruitment targets persons who have been diagnosed with the disease. The researcher reflects on the data and identifies common themes in order to understand the "lived experience." These characteristics are consistent with the qualitative research method known as:
- Grounded theory.
 - Ethnography.
 - Phenomenology.
 - Case study
- 13) A physiotherapist studied a community to determine if there were clients who would benefit from a hospice program if one were developed. This type of research is:
- Survey
 - Quasi-experimental.
 - A needs assessment method.
 - A pilot study.
- 14) A physiotherapist interested in life satisfaction among patients receiving hemodialysis reviews databases and identifies relevant studies which are then statistically analyzed providing generalization through multiple studies. The physiotherapist researcher is using which type of research?
- Quasi-experimental
 - Secondary analysis
 - Meta-analysis
 - Survey
- 15) A researcher conducts a survey to determine the perceived health status of elderly persons living independently at home. The same subjects participate in a phone call in which they describe the lived experience of living with chronic illness. When writing up the research study, the physiotherapist would describe using:
- A control group.
 - Triangulation.
 - A pilot study.

- d. Secondary data analysis.
- 16) A physiotherapist is interested in learning how reminiscence therapy can improve memory in cognitively intact persons over the age of 65 years. Findings from three groups are compared. Group 1 receives music therapy, Group 2 receives life review therapy, and Group 3 does not receive therapy, but data are collected from all three groups and compared. Group 3 is known as the:
- Pilot study.
 - Survey.
 - Needs assessment.
 - Control group.
- 17) The process of systematically finding, appraising, and using research findings as the basis for clinical practice is
- Evidence-based practice
 - Research
 - Meta-analysis
 - Control group
- 18) Which of the following best describes the difference between research utilization and EBP?
- Research utilization is a process of evaluating multiple studies for the most generalizable findings; EBP is use of the most recent study on a topic.
 - Research utilization involves changing practice based on findings of a single research study; EBP is the syntheses of findings from multiple studies to incorporate with practitioner skills and client preference to determine best care.
 - Research utilization is the application of research findings to health care practice; EBP is considered in selecting medication options.
 - Research utilization is review of research publications; EBP is using the healthcare provider's perception of what care would be best in individual situations.
- 19) You are a new physiotherapist working at XYZ hospital. Your preceptor tells you to dangle Ms. Musyoka' legs on the side of the bed before you attempt to assist her to a chair. You ask your preceptor why this is done and she answers, "This is what we have always done, so go do it." This is an example of which type of evidence?
- Trial and error
 - Intuition
 - Borrowed evidence
 - Tradition
- 20) Which of the following promotes consistent EBP practice changes in an institution?
- Physiotherapy clinical experts should be the authority for any change in practices.
 - Change champions are needed on each work shift to facilitate practice changes.
 - Physiotherapist managers must mandate research within healthcare institutions.
 - Opinion leaders should enforce adherence to their opinions.

SECTION B: SHORT ANSWER QUESTIONS

(40 MARKS)

- Describe*
- Give examples of where you can find evidence for an evidence based practice question. Among the list highlight which is the best option when doing research?
 - Summaries the steps taken for the implementation of evidence-based practice
 - Explain the barriers to implementing EBP
 - Discuss types of quantitative studies
 - Outline the types of case studies

SECTION C: LONG ANSWER QUESTIONS

(40 Marks)

Answer any 2 questions:

- 1) You are part of the quality team and you have identified the use of the IOWA model as the best model for EBP in your institution. Defend your decision highlighting clear the aspects of the model
- 2) Ethical guidelines in qualitative research
 - a. Discuss the fundamental ethical principles in qualitative research
 - b. How would you ensure informed consent for qualitative research
- 3) Examine the key areas to explore when critiquing a research study article
- 4) Describe the differences between a systematic review and a narrative review.

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BSP 421: EVIDENCE BASED PHYSIOTHERAPY (EBP) (3 Units)

Purpose of the Course

In situations of resource constraints and given scientific, legal and ethical requirements, it is important that health practitioners account for their practices. This course will teach the students how to apply evidence for decision based on the best available evidence.

Expected Learning Outcomes

By the end of the module the student should be able to understand and appreciate EBP and its applications, including applications of important EBP tools.

Course Content:

Introduction to evidence Based Practice: Definition, Evidence Based Practice, Evidence Based Physiotherapy;

Concepts of Evidence Based Physiotherapy: Awareness, Consultation, judgement, Creativity. Development of Evidence Based knowledge, The individual Professional, Professionals within a discipline, Professionals across disciplines.

Evidence Based Practitioner: The Reflective Practitioner, the E Model. Finding the evidence: Measuring outcomes in Evidenced Based Practice, Measuring Health Outcomes, Measuring Clinical Outcomes, Inferential statistics and Causation. Searching for the Evidence:

Asking questions, identifying different sources of evidence, Electronic, Bibliographic databases and World Wide Web, Conducting a literature search, Step-by-Step search for evidence. Assessing the Evidence:

Evaluating the Evidence; Levels of evidence in research using quantitative methods, Levels of Evidence classification system, Outcome Measurements, Biostatistics, The critical review of research using qualitative methods. Systematically reviewing the evidence:

Stages of systematic reviews, Meta analysis, The Cochrane collaboration. Economic evaluation of the evidence: Types of Economic evaluation, Conducting economic evaluation, Critically reviewing economic evaluation, Locating economic evaluation in the literature .

Using the evidence: Building evidence in practice, Critically Appraised Topics (CATs), CAT format, Using CATs, Drawbacks of CATs. Practice guidelines, algorithms and clinical pathways:

Recent trends in health care, Clinical Practice Guidelines (CPG), Algorithms, Clinical pathways, Legal implications in Clinical Pathways and CPG, Comparison of CPGs, Algorithms and Clinical Pathways. Communicating evidence to clients, managers and funders:

Effectively communicating evidence, Evidence based communication in the face of uncertainty, Evidence based communication opportunities in everyday practice. Research dissemination and transfer of knowledge:

Models of research transfer, Concrete research transfer strategies, Evidence Based Policy.

Mode of Delivery

Lectures

Tutorial

Group discussions

Instructional Material

Anatomical models

Audiovisuals Aids

Wall charts

Medical journals

Course Assessment

Written Examination 70%

Continuous Assessment 30%

Core Reading Materials

Evidence-Based Practice in Nursing and Health Care: A Guide to Best Practice by Bernadette Melynyk.

Evidence Based Rehabilitation: A guide to Practice by Mary Law

The Evidence Based Practice by Snout, Randy A Hayes.