Subject: Evidenced Based Practice

Mid Term Assignment.

Semester: DPT 8th .

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Section A.

Note: Highlight the correct option of the given MCQs from section A. attempt all 3 questions from section B.

1. **A research study to answer specific questions about new therapies or vaccines or new ways of using known treatment is known as**
2. A clinical trial
3. Non clinical trial
4. Case study
5. All of above
6. **You are teaching your juniors the fundamentals of the research one of your student who is 50 years of age asks you evidence based practice is challenge for physical therapist in Pakistan, your suitable answer is**
7. Yes it’s a challenge
8. We cannot research
9. We are undergoing a change
10. No matter if it is a challenge we can overcome it through little effort of researching.
11. **What barriers are there to evidence based medicine?**
12. Conflicting evidence
13. Resistance to change
14. Communication
15. All of the above
16. **The study drug or treatment is given to large groups of people (1,000 – 3,000) to confirm its effectiveness, monitor side effects, compare it to commonly used treatments, and collect information that will allow the drug or treatment to be used safely is an example of\_\_\_\_\_\_\_\_\_\_**
17. Phase-1trial
18. Phase-4 trial
19. Phase-3 trial
20. None of above
21. **Which of the following is correct?**
22. Levels of evidence represents research designs
23. Levels of evidence represents search system
24. Levels of evidence represents quantitative research and represents qualitative research
25. Levels of evidence represents qualitative research
26. **Evidence-based practice describes best when\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
27. Best available evidence is considered with patient values and professional expertise
28. Health professionals no longer make decisions based on what they were taught at university
29. Health professionals make decisions using critical thinking skills to appraise best available evidence
30. Health professionals make decisions based on opinions of those who influenced them early in their career
31. **A study of diagnostic effectiveness aims to**
    1. Determine if an intervention is effective
    2. Determine if a test is effective
    3. Determine the cause of a condition
    4. Determine the experiences of a condition
32. **A control group is important when determining if an intervention works because\_\_\_\_\_\_\_\_\_\_**
33. It controls for threats to internal validity
34. It increases the sample size
35. It improves the quality
36. It can be classified as an observational study
37. **Prognostic research investigates which of the following?**
38. Does a treatment work?
39. What is the likely outcome of the condition?
40. What causes the condition?
41. Does a test detect the condition?
42. **A specialist in diabetes writes a commentary in a peer-reviewed journal outlining how to best treat diabetes. With regard to the evidence hierarchy, this commentary is\_\_\_\_\_\_\_\_**
43. A higher level than case studies
44. A lower level than case studies
45. A higher level than systematic reviews
46. Equal to a systematic review
47. **Which is the highest level of evidence suitable for an intervention that causes harm?**
48. Cohort study
49. Case-control study
50. Randomized controlled trial
51. Case study
52. **Studies are done after the drug or treatment has been marketed. These studies continue testing the study drug or treatment to collect information about their effect in various populations and any side effects associated with long – term use is an example of**
53. Phase-1trial
54. Phase-4 trial
55. Phase-2 trial
56. None of above
57. **Scenario: Your client is a football player who wants to know if stretching just before his football game will reduce the risk of injury. Which PICO search terms are most appropriate for this question?**
58. P: Football players, I: Stretching, C: No stretching, O: Reduce injury
59. P: Football Payers, I: No stretching, C: No Stretching, O: Reduce injury
60. P: Football players, I: Stretching, C: Not football players O: reduce re injury
61. P: Football players I: Stretching, C: reduce injury, O: no stretching
62. **Research on patients, conducted in clinical settings that generates knowledge with experiment or observation rather than theory.**
63. Ecological research
64. Astronomy
65. Research methodology
66. Clinical research
67. **Distillation of clinical observations generates ‘practice knowledge’ or \_\_\_\_\_\_\_\_\_**
68. Cross sectional study
69. Knowledge or power
70. Professional craft knowledge
71. None of the above

Section B

Q1: What is meant by evidenced based practice, why is evidence-based physiotherapy important. Explain with examples.

Q:2 What do we mean by ‘high quality clinical research, patient preferences and practice knowledge’?

Q 3: Develop a clinical research question using **P I C O** for the following Scenarios.

1. Mabel is a 6-week-old baby at her routine follow-up. She was born prematurely at 35 weeks. You want to tell the parents about her chances of developing hearing problems…
2. At a routine immunisation visit, Lisa, the mother of a 8-month-old, tells you that her baby suffered a nasty local reaction after her previous immunisation. Lisa is very concerned that the same thing may happen again this time. Recently, a colleague told you that needle length can affect local reactions to immunisation in young children but can’t remember the precise details.

Q1: What is meant evidence based practice:

* Evidence based practice (EBP) is the conscientious use of current best evidence in making decisions about patient care. A systematic search for and critical appraisal of the most relevant evidence to answer a burning clinical question.
* Evidence based physiotherapy is physiotherapy inform by relevant high quality research.
* High quality research refer to evidence based physiotherapy
* EBP is the integration of the best research evidence, clinical expertise, and patients value and circumstances

COMPONENTS OF EVIDENCE BASED PRACTICE:

Evidence-based practice involves three components to improve outcomes and quality of life.

* External evidence includes systematic reviews
* Randomized control trials, best practice
* Clinical practice guidelines that support a change in clinical practice

ANOTHER 3 COMPONENTS:

* Best research evidence:

Valid and clinically relevant research with a focus on patient-centered clinical research

* Clinical expertise:

Use of clinical skill and experiences.

Our clinical expertise, combined with the best available scientific evidence, allows us to provide patients with the options they need. Patients can't have a preference if they aren't given a choice, and they can't make that choice if they aren't presented with all options

Clinical expertise includes the general basic skills of clinical practice as well as the experience of the individual practitioner.

* Patient value and preferences:

The patient’s unique preference , concerns, and expectation in his or her setting.

Understanding preferences strengthens our ability to tailor evidence-based interventions for the individual patient. Helping patient's acknowledge and share their unique preferences is essential for patient-centered care.

WHY EVIDENCE BASED PHYSIOTHERAPY IS IMPORTANT:

* Patients may be offered the safest and most effective interventions
* The expectation is that this will produce the best possible clinical outcomes
* Practice knowledge might suggest alternative interventions even if the evidence indicates a particular intervention is effective

There is some evidence that upper extremity casting for children with cerebral palsy may increase the quality and range of upper extremity movement.

However, an experienced physiotherapist might suggest alternative interventions if his or her practice knowledge indicates that casting will cause the child distress, or if the child or the child’s parents are unlikely to tolerate the intervention well.

* One of the most important aspects of Evidence Based Practice in Physiotherapy is the fact that is it keeps physios accountable for what they are doing with each and every patient. By adhering to recommendations, or guidelines as directed by research, patients can know that they are getting the most up to date and highly recommended treatments.

Q2: What do we mean by ‘high quality clinical research, patient preferences and practice knowledge’?

High quality Clinical research:

Research on patients, conducted in clinical settings that generates knowledge with experiment or observation rather than theory.

There is an enormous volume of clinical research, but not all of it is of high quality.

High quality clinical research is that which is carried out in a way that allows us to trust the results- valid (it has a low risk of bias) and is relevant to our questions

Good quality research provides evidence that is robust, ethical, stands up to scrutiny and can be used to inform policy making. It should adhere to principles of professionalism, transparency, accountability and auditability.

PATIENT’S PREFERENCE:

Traditional clinical model:

Decisions about therapy for the patients is made by the physiotherapists.

Contemporary Patient model

Patients have developed expectations that they will be given an opportunity to contribute to, and share, decisions involving their health

In contemporary models of clinical decision making, patients are encouraged to contribute information

* It requires

That physiotherapists are able to communicate to patients the risks and benefits of alternative actions. Communication skills, empathy and flexibility from physiotherapists.

Patient preferences result from deliberation about specific elements, such as anticipated treatments or health outcomes. Patient preferences refer to the individual's evaluation of dimensions of health outcomes and are but one of a large number of preferences that may influence health care choices.

Practice knowledge:

Practice knowledge is knowledge arising from professional practice and experience.

Consciously or subconsciously, physiotherapists add to their personal knowledge base during each patient encounter.

Practice knowledge is created through reflective processes that enable practitioners to evaluate their practice and learn from their experience.

Practice-Based Knowledge is the cumulative knowledge and learning acquired by practitioners from designing and implementing diverse programmes in different contexts, including insights gained from observations, conversations, direct experiences, and programme monitoring .

Q3 a: Manahil is a 6 - week old baby at her routine follow-up.

She was born permanently at 35 week. You want to tell the parent about her chances of developing hearing problems.

P: Population/patient= infants

I: intervention/indicator= premature

C: comparator/control

O: outcome= sensory deafness

QUESTION:

In infants born permanently , compare to those born at full term, what is the subsequent lifetime prevalence of sensory deafness?

Q3 b:

P: 8 month old baby may reaction to vaccine

I: local reaction of immunization

C: no local reaction of immunization(fever, temperature, chills)

O: the same condition may not repeated again

QUESTION:

In young children , does local reactions of immunization can be reduced with needle length?