

STATE OF THE ART RESEARCH TO STATE OF THE ART MANUAL THERAPY

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INTRODUCTION

- Physiotherapy: a science firmly rooted in the evidence.
- First line practitioner status = responsibility of being evidence based
- Production of new research as well as consumption of current research is daunting
- The OMPTG South Africa embarked on a drive to strengthen evidence-based medicine amongst clinicians



EVIDENCE-BASED MEDICINE DRIVE

- Lecture series as part of the OMT course
- Section in the Physio-Pedia newsletter



LECTURE SERIES IN OMT COURSE: “APPLIED RESEARCH”

- Case study done previously
- A lecture series consisting of five x1 hour lectures were developed (modules 1-5)
- Two assignments to be completed by students (hand in on module 6 and 7)
- All information are presented through theory as well as practical workshops



AIM

To introduce the principles of evidence-based medicine in order to ensure the application of the literature to everyday clinical practice, including in the choice of assessment techniques, treatment techniques and clinical reasoning strategies



APPLIED RESEARCH LECTURE 1

- Definition of evidence-based medicine
- Research assignments overview, format, assessment and support
- Skills needed to “survive”
- Levels of evidence
- Practical: rate four abstracts



APPLIED RESEARCH LECTURE 2

- Assignments format and opportunity for questions
- Where to find literature
- How to search for literature
- How to read an article
- How to critique the literature
- How to reference an article
- Practical: critical appraisal and referencing



APPLIED RESEARCH LECTURE 3

- The value of engaging with the literature: real-life feedback from real-life past MSc Students
- Rating a randomised controlled trial (Pedro Scale)
- Basic principles of scientific writing
- Practical: rate an RCT & develop a plan of action for assignment 1



APPLIED RESEARCH LECTURE 4

- Scientific writing continued
- Creating an argument
- Practical: construct an argument & develop a plan of action for assignment 2



APPLIED RESEARCH LECTURE 5

- Psychometric properties of tests and tools
- Define the terms validity, reliability, sensitivity, specificity
- Recognise the opportunities for potential studies in your own practice
- Use the Dynamed App in everyday clinical practice



ASSIGNMENT 1 - FORMAT

Student submits one properly completed PA&CR form, with a written justification of about 2-5 pages [Times New Roman, 12 Font, 1.5 spaced] - of one (1) chosen treatment technique/exercise/piece of advice, supported by 3-5 articles on current higher level evidence

Systematic literature review, RCT or other experimental study



ASSIGNMENT 1 – FORMAT CONTINUED

- A report [one page maximum] to the referring doctor or a colleague, providing evidence for the selected management / outcome measure / proposed continuation of treatment plan [related to the above patient]



ASSIGNMENT 1 - SUPPORT

- Students submit other PA&CR forms at modules 2, 3 and 4, to be screened by assistants/lecturers to facilitate students in clinical reasoning and the correct completion of the form
- Lectures and practicals on clinical reasoning
- Applied research lectures
- Available OMTC articles in pre-course reading pack



ASSIGNMENT 2 - FORMAT

- Format: 3,000 – 5,000 words [Between 6 and 10 pages typed in 12 font Times New Roman, 1.5 line spacing – excluding reference list]
- Minimum 8, maximum 15 current references
- Systematic reviews on the topic > RCTs on the topic > Uncontrolled studies on the topic > Case series on the topic; No case reports or clinical expert opinion



ASSIGNMENT 2 – FORMAT CONTINUED

Best-practice management of conditions assignment

Introduction to the condition: Pathophysiology, biomechanics, etc

- Review & Discussion of the current best-evidence literature on the physiotherapy management of this condition
- Conclusion & Recommendation on best-practice for clinicians in South Africa



ASSIGNMENT 2 - FORMAT

Physical tests and outcome measures

- Introduction to the measure/test: Conditions to use, aim, etc
- Review & Discussion of the current best-evidence literature on the test/measure
- Conclusion & Recommendation on best-practice for clinicians in South Africa



ASSIGNMENT 2 - SUPPORT

- Applied research lectures
- Available OMTc articles in pre-course reading pack
- Students read up and complete specific Portfolio tasks on syndromes



ASSIGNMENTS 1 & 2 - ASSESSMENT

- Assignments are independently marked by two examiners according to a specific mark sheet, and the average mark is taken.
- If the candidate fails with a mark above 44%, a supplementary is granted on the same PA&CRF. If a candidate fails with a mark lower than 44%, a new PA&CR form and justification must be completed and submitted within 6 months after the end of the last module. A maximum mark of 50% will be allocated.



PHYSIO-PEDIA NEWS LETTER

- Where to find free peer-reviewed papers
- How to use the “clinical queries” function in PubMed
- How do define your keywords
- Deciding which papers to read
- How to read a paper
- Levels of evidence
- Critical appraisal
- And others...



CONCLUSION

It is important to make evidence-based medicine user-friendly

Less daunting = higher usage (consumption and creation) = more effective patient/client management and greater public health impact

