Erasmus+ VR-PAIN

NEWSLETTER No 4

01. 12. 2024

The VR-PAIN project is now completed. The team have developed three clinical VR cases to support clinical reasoning in pain science education.

Acute low back pain: A 45-year-old patient with a 5 week history of acute low back pain (LBP) attending for his first appointment. The student and tutor discuss the referral letter and plan for the subjective assessment. The tutor and student then go into the treatment room to meet the patient. The student questions the patient about their pain (severity, irritability, 24-hour pain presentation, presence of red flags symptoms). They then discuss scores from the Startback tool and Obero questionnaire. The student and tutor then clinically reason the presentation**.**

Chronic low back pain: A 43-year-old man with a 10-year history of chronic low back pain. He used to own his own building company but sold it and now works for someone else due to his LBP. This is his second physiotherapy appointment. The student and tutor review his chart summarising his subjective and objective assessment and clinically reason his case. They discuss the score of the Fear Avoidance beliefs questionnaire, the Roland Morris disability Scale, the Hospital Anxiety and Depression Scale. They discuss the patient's illness perception and the treatment approach to take. The tutor and student then go in to meet the patient. During the appointment the student educates the patient about pain neuroscience, they discuss pain management strategies (goal setting, over-under activity, exercise and pain management strategies). There is also discussion around managing the patients' expectations. A wrap up conversation brings the appointment to an end.

Acute post-operative case: A 30-year-old female Day 1 post-surgery for an hiatus hernia. Six months ago it was repaired laparoscopically, but that failed so open surgical repair was planned. The student and tutor discuss the patient case, discussing the patients past medical history and post-operative pain management. The student then assesses the patient's pain, encourages her to use the patient-controlled analgesia, and auscultates the patient's chest. The case finishes with the patient sitting out of bed. A wrap up conversation between the student and tutor brings the case to an end.

WP4: VR Tool Intervention and Evaluation

Adaptable Training Resources
- Two manuals have been developed to integrate VR clinical cases seamlessly into teaching modules, promoting engaging and practical learning environments. (i) The user manual included information relating to VR, orientating the users to the VR headset and how to fit and adjust it. A summary of each case is included (patients charts) and key questions the users should consider ahead of the practical session. (ii) A et-up Manual summarise technical requirements for downloading the VR-PAIN cases .apks onto VR headsets.

WP4: VR tool intervention & evaluation

- University College Dublin, University College Cork and University f Applied Science Utrecht have now evaluated the VR-PAIN acute and chronic pain VR cases. In total over all students and academics participated in the workshops. The evaluation process and results will be published later this year.
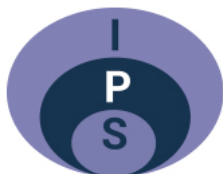
Realistic scenario, Good learning activity

Increase font size of text, Have tutor give more feedback

DISSEMINATION

Irish Pain Society Annual Scientific Meeting, Dublin 2024 (poster presentation)

European Pain Federation EFIC, April 2025 (poster presentation accepted)

Irish Society of Chartered Physiotherapists Conference, Dublin 225 (invited to develop workshop)

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VR PAIN Project results are available here:

https://vr-pain.eu

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