

## My Research Diary – Beate Dejaco

Arnhem, the Netherlands 23.03.2021

### Pre-focus group interview reflection

On the 26<sup>th</sup> of March 2021 I will assist my colleague researcher Niamh Brady with carrying out a focus group study to explore the perspectives of physiotherapists regarding the role of virtual reality (VR) interventions in the management of musculoskeletal pain. Due to COVID-19 restrictions Niamh will carry out her focus group study with Microsoft teams. In this case, the restrictions allow us to collaborate much easier, and I hope technology like Microsoft teams or Mesh will make international scientific research collaborations as this one more common in the future.

As a PhD student in the Netherlands, Radboud University Nijmegen, I am interested in the use of VR in treatments of patients with shoulder pain. As a physiotherapist in daily care, I am very interested in which patient group (age, pathology, gender, personality etc.) might profit the most from interventions using VR.

In the beginning of the journey, I sometimes wondered whether VR head mounted displays would be the next gadget nice to have in a physiotherapy clinic, a rage that would be gone within some years. But studying literature describing the effects of VR in different fields of pain management and motor control enhancement I believe that VR soft-and hardware have the potential to influence peoples pain perception and motor control as a homebased intervention or an add-on to usual physiotherapy care. My first study focused on the validity and reliability of a head mounted VR device measuring range of movement of the shoulder of healthy participants and participants with painful shoulders. Participants were immersed in a virtual world where they were asked to move to given angles following a randomized order. Data analysis will follow soon.

In this focus group study, I will assist my colleague Niamh during the online session with clinical physiotherapists. I will take notes and ask questions if necessary. Like Niamh I am aware of my enthusiasm about the potential role of VR in physiotherapy care and will be careful in formulating my questions and answering questions of the participants if necessary.

I am thankful to be given this opportunity to assist Niamh in this study, I think that the results of this qualitative study will be very important to guide future focus studies, pilot studies and eventually randomized clinical trials to investigate the effect of VR in shoulder patients.