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## Use of Virtual Reality in the Treatment and Assessment of Psychotic Disorders

### S0029

#### CHALLENGE and Face Your Fears: Virtual Reality Treatment for Auditory Hallucinations and Paranoid Ideations

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**Background:** Many patients suffering from schizophrenia spectrum disorders continue having distressing auditory hallucinations and paranoid ideations despite receiving current treatment. Virtual reality assisted treatment offers the potential of advancing current psychotherapies for psychotic symptoms by creating virtual environments that can elicit responses (e.g. thoughts, feelings, behaviours) mirroring real-world settings. In two large-scale randomised clinical trials, we are investigating whether targeted virtual reality assisted psychotherapy can reduce psychotic symptoms and increase daily life functioning and quality of life. The CHALLENGE trial examines whether nine sessions of virtual reality-assisted psychotherapy is superior to nine sessions of standard treatments in reducing the severity, frequency, and distress of auditory hallucinations in patients with psychosis. In the Face your Fears trial we are investigating whether virtual reality assisted cognitive behavioral therapy (CBT) is superior to standard CBT in reducing levels of paranoid ideation in patients with psychosis spectrum disorders. **Methods:** The CHALLENGE and Face your Fears trials are randomised, assessor-blinded parallel-groups superiority clinical trials, allocating a total of 266 and 256 patients, respectively to either the experimental intervention or a control condition. The trials are currently enrolling patients; thus, no quantitative data is available yet. The main objective of this presentation is to give a qualitative account of this new psychotherapeutic methods as it is applied in both trials. **Results:** Qualitative data comprising case descriptions and video material will be presented at the conference. **Discussion:** The preliminary findings indicate great potential for these innovative treatments albeit important concerns regarding implementation will be raised.

**Disclosure:** No significant relationships.

**Keywords:** auditory hallucinations; schizophrenia; Psychotherapy; virtual reality

### S0030

#### Fears, Fun and Voices – an update on VR Treatments for Psychosis

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**Background:** Virtual Reality (VR) is increasingly used for treatment of psychiatric disorders. With immersive VR, people can be gradually exposed to situations they fear, they can practice new behaviour in a safe and controlled way. The threshold for engaging in therapy is lower in VR than in real life. VR applications for psychosis have been introduced fifteen years ago, and are rapidly expanding. **Methods:** In our VR mental health lab, several VR therapies for psychotic disorders have been developed and investigated. Results of recent randomized controlled trials (RCT) will be presented, and ongoing and future projects will be discussed, including VR cognitive behavioral therapy (VRcbt) for paranoid delusions, social cognition training, stress management and avatar therapy for auditory hallucinations **Results:** The RCT of VRcbt for paranoid delusions (N=116) had strong and statistically significant effects on paranoid ideations, anxiety and safety behavior. Facial emotion recognition was improved by VR social cognition training (RCT N=81), but other domains of social cognition proved more difficult to improve. A VR relaxation tool (RCT N=50) had strong immediate effects on perceived stress and emotional states. Ongoing VR intervention studies are a modular VR intervention aimed at improving social functioning (VR SOAP) and an empowering intervention for patients with auditory hallucinations (VR VOICES). **Discussion:** VR is a powerful tool for treatment of psychotic disorders, offering interventions for multiple symptom domains and functioning. Next generation VR studies hold the promise to expand and substantially improve psychosocial treatment of psychotic disorders.

**Disclosure:** I am co-founder and have shares of VRelax, a company providing VR relaxation software.

**Keywords:** paranoid delusions; Psychosis; hallucinations; virtual reality

### S0031

#### The UK AVATAR 1 and 2 Trials for People with Distressing Voices – Findings and Learning from AVATAR1, and AVATAR2 Developments in Theory and Therapy.

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