

# Amelia by XRHealth Clinical Case

## Fear of Flying



Health care professional with expertise in VR:  
Howard Gurr

# Patient

## Woman, mother of one child.

Self employed, used to fly often and normally

## Reference diagnosis

### ➤ Reason for consultation;

- Issues with flying started after she had a panic attack on a plane, that she could not explain.
- She had tried other treatments for her problem but she found no relief.

### ➤ Background;

- **Panic disorders** at age of **13**
- Emergency room at least **3 times a year due to panic attacks**

### ➤ Family history;

- Mother and son → panic attacks.

### ➤ Physical problems;

- Problem with her hip and 3 joints which were surgically corrected and she had additional surgeries scheduled.
- Airborne allergies
- High blood pressure
- Small adrenal gland tumor
- Social drinker
- Heavy caffeine user

# Objectives

## Objectives to be achieved.

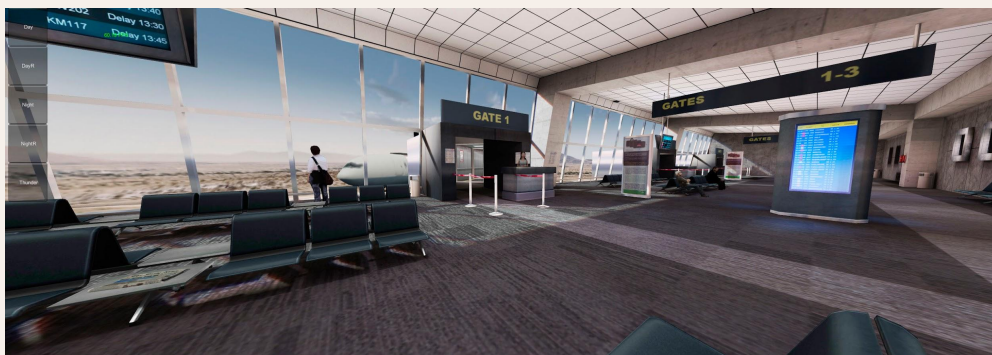
- Psychoeducation about anxiety and panic attacks
- Information and training on VR
- Reduce the fear of flying in a short period of time

## Methodology → 2 days, 2 hour session

**First two hours:** Psychoeducation in anxiety and panic attacks  
/ Teaching the patient everything about the VR

First exposure to VR

**Second day → 2 hours:** Reflect on her last session experience  
with VR / Exposures with VR / Homework assigned



# Development

## Session 1: Psychoeducation and VR approach

### ➤ **Psychoeducation:**

Educated the patient on anxiety and panic attacks

Sympathetic nervous system → back brain Vs front brain

Basic concepts of cognitive-behaviour therapy and tools which will be applied to treat anxiety.

### ➤ **VR for flying:**

Firstly the patient was introduced to VR and taught about the functioning of VR (what is it, what are the experiences when using it, and on why it helps).

### ➤ **Exposure:**

- Hands become sweaty
- Difficulty breathing
- Body tense and stressed
- She removed the HDM
- Repeated exposures during the session

The patient realized that the muscle relaxation technique works better for her than diaphragmatic breathing.



# Development

## Session 2: Previous experiences and VR exposure

During the session the experience of the previous session was discussed. → Physical symptoms such as sweaty hands and chest discomfort were discussed.

A connection between the physical symptoms and changes that naturally occurred was established.

Discussion on her cognitions when anxious and the “cough technique” was introduced.

### ➤ **VR exposure:**

- **Aisle seat** → Better sensation, the patient felt better sitting there than sitting on beside the window.
- **Engine sounds** were triggers for her anxiety
- Multiple exposures

**Homework** (was sent in order to continue working on the exposures)

- With the help of Amelia by XRHealth, the healthcare professional was able to provide the equipment to the patient for her to complete sessions **on her own**.
- The healthcare professional also recommended a workbook on dialectical behaviour therapy skills called **“Mind over Mood” from Dennis Greenberger**.



# Results

## **At the end of therapy it was possible to observe:**

The patient was able to take flights

She had difficulty in **one** flight

- She stopped at Starbucks before getting on the plane.
- She felt anxious during the flight.
- Used the Headspace app with noise reduction with headphones.

On 2018 she took a month off from work and she had over 50 flights scheduled in her planned trips over Europe and Central America.

On 2019 she wrote:

**“I leave for Rome and Malta soon thanks to you I’m seeing the world and living my best life”- Patient**





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