Amelia by XRHealth Clinical Case

Fear of Flying

Health care professional with expertise in VR:
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Patient

Man, 55 years old, married and with children.

Entrepreneur.

Works from 8 to 15h, but he's always connected (Formations, flights)

Ex Smoker and consumes alcohol occasionally.

Previous treatment→ Mindfulness and relaxation techniques.

34 years old → anxiolytics → PTSD

Narrowing of arteries → No medical contradiction to flying.

Reference diagnosis

➢ Traveled without concern
➢ His fear started after a trip to Paris, when in the plane there was an air bump → Pale, dizzy
➢ 27 years old → traveled to Dominican Republic. Where there were light aircraft trips and he avoided them.
➢ 33 years old→ trip to Italy with his family,He DOESN'T go. Avoids it completely.

❗Important: Fear of heights

➢ 30 years old, driving → A bus and his car didn't fit on the road he was surrounded by cliffs, he gets out the car and becomes conscious of the height. → Has a panic attack, the other person has to drive.

Objectives

Objectives to be achieved.

➢ Identification of the discomfort
➢ Reduction and anxiety management when flying
➢ Be able to travel with his family by plane

Methodology→ 8 sessions, lasting 1.5hrs.

Evaluation → Identify the situations that may occur, by a semi-structured interview.

Self-report → **ATAVA** (Autoinforme sobre temores a volar en avión)/ Self-report on fear of flying.

Intervention

➢ **Procedure**
   ○ **Training on relaxation techniques** → Antagonistic to anxiety
   ○ **Self-instructions** → Manage cognitive response
   ○ **VR exposure** → In a progressive way
   ○ **Homework** → Self-reports , very important

Development

Session 1: Problematic behaviour and background information

Identification of the problem, the behaviour and the mechanisms he use under this circumstances.

Session 2: Questionnaires

Identify factors that makes him frightened, introduction to the subjective units of distress.

Motivation work.

Session 3: Psychoeducation and relaxation techniques

Introduction and practice of the relaxation techniques.

Psychoeducation:

➢ **Concepts of conditioning and phobia development** → Sensibilization and generalization.
➢ **Anxiety**→ the 3 symptoms of response towards triggered stimuli.
➢ **Lift Principle and basic components of flights** → Takeoff, flight and landing
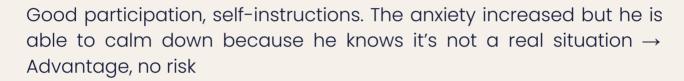
Session 4: Self-instructions

Understand the structure and organization, self-knowledge, **self-reinforcement.**

Development

Session 5: Exposure and familiarization → VR

Environments:

➢ At home, getting ready to go out→ Sun
➢ At home getting ready to go out→ Rain
➢ On his way to the airport → Sun
➢ On his way to his airport → Rain
➢ Entering to the airport → Watching the flight panel

Good participation, self-instructions. The anxiety increased but he is able to calm down because he knows it's not a real situation → Advantage, no risk

Homework

Session 6: Exposure and familiarization → VR

Scene → Waiting room

➢ Fight panel
➢ Window → Sun/Rain
➢ Sitting down
➢ Boarding

Scene → Airplane

It's observed that the patient is able to reduce his anxiety.
The healthcare professional asks for the SUD through the goggles.

➢ In the chair
➢ Flight
➢ Takeoff
➢ Normal
➢ Landing→ SUD: 6, mentioned in the self-reports, that landing was the best part of flying, but it's where he feels more anxiety due to immersion.

Development

Session 7: Exposure and familiarization → RV

Scene→ Airplane

- ➢ Turbulences
- ➢ Takeoff
- ➢ Normal Flight
- ➢ Landing
- ➢ The patient is induced to a panic attack → Playing with reality.

Scene→ Airplane

- ➢ Airport
- ➢ Takeoff
- ➢ Normal and altered flight → Turbulence and storm.
- ➢ Landing

The patient is able to work with relaxation techniques to regulate his state.

During the exposure he mentions a SUD of 6 and is able to reduce it and maintain it during relaxation.

Session 8: Exposure and full rehearsal → VR

All scenes are applied in order to create a full rehearsal.

Homework review, good immersion and flight disposition is observed.

Scenes→ At home, on his way to the airport, waiting room, flight and landing.

Results

At the end of therapy it was possible to observe:

The patient is able to manage anxiety correctly

He mentions he doesn't feel like losing control of the situation

He mentions a high capacity to reduce anxiety

He is able to travel with his family, mentions he feels confident and motivated → During the flight he felt anxious but was able to control the situation.

Predisposition to keep flying

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