

FLYING PHOBIA

Felicitas Kort

Accepting jobs or promotions to positions require much flying, also visiting family and friends or going on vacation, therefore a flying phobia hinders life style. Four aspects are feared: possibility of a crash (although statistically flying commercial airplanes are safer than driving a car), confinement, heights and instability. Evidenced based psychotherapy offers short term treatment to overcome fear of flying.

Key concepts

- Intense fear of flying
- Panic
- Autonomic nervous system
- Systematic desensitization = Exposure therapy
- Virtual reality

Specific phobias are among the most common psychological problem, ranging from 10% to 30% of the population and it depends on the person's individual learning history phobias.

Fear of flying , aerophobia - a situational type of phobia- is an avoidance out of proportion to the danger of taking an airplane, before, during and after departure. This fear leads to maladaptive behaviors subject to the autonomous nervous system, thus treatment calls for the activation of these responses.

A specific phobia such as fear of flying is characterized by three symptoms: a) marked fear of airplanes b) avoidance of airplanes and c) impairment in flying

The fear reaction occurs upon encountering the feared stimulus – airplanes - and may escalate into a panic attack when the fear is excessive or irrational, thus it is necessary to establish the proper diagnosis and the focus of apprehension i.e fear of crashing on an airplane vs. fear of having a panic attack on an airplane.

Causes

Past experiences, a learning history such as the observing others with a flying phobia and informational learning occurs after reading or hearing about dangerous situations in flying.

Psychotherapy based on empirical evidence is a commonsense procedure which gives priority to results, demystifies patient-therapist relationships, presents homework and answers the following basic questions:

- *List of urgent and realistic problems*

A structured interview evaluates the biographical history and remains in the present here and now; the use Microsoft excel charts is frequent and specific questionnaires are essential.

- *Strategies for intervention*

Even though sometimes manuals are helpful, intervention is tailored for each symptom and each individual. Supervision is required.

- *Progress evaluation*

Every session records progress. Sub-goals accelerate behaviorchange. Efficacy is more important than etiology.

Behavior and cognitive psychotherapy is a case formulation based in hypothesis about the patient' s problems. It is mandatory to monitor the psychotherapeutic process on a regular basis.

Case Formulation

A 40 year old woman describes her problem as “every time I am going to fly I am left at home with my suitcase” . In 2012 she booked to travel to Europe with her husband and had to return home from the airport. In 2013 she tried again to fly to Mexico but was unable to surmount her fear of flying. Her aerophobia started 20 years earlier in her honeymoon. In 2014 her husband was flying to Europe and offered to come along, if she decided not to do so, he would travel alone.

Behavioral Analysis

In a structured interview factors that may facilitate or complicate treatment are identified. In this case what was needed is to allow her to travel as soon as possible. She

insisted that she had to travel and wanted to be successful this time. Behavioral and cognitive psychotherapy remains in the here and now, and though it certainly reviews the past, in cases such as a specific fear, unlearning the maladaptive fear is the main focus.

Questionnaires

The Fear Survey Schedule (Wolpe and Lang 1977) asks clients to rate the intensity of their distress associated with fear 108 items.

Fear of Flying Scale (Haug et al. 1987) 21 items which assesses fear associated with different aspects of flying

The person is asked to provide a subjective rating of the intensity of their fear using Subjective Units of Distress Scale (SUDS) (Wolpe and Lazarus 1966) a verbal rating on a 10-point scale, where 10 represents the worst fear one can imagine, and 0 represents no fear at all.

Assessment

The Subjective Units of Distress functions as a distress thermometer, thus:

- 0 totally relaxed
- 1 alert and well
- 2 minimal distress
- 3 mild anxiety
- 4 moderate distress
- 5 uncomfortable, but continues performance
- 6 quite anxious, interfering with performance
- 7 Very anxious
- 8 Extremely anxious, can't concentrate
- 9 Highly distressed
- 10 Severe degree of fear

Assessment begins by explaining that the goal is not to completely eliminate anxiety, but to minimize the distress and avoidance through systematically confronting the fear of flying.

As a result of the structured interview, the following hierarchy is obtained:

1. Fear of boarding the airplane	10	Suds
2. Walk up the steps to the aircraft	9	“
3. Taking the bus to the airplane	8	“
4. In the line for the flight check-in	7	“
5. See the airplanes from a terrace	4	“

Treatment plan: Exposure Therapy

Systematic Desensitization treatment is a form of behavior therapy, which now after further research has evolved to Exposure Therapy which is based on the theory that, maladaptive emotional responses are learned and can be reeducated .

Exposure Therapy consists on working up a hierarchy in order to gradually expose the person in small steps towards the act of flying : purchasing a ticket, driving to the airport, checking in, boarding, flying, and landing.

Duration and repetition of scenes are the essential elements to prevent avoidance of flying.

Process

Session I (50’) Exposure in imagination

Scene 1 *“Imagine driving to the airport and observing airplanes in the sky flying over the ocean”* 1st presentation 3 Suds

2nd presentation 2 “

3rd presentation 1 “

Scene 2 Presentation of visual stimuli : *“four photos of airplanes”*

1st presentation 9 Suds

2nd presentation 8 “

3rd presentation 6 “

4^{th,5th & 6th} presentations 2 “

Session II (50’) Exposure in imagination

Scene 3 *“Imagine that the flight is being announced for departure”*

1st presentation 7 Suds

2nd presentation 6 “

3rd, 4^{th,5th & 6th} presentations 2 “

Session III Exposure “In Vivo”

Scene 1 Travelling to visit the airport 7 Suds
Remaining 1 hour at the airport 4 “

Session IV Exposure in imagination

Scene 1 “*Imagine that your are flying in 15 days*”

1st presentation 4 Suds

2^{nd,3rd} presentations 2 “

Scene 2 “*Imagine that you are flying tomorrow*”

1st presentation 3 Suds

2^{nd,3rd} presentations 2 “

Session V Instructions for self-monitoring

She was given a list to complete to measure her levels of anxiety while traveling:

travel to airport__

cheking in__

entering the airplane__

every hour during flight_____

landing_____

Outcome

From London she sent an email “...*I hope that from now on I will enjoy travelling...I landed safely and happy to have been able to control my fear. Next week we fly to Amsterdam...*”

The goal is to monitor the progress of each sesión:

a) if it is positive, continue the same procedure

b) if it is inadequate assess again; offer another hypothesis; and another plan of treatment.

Discussion

Generally it is accepted that pharmacotherapy is not necessary for the treatment of specific phobias. In cases where there is more than one problem addressing first the most urgent problem is indicated.

Flying phobias include knowing its triggers and cues, anticipate the consequences and the avoidance and safety behaviors.

Applied Relaxation - Applied Tension

Fear of flying may include physical symptoms such as changes in brain activity, the release of cortisol, insulin, and growth hormone, and increases in blood pressure and heart rate. Among other symptoms : unsteadiness, dizziness and lightheadedness, nausea sweatin increased heart rate or palpitations shortness of breath trembling or shaking , an upset stomach.

Thus, Progressive Muscle Relaxation (Jacobson, 1938) is used initially as an essential adjunct to the treatment systematic desensitization, though research has shown that it is not necessary to be relaxed. It is sufficient to remain calm ie diaphragmatic breathing, visualization of pleasant scenes, the use of relaxation has autonomic effects antagonistic to those of anxiety.

Progressive muscle relaxation is directed to five group of muscles :

- 1- arms and shoulders
- 2 - face (forehead, eyes, nose, tongue and neck)
- 3 - thorax and lower back
- 4 - diafragmatic breathing and
- 5 -legs and feet

The practice of these exercises minimum twice a week is a auxiliary tool for reducing discomfort and stress; the goal is not to be relaxed , but rather to let go of physiological tensions.

Applied Tension (Ost, 1997) is another treatment option. Tension alone even in the absence of exposure to the phobic stimuli (airplanes in this case) results in sustained improvement of the phobic symptoms, also in individuals with a history of blood or spider phobia.

Virtual reality (VR) and computer-assisted exposure therapy

Other form of treatment – a variation of exposure therapy - in order to counteract physiological symptoms associated with the fear of flying is Virtual Reality Computer Assisted exposure which consists of 4 sessions of anxiety management training followed

by exposure to a virtual airplane or an actual airplane at the airport. (See virtuallybetter website)

Conclusion

Consumer confidence in psychological treatments and its beneficial outcomes can be enhanced once the person understands the details of evidenced treatment of the flying phobia, and when it is specific, the results are successful in most cases.

<http://www.virtuallybetter.com/portfolio/fear-of-flying/>

This website describes using virtual reality technology what happens in an airport with details on boarding an airplane

http://www.bps.org.uk/system/files/documents/phobias_information_leaflet.pdf

The British Psychological Society describes briefly what are phobias and how to help

<http://www.nimh.nih.gov/health/statistics/prevalence/specific-phobia-among-adults.shtml>

In case you are interested in statistics and prevalence of specific phobia

Further reading

Brown, D. (2009) Flying without fear, Newharbinger Publications.

This book prepares you for sights, sounds, and sensations you will experience in airports and airplanes. It teaches how to deal with anxiety before boarding an airplane.

Bourne, E. & MacKay, M. (1998) Overcoming specific phobia client manual, Newharbinger Publications.

Haug, T., et. al Brenne, L., Johnsen, B. H., Berntzen, D., Gotestam, K. G., & Hugdahl, K. (1987). The three-systems analysis of fear of flying: A comparison of a consonant vs. a non-consonant treatment method. Behaviour Research and Therapy, 25, 187–194.

Jacobson, E. (1938) Progressive Relaxation, Chicago University Press

Ost, L.G Brandberg, M & Alm, T. (1997) One versus five sessions of exposure in the treatment of flying phobia, Behavior Research and Therapy, Vol.35, Issue 11, pp.987-996

Wolpe, J., & Lang, P. J. (1977). Manual for the fear survey schedule (revised). San Diego: Educational and Industrial Testing Service.