

4d. Biopsychosocial - Interventions for Phobia

Biological management options (protective factors/treatments):

- Biological interventions target bodily ('biological') mechanisms believed to be contributing to a phobia or its symptoms.
- These can involve the use of medications that target GABA dysfunction and can minimise the onset or severity of symptoms, and/ or relaxation techniques involving activities such as breathing and exercise that are under the control of the individual and which can also help in the management of symptoms.

1. Medications - Agonists and antagonists:

- Drugs and other medications work either by stimulating a neurotransmitter's activity (called agonists) or by inhibiting a neurotransmitter's activity (called antagonists)

Benzodiazepines:

- Benzodiazepines have both anti-anxiety and sleep-inducing properties.
- Agonists
- They are commonly referred to as sedatives, mild tranquillisers or depressants, because they slow down CNS activity.
- They relieve symptoms of anxiety by reducing physiological arousal and promoting relaxation.

How it works:

- Benzodiazepines are a group of drugs ('agents') that work on the central nervous system, acting selectively on GABA receptors in the brain to increase

GABA's inhibitory effects and make post-synaptic neurons resistant to excitation.

- Benzodiazepines are GABA agonists. Therefore, they imitate GABA and stimulate activity at the site of a postsynaptic neuron where GABA is received from a presynaptic ('sending') neuron.
- In this way, benzodiazepines have inhibitory effects on postsynaptic neurons throughout the brain and reduce the symptoms of anxiety by imitating GABA's inhibitory effects.
- When a benzodiazepine attaches to a GABA receptor, it changes the shape of the receptor to make it more receptive to the activity of GABA and consequently more resistant to excitation.
- Reducing the excitability of neurons reduces the communication between neurons and, therefore, has a calming effect on many of the functions of the brain.

Side effects and risks:

- Although benzodiazepines tend to be highly effective in reducing anxiety with few side-effects in the short term, there are potential negative consequences associated with their long-term use as they can reduce alertness, abilities dependent on alertness (e.g. concentration, reaction time) and can be addictive.
- Benzodiazepines can also lower inhibitions and make some people more impulsive and likely to take risks, particularly if these medications are mixed with alcohol or other drugs.
- Benzodiazepines treat the symptoms and not the cause of anxiety. Once medication is stopped, symptoms may return if the underlying cause of the anxiety — the specific phobia — has not been addressed.

2. Exercise:

- **Exercise is physical activity undertaken to improve or maintain one's physical condition.**
- Exercise has been studied as a possible treatment option for the stress and anxiety symptoms commonly experienced by people with a specific phobia:
 - an extra treatment to complement other interventions,
 - as a stand-alone treatment.

Benefits of exercise:

- Promoting relaxation and thereby providing relief from anxiety
- Providing distraction or 'time out' from phobic stimuli, fear and anxiety
- Coping with the stress and associated physical reactions e.g. stress places demands on the body for energy and in the process uses up stress hormones
- Increasing tolerance to some of the fear and anxiety symptoms e.g. exercise can cause physical reactions like those for fight-flight or a panic attack (e.g. rapid heartbeat, sweating, shortness of breath), enabling symptoms to be experienced in a controlled, nonthreatening way, and possibly improving coping ability through repeated exposure if exercise is regular.
- Altering brain chemistry e.g. promotes release of mood enhancing ('feel good') endorphins, thereby promoting a sense of well-being and indirectly providing relief from anxiety.

3. Relaxation techniques:

- People experiencing a phobic reaction can over breathe as the respiration rate normally increases in the presence of a perceived threat.
- They may breathe faster and deeper than necessary (hyperventilation) or get into a pattern of uncontrolled rapid and shallow breathing (tachypnea).
- A significant problem is that an abnormal breathing pattern can become habitual and actually increase fear or anxiety. People with specific phobias are believed to develop abnormal breathing patterns.

- Over-breathing may also cause breathlessness — a sensation of shortness of breath or difficulty breathing.

4. Breathing retaining:

- **Breathing retraining, also called, breathing training, is an anxiety-management technique that involves teaching correct breathing habits to people with specific phobias.**
- Breathing retraining helps people to maintain correct breathing or correct abnormal breathing patterns when anticipating or exposed to a phobic stimulus, so it may also help to reduce anxiety or alleviate some of its symptoms.
- Breathing retraining can give people control over their breathing and may therefore also help them feel as if they have more control of their fear or anxiety
- An appropriate breathing pattern generally involves slow, regular breaths in through the nose and out the mouth at a controlled rate as opposed to fast and/or irregular, shallow 'chest breathing' or the rapid, deep breathing of hyperventilation.
- The goal is to slow the respiration rate, promote a 'normal', regular breathing pattern, prevent over-breathing and maintain the correct balance of oxygen and carbon dioxide in the blood.

Psychological Management Options/Protective factors/Evidence based interventions in the treatment of specific phobia:

1. **Cognitive Behavioural Therapy (CBT): combines cognitive and behavioural therapies to help people manage a mental health problem or disorder.**
- **Cognitive therapy is a type of 'talking therapy' that focuses on the role of 'cognitions' (thoughts, beliefs and attitudes) in determining emotions and behaviour.**

- Certain maladaptive beliefs and ways of thinking can trigger or 'fuel' mental health problems and disorders.
- **Behavioural therapy is the clinical application of learning theories such as classical and operant conditioning.**
 - Behavioural therapy deals directly with maladaptive behaviours such as avoidance and reduced activity levels, which can maintain or worsen a person's psychological problems.
 - When using behavioural therapy, the therapist exposes their client to new situations that are designed to 'retrain' them so that maladaptive, habitual or reflexive ways of responding become extinguished and new, more adaptive, habits and reflexes are conditioned

CBT for Specific Phobias:

- The cognitive component of CBT aims to assist the client to develop a new understanding that the feared stimuli is not (or is unlikely to be) dangerous, so their avoidance and safety behaviours are unnecessary.
 - Identify cognitive distortions
 - Gather accurate information about their phobic stimulus
 - Evaluate their evidence and counter with alternative, more objective and useful thoughts
- The behavioural component of CBT aims to change or eliminate behavioural responses to a phobic stimulus that are maladaptive through:
 - Relaxation techniques (breathing retraining, exercise)
 - Systematic desensitisation

2. Systematic desensitisation:

- **Systematic desensitisation applies classical conditioning principles in a process that involves *unlearning* the connection between anxiety and a specific object or situation and *reassociating* feelings of relaxation (and safety) with that particular object or situation.**

1. Teach client a relaxation strategy
2. Establish a fear/anxiety hierarchy
3. Systematic, graduated pairing of items in the hierarchy with relaxation by working upwards through items in the hierarchy, one 'step' at a time:
 - in vivo (in real life)
 - using visual imagery ('imagination')
 - using virtual reality

→ must be fully calm using relaxation techniques before moving up to the next step.

Social Management Options/Protective factors/Evidence-based interventions in the treatment of specific phobia:

1. Psychoeducation for families and supporters:

- **Psychoeducation: involves the provision and explanation of information about a mental disorder to individuals diagnosed with the disorder to increase knowledge and understanding of their disorder and its treatment.**
- Aimed at both family/friends and person to reduce stigma
- In some cases, psychoeducation may be broadened to include family members and others outside the immediate family who can provide social support.

- **Challenging unrealistic or anxious thoughts:**
- People with a specific phobia typically have anxious thoughts about their phobic stimulus. The anxious thoughts that trigger and fuel phobias are usually negative and unrealistic.
- Unrealistic thoughts are unhelpful thoughts. As well as being triggered by anxious thoughts, they can trigger anxious thoughts, which are also unhelpful as they also fuel and perpetuate

- Learning to challenge unhelpful thoughts is an important step in overcoming a phobia, but this can be difficult when anxious or distressed. Learning to challenge unhelpful thoughts is an important step in overcoming a phobia, but this can be difficult when anxious or distressed.
- Families and other supporters can therefore play an important role in helping a person to cope with or overcome a phobia by encouraging them to recognise and challenge unrealistic or anxious thoughts. to play in helping a person to cope with or overcome a phobia by encouraging them to recognise and challenge unrealistic or anxious thoughts. the phobia.
- **Not encouraging avoidance behaviours:**
- **Avoidance behaviour involves actions that help avert any contact, exposure or engagement with a feared object or situation. Simply staying away from a phobic stimulus is an example of avoidance behaviour.**
- While avoidance can make the individual feel better in the short-term, it prevents them from learning that their phobia may not be as frightening or overwhelming as they think.
- It is important that family members and supporters understand what avoidance behaviour is, the role it plays in perpetuating a phobia and how it can impact on daily functioning.
- It is important for them to recognise that avoidance behaviour is counter-productive and may actually be contributing to the phobia unintentionally and that they should consequently not be encouraging or reinforcing avoidance behaviours.

Resilience

- **Resilience refers to the ability to successfully cope with adversity, and to 'bounce back' and restore positive functioning.**

- It is considered a protective factor that is a strength or asset for 'good' mental health as it helps safeguard against the effects of risk factors for 'bad' mental health and minimises their impact.
- Resilience is not merely coping or adaptive behaviour.
- Resilience can be distinguished from other concepts such as 'mental toughness' or 'invulnerability' with reference to three key qualities:
 1. The ability to achieve positive results in adverse situations
 2. The ability to function competently in situations of acute or chronic stress
 3. The ability to recover from trauma (Shastri, 2013).

2 Biological factors supporting good mental health:

- ADEQUATE DIET
 - Eat a variety of foods
 - Drink lots of water
 - Don't skip breakfast and try to eat regularly throughout the day
 - Don't rely on vitamin/mineral supplements
 - Don't rely on drugs/alcohol

- ADEQUATE SLEEP
 - Inadequate or poor sleep can adversely affect mental health by impairing affective, behavioural and cognitive functioning.
 - Poor sleep quantity or quality over a sustained period is considered a risk factor for the development or perpetuation of a range of mental disorders, including mood, anxiety, addictive, personality and psychotic disorders.

Social factor supporting good mental health:

- 1. Support from family, friends and community**
 - **Social support generally refers to the assistance, care or empathy provided by people to each other.**

Social support tends to have four main forms:

1. Appraisal support - help from another person that improves someone's understanding of their mental health problem and the resources and coping strategies that may be needed to deal with it.
2. Tangible assistance - involves the provision of material support, such as services, financial assistance or goods, that may help offset the effects of a mental health problem.
3. Informational support - community groups and agencies can provide informational support about how to cope with a mental health problem, symptoms or contributory factors.
4. Emotional support - expressions of empathy and by reassurance that a person is cared for, valued and will be helped in any way required