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Diagnosis and management of phobic anxiety disorders in primary care

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Summary

Fear or phobia is a common phenomenon, but many people develop specific types of phobic anxiety disorders. The more common ones are agoraphobia, specific phobias and social phobia. Agoraphobia is often associated with panic attacks, while specific phobia is often accompanied by fainting spells. Social phobia is often a neglected topic, but is now becoming more important. Each type of phobia has its own unique features and deserves specific forms of treatment.

摘要

恐懼症是一種常見的現象，臨床上患者會有不同表現。常見的包括空曠恐懼病、特異性恐懼症及社會恐懼症。其中空曠恐懼症經常並發恐慌發作，而特異性恐懼症常會並發昏厥。社會恐懼症以往一直被忽視，但現時則變得非常重要。各種恐懼症均有其獨特表現，須要相應處理方案。

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Overview

The word "phobia" is derived from the Greek god Phobos who would induce fear and terror in the enemies. Fear is a universal phenomenon as a self-protective alarm system. However, pathological fear is harmful and dysfunctional. A phobic disorder is thus the persistent or excessive fears and anxieties attached to a relatively specific stimulus (object) or an event (situation). It occurs only in response to specific situations, living things or natural phenomena, and is not secondary to other disorders. But it is diagnosed, according to the DSM-IV, only when there is significant interference with normal routine,

occupational or academic functioning, social activities and relationships, or marked distress about having the phobia.

Different forms of phobic disorders exist, all very common in the community though often unrecognised or under-diagnosed by the primary care medical profession. There are two cardinal clinical features: *anticipatory anxiety* restricted to or predominate in the specific situations or events, and *phobic avoidance* of the circumstances. The anxiety symptoms are out of proportion to the demands of the situation, and occasionally panic symptoms coexist. The patients feel that such experiences are beyond voluntary control, and cannot be reasoned away. As a result, they exhibit counterphobic behaviour especially that of avoidance.

Co-morbidities

Quite often, phobias are related to panic disorder (40-50%) especially agoraphobia, and to depressive disorder (35-80%). It should be noted that the depression can be primary or secondary in nature, not to mention that anxiety and depression share some common symptoms. There is also an increased association with obsessive-compulsive disorder, body dysmorphic disorder (a preoccupation with some imagined defect in appearance), eating disorders and alcohol and substance abuse.

Prevalence

Agras *et al*¹ studied a household population in Vermont, U.S. totalling 325 persons, and the overall 1-year prevalence for 40 commonly feared situations was 7.7%. Most were mildly disabling; but there were 0.2% severe cases. Angst and Dobler-Mikola² found a 1.2% for non-agoraphobic phobias in 456 young adults in Zurich. The wide differences between studies could be due to the definitions used.

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The Epidemiological Catchment Area (ECA) study in the U.S. found life-time prevalent rates for clinically

diagnosable phobias as between 11-12^{3,4} (11.25% for simple phobia, 5.6% for agoraphobia and 2.73% for social phobia).

General etiological theories

Psychodynamic theory

Gilbert's defence/safety model⁵ – phobia developed as the result of the inappropriate activation of two biologically wired and complementary survival systems. The 'defence' system is hyperactive while the 'safety' system is underactive, resulting in excessive appreciation of potential threats, but dampens recognition of non-threatening cues.

Behavioural-cognitive theory

The association between the phobic onset with a traumatic incident forms a classical conditioning process. A modified version is that the impact of trauma is dependent on prior learning with relevant stimuli, and occurs in vulnerable (neurotic) personality. However, it still cannot account for never directly experienced phobic stimuli. Rachman⁶ suggested direct trauma (classical conditioning) together with vicarious observation (learning) and informational transmission (such as warnings from significant others).

Cognitive theories recognise the characteristic thinking patterns that reflect perceptions of harm and danger. Patients with specific phobias tend to appraise the stimulus and responses as dangerous. Social phobic patients think that they will look foolish, appear inferior and therefore be devalued, discounted, disapproved of, and disliked.⁷

Biological theory

Though the limbic system (especially the hippocampus and the amygdala with connections to the prefrontal cortex) has long been implied, no structural or cerebral blood flow abnormalities have been persistently found. For patients with panicky features, they show a modestly increased sensitivity to caffeine, carbon dioxide inhalation, yohimbine and nicotinic acid that suggest an innate low threshold alarm (noradrenergic) system involving the locus coeruleus. Since this locus coeruleus is dampened by the raphe nuclei, there is suggestion of a

central serotonergic supersensitivity and a hypoactive dopaminergic hypoactivity.

General principles of management

Since the patient often presents with physical symptoms, the likelihood of an underlying medical condition has to be evaluated, and substances (medications and drugs abuse) that cause anxiety or phobia should be explored. This is achieved not by ordering a battery of laboratory tests, which may further increase the anxiety of the patient and the fear of a serious disease. Instead, the doctor should start off by listening to the temporal relationship between the presenting symptoms and stressful life events, and by observing other clinical features of psychological distress. Appropriate physical examination targeted at the symptoms is important, especially to primary care doctors, to screen for any signs of a medical disease and to tailor which diagnostic tests are necessary. It may also serve as a reassurance of no serious problem, and at times can even induce a 'laying of hands' therapeutic effect.

Psychotherapies

a. Supportive psychotherapy

This consists mainly of proper patient education and explanation, with reassurance of safety. Techniques such as relaxation training and breathing retraining are helpful.

b. Behavioural therapy

The well-known therapy is 'exposure' with emphasis on the extinction of the conditional responses and on mastery development. In addition, there should be reinforcement for performance accomplishment. Social skills and assertiveness training are additional help, using instruction and modelling, together with role-play and feedback.

c. Cognitive therapy

It aims to restructure the distorted thoughts to more realistic ones:

- i. Ellis's⁸ rational-emotive therapy: actively and directly dispute the negative self-statements or beliefs of the patients.

- ii. Meichenbaum's⁹ self-instruction training: modifies the fearful internal dialogues to include coping, task-oriented and self-achievement statements.
- iii. Beck¹⁰ aims to identify and label the errors in thinking, to evaluate the evidence and to generate alternative and more realistic hypothesis.
- iv. Frankl's¹¹ paradoxical intention: exaggerate and magnify the irrational fears so that their fears finally lose their strength and meaning.

Psychotherapy can either be in vivo (real life) or in vitro (in artificial setting), starting from the most feared situation (called flooding or implosion) or from the least (called desensitisation), and conducted either in groups or individually. The underlying mechanisms include habituation (reduction in response strength with repeated exposure), extinction (decrease in fearful response through repetition without reinforcement), emotional processing (cognitive change to explain what is learned during exposure), self-efficacy (confidence to perform a certain task), predictive accuracy (alter the anxiety expectation by avoiding any over-estimation), etc.¹² Some would classify the patients into two types, the physiological and the behavioural reactors.¹³ The former is more responsive to applied relaxation, while the latter to cognitive-behavioural techniques.

Medications

Pharmacological treatments offer an efficient and effective management for the more disabling phobic conditions, used either alone or with psychotherapy. However, some psychotherapists argue that they are not useful, or even contra-indicated for phobias. As discussed above, phobia involves mainly the neurotransmitters noradrenaline and serotonin, and it is therefore not surprising that many types of antidepressants have been found effective for phobic disorders (**Table 1**).

For agoraphobics with associated panic features, the dosage should begin significantly lower than for the treatment of depression, and then titrate upwards. For social phobia, the dosage is similar to that for depression, and the selective serotonin reuptake inhibitors (SSRIs) are particularly effective. In a way, they are rarely used for simple phobias. All these medications have side-effects and possibilities of relapse on withdrawal, especially with the benzodiazepine anxiolytics (BDZs). BDZs are useful

for those predictable situations that induce the anxiety, but the relapse rate is high. Beta-blockers are particularly useful if taken prior to the exposure or performance. Buspirone has rather weak efficacy and can be used as an adjunct.

Miscellaneous

Other forms of therapy have been tried but without evidence-base of success or failure. They include hypnosis and suggestion, imaginary visualisation and perhaps faith healing. As a last resort, psychosurgery by leucotomy has been applied.

Table 1: Pharmacotherapy for phobic disorders

Commonly used agents	Brand name	Usual daily dose	Starting dose
A. Monoamine oxidase inhibitors (MAOIs)			
1. Phenelzine	Nardil	30-90mg	15mg
2. Moclobemide	Aurorix	150-600mg	150mg
B. Tricyclic antidepressants (TCAs)			
1. Clomipramine*	Anafranil	75-150mg	25mg
2. Imipramine	Tofranil	75-150mg	25mg
C. Selective serotonin reuptake inhibitors (SSRIs)			
1. Fluvoxamine*	Faverin	50mg	25mg
2. Sertraline*	Zoloft	50mg	25mg
3. Paroxetine*	Seroxat	20mg	10mg
4. Fluoxetine	Prozac	20mg	10mg
5. Citalopram	Cipram	20mg	10mg
D. β -blockers anxiolytics			
1. Propranolol	Inderal	30-60mg	20mg
E. Benzodiazepine anxiolytics (BDZs)			
1. Diazepam	Valium	10-30mg	5mg
2. Alprazolam	Xanax	1.5-6mg	0.5mg
3. Clonazepam	Rivotril	1.5-6mg	0.5mg
F. Azapirone (5HT _{1A} antagonist) anxiolytic			
1. Buspirone**	Buspar	15-60mg	15mg

* more extensively studied

** not effective for panic attacks

Different types of phobic disorders

It is now understood that different phobias could have different underlying mechanisms, and they respond to different specific therapies.

Agoraphobia

Inappropriate anxiety or fear when away from home, in situations from which they cannot escape, and leaving the situation may be difficult or embarrassing, or where help may not be available e.g. crowded shops, cinemas, etc. The patient usually avoids open space or social situations, tries to endure marked distress or requires a companion. A key feature is the lack of an immediately available exit. Many patients are worried about collapsing or being left helpless in public.

In a way, agoraphobia is a normal reaction to perceived danger or threat. The ICD-10 criteria require that the fear or avoidance must occur in two of the following situations: crowds, public places, travelling alone or travelling away from home. If the avoidance is limited to one or a few situations, specific phobia or social phobia (if limited to social situations) is a better diagnosis. The onset of agoraphobia is usually after puberty. Mathews, Gelder & Johnston¹⁴ concluded that dependent behaviour (even in childhood) is a pre-existing trait. A past history of school phobia is quite common. There is also a close association with traits of dependency and unassertiveness, and the avoidant personality disorder (though this can be due to contamination of diagnostic criteria). Finally, it is more common in females, perhaps related to the traditional role that being housebound is more acceptable in women than in men.

In the DSM-IV, it is often associated with panicky features and is therefore subdivided into

- i. agoraphobia secondary to panic disorder; and
- ii. agoraphobia without history of panic disorder. However, in the latter there can be fear of developing panic-like symptoms such as dizziness or diarrhoea. According to many authorities, this mandatory association is rather premature, as panic attacks do occur in other anxiety disorders and even in non-clinical subjects.¹⁵ Furthermore, agoraphobia without panic attacks is common in studies from the general population. Wittchen¹⁶ found that 50% of agoraphobics in the Munich community never had

panicky symptoms. Finally, the panic-associated agoraphobics are prone to early help-seeking behaviour, and therefore leading to an over-representation in the clinic sample.

Specific etiological theories of agoraphobia

- i. Unconscious motivation
 - a. Freud¹⁷ first explained that such patients had a fear of walking in the streets lest it would lead to sexual temptation, a repressed desire or idea.
 - b. Hafner¹⁸ explained it as an attempt to cope with an unsatisfactory marriage, including sexual difficulties. But this may be the result rather than the cause, or related to another variable such as neuroticism.
- ii. Separation anxiety

Bowlby¹⁹ suggested that the childhoods of the patients are marked by anxious attachment to the parents and the lack of a secure base. This is supported by a high prevalent rate of school phobia among the agoraphobics.²⁰
- iii. Bio-behavioural theories
 - a. Klein, Ross & Cohen²¹ postulated uncontrolled discharges in the 'anxiety system' which, like epilepsy, produces semi-random bursts of panic. As a result, the normal stabilising negative feedback loop has become a pathological positive feedback loop. But this theory has been criticised for the debatable spontaneity of panic attacks.
 - b. Gorman *et al*²² postulated that reciprocal innervation among the nuclei of the brainstem, limbic lobe and prefrontal cortex is the cause of the panic attack, which in turn leads to anticipatory anxiety and phobic avoidance. However, it cannot explain agoraphobia without panic.

Specific (selective) phobia (formerly simple phobia)

Inappropriate anxiety in the presence of a particular object or situation. It is usually named with the object before the term e.g. height phobia or after it e.g. phobia of flying. Fear is a universal experience and all children have experienced it. In adult patients, they recognise that the fear is excessive or unreasonable. In children, the

expression can be in the form of crying, tantrums, freezing or clinging (but persists for at least 6 months). The prevalence often declines with age. The situation is avoided or else is endured with intense anxiety or distress. There are a few common types which are summarised in **Table 2**.

In modern societies, there are two further interesting subtypes, viz:

- i. *Illness or disease phobia*
 - inappropriate anxiety with repeated fearful thoughts of contracting certain illness, especially cancer and venereal disease. It differs from hypochondriasis (concerned that one may have contracted the disease) or delusional disorder of somatic type (convinced having contracted the disease against contrary evidence).
- ii. *Accident phobia*
 - when survivors of traffic or industrial accidents fail to recover their normal travel or work habits, or live in fear of another accident. It is quite often related to post-traumatic stress disorder.

Table 2: Common types of specific phobia

- a. *Animal type*
 - e.g. insects (arachnophobia) especially spiders, rats, snakes, etc. This is the most prevalent type in the general population, and is less disruptive or disabling. It has less comorbidities and is most easily treated.
 - b. *Natural environment type*
 - e.g. storms, heights (acrophobia), water (affect bathing, swimming or hair washing), etc.
 - c. *Blood-injection-injury type*
 - e.g. seeing blood, needles, injection or other invasive procedure, etc. This is the most prevalent type among the clinic population, with a high incidence of fainting (70-80%), sometimes associated with hypotension or even asystole.
 - d. *Situational type*
 - e.g. dental phobias, public transport, tunnels, bridges, enclosed spaces (claustrophobia, with a sense of entrapment/restriction and a fear of suffocation), etc.
 - e. *Atypical types*
 - e.g. fear of sexual or aggressive scenes, fear of choking, vomiting, etc.
-

Social phobia (social anxiety disorder)

This is inappropriate anxiety when exposed to unfamiliar people or possibility of being observed or criticised by others e.g. in restaurants, dinner parties, meetings, etc. It involves not only the avoidance of going out, but includes those who are withdrawn at parties (staying in the corner) or those who talk only to a few familiar friends on limited topics.

It has been said that these patients lack social skills or motivation to improve relationships, but is untrue in most cases. There are two subtypes:

- a. Specific or discrete: fear of a circumscribed situation such as speech making, eating in public, etc. (see **Table 3**)
- b. Generalised: multiple or broad-based fears e.g. social contact with others. This latter category may overlap with the criteria for the avoidant personality disorder (APD). Holt, Heimburg and Hope²⁴ suggest that social phobia plus APD identify a more severe type.

Prevalence of social phobia

According to Kessler *et al*⁴, about 7-8% of the U.S. population suffer from social phobia. The male to female ratio is 1:1²⁵ in clinic populations, but females are more common in the community sample.²⁶ The age of onset is usually between 15 to 20 years,²⁷ and the patients are less likely to be married.²⁵ The social class is still unclear, but the patients are probably less educated and have the lower socio-economic status. It is more related to social anxiety or shyness in children and adolescents.²⁸

Table 3: Common social phobic situations

- i. Performance situations: public speech, stage fright, eat or drink before others, urinating in public bathroom, entering a room where people are already seated;
 - ii. Interactional situations: chat on the phone, speak with strangers, avoid social gatherings, interacting with others, dealing with authority figures, returning unwanted items to a store, making eye contact with unfamiliar people.
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(Continued on page 283)

Key messages

1. Different types of phobic disorders occur in the general population, causing significant distress and dysfunction.
2. Anticipatory anxiety and phobic avoidance are the two cardinal symptoms.
3. Knowledge of different types of phobic disorders can enhance the diagnostic acuity.
4. Doctors should avoid over-investigation, but explore the psychosocial factors related to the anxiety.
5. The mainstay of treatment is behaviour (exposure) therapy, often used in conjunction with cognitive techniques. Medications of different types can be used for more disabling conditions.

Specific etiological theories of social phobia

- i. Beck, Emery and Greenberg²⁹ mentioned the hypersensitivity to signals from other people regarding personal acceptability, and the autonomic hyperarousal activates the fears concerning the possibility of failed performance.
- ii. Hartman³⁰ explained that socially anxious persons are too self-focused in social situations, which together with an internal attribution (negative distorted self-evaluation) produces anxiety. However, it is argued that many other disorders also self-focused attention.
- iii. Clark and Wells³¹ discussed about an insecure person trying to present a favourable impression of 'self'. This results in negative self-focused thinking tied to 'safety behaviour' (e.g. I will try to speak clearly and slowly) or 'avoidance' which decreases the chance to disprove the negative appraisals (e.g. 'I am a boring person'). However, this generates anxiety and paradoxically results in 'failed performance' (e.g. stutters), thereby 'post-mortemly' reinforcing the distorted self-impressions.

Conclusion

In recent years, enormous progress has been made in the understanding of the bio-psychological basis of phobic disorders that are characterised by anticipatory anxiety and phobic avoidance. With proper training, primary care doctors should be able to diagnose this often under-recognised condition among their patients. For mild or

uncomplicated cases, these disorders can be adequately treated at the primary care clinics, using reassurance and other simple psychological techniques, with or without psychotropic medications. Severe and disabling cases perhaps need referral to or back-up supports from clinical psychologists or psychiatrists. ■

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