NHS
Health Education England

MRCPsych General Adult Module

Anxiety

Developing people
for health and
healthcare

Health Education England

GA Module: Anxiety

Aims and Objectives

The overall aim is for the trainee to gain an overview of Anxiety

By the end of the session trainees should:

- Develop detailed knowledge about aetiological theories and epidemiology – Expert led session

Health Education England

GA Module: Anxiety

Expert Led Session

Anxiety:

Aetiological Theories and Epidemiology

Image from RCPsych information leaflet for anxiety disorders, Illustration by Locole

Prevalence and Costs

- Anxiety disorders are among the most common mental disorders. Up to 15% of all people suffer during their life from an anxiety disorder (lifetime prevalence) (Kessler et al. 2010).
- Treatment of anxiety disorders and consequences of the disease cause high costs and are connected with severe social problems (Wittchen and Jacobi 2005). One in four patients with generalized anxiety disorder is not in a position to meet its daily life requirements (Becker and Hoyer 2000).
- The course of anxiety disorders without adequate treatment is chronic and recurrent and a spontaneous remission was found in only about 14% of the patients (Wittchen 1991).

Prevalence rates

Health Education England

12 month Prevalence

- Panic Disorder 0.6 – 3.1
- Agoraphobia 0.1 – 3.1
- GAD 0.2- 4.3
- Social phobia 0.6 – 7.9
- Specific phobias 3.1 -11.1
- OCD 0.1 – 3.1

Median

- Panic disorder 1.2
- Agoraphobia 1.2
- GAD 2.0
- Social Phobia 2.0
- Specific Phobia 4.9
- OCD 0.7

Panic Disorder

- Women 2-3 times more likely to be affected
- Age of onset : Bimodal distribution (15-24,45-54yrs)

Panic Disorder – Aetiology

- **Serotonergic model** : exaggerated post-synaptic receptor response to synaptic serotonin
- **Noradrenergic model**: Increased NA activity, hypersensitivity of presynaptic α 2 receptors
- **GABA model**: Reduced inhibitory receptor sensitivity
- **Cholecystokinin-pentagastrin model, Lactate model**: induce panic
- **False suffocation CO2 hypothesis**: hypersensitive brainstem receptors
- **Neuroanatomical model:** overactive fear brain network
- **Genetic hypothesis:** moderate heritability of 25-50%, stress-vulnerability
- **Cognitive Theory**: Fears about serious physical or mental illness are more frequent in anxious patients with panic attacks

Agoraphobia

- Women 3 times more likely to be affected
- Age of onset : Bimodal distribution (15-35,45-54yrs)

Agoraphobia - Aetiology

- **Genetic and environmental:** First degree relatives have increased prevalence of other anxiety, depressive disorders and alcohol misuse
- **Psychoanalytical:** Internal source of anxiety excluded by repression and attached to external object by displacement
- **Learning theory :** conditioned fear responses to learned avoidance

Simple Phobias

- Women 3 times more likely to be affected
- Mean age of occurrence is 15 yrs

Simple Phobia- Aetiology

- **Genetic and environmental factors:** MZ:DZ 26%:11% for animal phobia, situational phobia roughly equal suggesting stronger role of environmental factors
- **Psychoanalytical:** Internal source of anxiety excluded by repression and attached to external object by displacement
- **Learning theory:** association learning, fearful anticipation of phobic situations and selective attention to phobic stimuli

Social phobia

- Men > or = women
- Age of onset : Bimodal distribution, peaks at 5yrs and 11-15yrs

Social Phobia- Aetiology

- **Genetic and Environmental factors:** MZ:DZ= 24%:15%
- **Dysregulation** of 5-HT, NA and DA systems
- **Neuroanatomical Model:** Overactive fear brain network (prefrontal cortex, amygdala, hippocampus)
- **Conditioning and Cognitive learning**

GAD

- Women 1.5 to 2.5 times more affected than men
- Highest prevalence in 45-59yrs - 7.7%

GAD - Aetiology

- **Triple vulnerability model**
  - Generalised biological vulnerability (genetic, neurobiological - 5HT, NE, GABA, HPA axis)
  - Generalised psychological vulnerability (low sense of control, parenting and attachment issues)
  - Specific psychological vulnerability (stressful life events, high threat events)

GAD – Aetiology

- **Genetic factors :** there is a five-fold increased risk of GAD in first-degree relatives (parent, sibling and offspring) of people with GAD
- **Environmental stressors** such as domestic violence, unemployment, separation, low socioeconomic status, and history of child abuse are associated with the development of GAD
- Brain imaging studies in people with GAD have shown exaggerated responses in the amygdala and hippocampus (both involved in the regulation of emotion and behaviour)
- Alteration of GABA, serotonin, and noradrenaline have an apparent role in the pathophysiology of GAD

Neurobiology

- Cannon 1927- Thalamus plays central role in experience of emotions
- Papez 1937 –neuronal circuit for experience of emotion
- Gray 1981- septohippocampal system is central substrate for anxiety in the brain , papez circuit +Locus coerulus + ANS
- Gorman 2000- neuroanatomical model for panic attacks

Neurobiology

- Vythilingam 2000: MRI studies show reduced temporal lobes but no change in hippocampal volume in panic disorder which is in contrast to findings in depression and PTSD

- Nutt 2001- In GAD, frontal cortex for worries, thalamus for hypervigilance , insula for autonomic sx, basal ganglia for motor tension

- Cannistaro and Rauch 2004: development of panic attacks by external cues that stimulate amygdala but person unaware

Health Education England

GA Module: Anxiety

Any Questions?

Thank you….. MCQs are next...

Health Education England

GA Module: Anxiety

MCQs

- Which one of below is not true of body dysmorphic disorder (BDD)?

A. First described by Morselli

B. DSM-IV classifies BDD as a somatoform disorder

C. ICD-10 classifies BDD under hypochondriacal disorder

D. Severe BDD is usually treated with SSRI and CBT as first line

E. Commonly associated with morbid jealousy.

Health Education England

GA Module: Anxiety

MCQs

- Which one of below is not true of body dysmorphic disorder (BDD)?

A. First described by Morselli

B. DSM-IV classifies BDD as a somatoform disorder

C. ICD-10 classifies BDD under hypochondriacal disorder

D. Severe BDD is usually treated with SSRI and CBT as first line

E. Commonly associated with morbid jealousy.

Health Education England

GA Module: Anxiety

MCQs

- All of the following anxiety disorders are more common in females, except:

A. Agoraphobia
B. Social phobia
C. Panic disorder
D. Generalised anxiety disorder
E. None of the above

Health Education England

GA Module: Anxiety

MCQs

- All of the following anxiety disorders are more common in females, except:

A. Agoraphobia

B. Social phobia

C. Panic disorder

D. Generalised anxiety disorder

E. None of the above

Health Education England

GA Module: Anxiety

MCQs

- All of the below are poor prognostic factors for OCD, except:

A. Early onset
B. Male
C. No compulsions
D. Family history of OCD
E. Longer duration

Health Education England

GA Module: Anxiety

MCQs

- All of the below are poor prognostic factors for OCD, except:

A. Early onset

B. Male

C. No compulsions

D. Family history of OCD

E. Longer duration

Health Education England

GA Module: Anxiety

MCQs

- Which of the following is recommended by NICE as first line treatment for PTSD?

A. SSRI antidepressants

B. Counselling

C. EMDR

D. Combination of CBT and SSRI antidepressant

E. Quetiapine

Health Education England

GA Module: Anxiety

MCQs

- Which of the following is recommended by NICE as first line treatment for PTSD?

A. SSRI antidepressants

B. Counselling

C. EMDR

D. Combination of CBT and SSRI antidepressant

E. Quetiapine

Health Education England

GA Module: Anxiety

MCQs

- Which of the following statement is FALSE?

A. Quetiapine has clear RCT evidence for efficacy in Generalised anxiety disorder.

B. Escitalopram is licenced for treatment of OCD

C. Treatment duration of at least 3 months is usually recommended for treatment of OCD

D. Antipsychotics should not routine be combined with antidepressants for treatment of anxiety disorders

E. Paroxetine, Escitalopram and Citalopram are all licenced for treatment of panic disorder

Health Education England

GA Module: Anxiety

MCQs

- Which of the following statement is FALSE?

A. Quetiapine has clear RCT evidence for efficacy in Generalised anxiety disorder.

B. Escitalopram is licenced for treatment of OCD

C. Treatment duration of at least 3 months is usually recommended for treatment of OCD

D. Antipsychotics should not routine be combined with antidepressants for treatment of anxiety disorders

E. Paroxetine, Escitalopram and Citalopram are all licenced for treatment of panic disorder

Health Education England

GA Module: Anxiety

Any Questions?

Thank you.