

# Mental illness

## ‘A Broad Overview’

Dr H Pathmanandam  
March 2017

# Introduction

- Mental disorders are common in primary and secondary care
- Many are not recognised and not treated
- Some receive unnecessary or inappropriate treatment
- Must improve recognition and management

# Mental disorders

# Hierarchy of mental disorders

- Organic
- Psychotic
- Affective
- Neuroses
- Personality

# Affective disorders

# Depression

- Low mood
- Loss of interest or pleasure in activities
- Decreased energy or fatiguability

# Cognitive symptoms

- Loss of confidence/self esteem
- Guilt
- Poor concentration
- Poor memory
- Suicidal ideation/behaviour

# Biological (somatic) symptoms

- Anhedonia
- Lack of emotional response
- Early morning waking
- Diurnal mood variation
- Psychomotor retardation or agitation
- Marked loss of appetite
- Weight loss – at least 5% of body weight in last month
- Loss of libido



# Treatment of depression

- Stepped care model
- Wait and see
- Psychological/psychosocial interventions
- CBT
- Medication
  - SSRI
  - If ineffective switch to different class

# Refractory depression

- Venlafaxine
- Lithium
- Combination of antidepressants
- Augmentation with antipsychotics

# Mania

- Elevated mood, grandiose
- Increased activity, increased talkativeness
- Thought disorder
- Decreased sleep
- Disinhibited
- Reckless behaviour
- Psychotic symptoms

# Management of acute mania

- Stop antidepressant
- First episode start an antipsychotic
  - Consider individual risk and side effects
  - Start low and titrate according to response
- Consider adding short-term benzodiazepine

# Long term management

- If response is inadequate consider adding
  - Lithium
  - Sodium valproate
- If already on a mood stabiliser optimise treatment and then consider adding antipsychotic
- For long term treatment of bipolar affective disorder
  - Lithium
  - Sodium valproate
  - Antipsychotic

# Anxiety disorders

# Generalised anxiety disorder (GAD)

- 'Free-floating' anxiety
- Excessive and inappropriate worry
- Symptoms for several months
- Usually involve elements of:
  - apprehension
  - motor tension
  - autonomic overactivity

# GAD: acute treatment

- Emergency – benzodiazepines (max 2-4 weeks)
- CBT
- First line – some SSRIs: escitalopram, paroxetine and sertraline
- Venlafaxine
- Some TCAS – imipramine, clomipramine



# Panic disorder (PD)

- Several severe attacks of autonomic anxiety should have occurred within a period of about 1 month
- There is no objective danger;
- Not confined to known or predictable situations
- Free from anxiety symptoms between attacks (although anticipatory anxiety is common).

# PD: acute treatment

- CBT
- ? Benzodiazepines (not recommended by NICE)
- SSRIs
- TCAs (imipramine and clomipramine)
- Reboxetine

# Social phobia

- There are psychological, behavioural, or autonomic symptoms of anxiety
- the anxiety must be restricted to or predominate in particular social situations
- the phobic situation is avoided whenever possible.

# Social phobia: acute treatment

- CBT
- First choice – SSRIs
- MAOIs

# Post-traumatic stress disorder (PTSD)

- Onset follows the trauma with a latency period which may range from a few weeks to months (but rarely exceeds 6 months)
- Typical symptoms include:
  - episodes of repeated reliving of the trauma in intrusive memories ("flashbacks") or dreams
  - "numbness" and emotional blunting, detachment from other people, unresponsiveness to surroundings, anhedonia
  - avoidance of activities and situations reminiscent of the trauma.
  - a state of autonomic hyperarousal with hypervigilance, and an enhanced startle reaction

# PTSD: acute treatment

- 'watchful waiting'
- Trauma-focused CBT in severe cases
- Individual trauma-focused CBT (or EMDR) for all
- Paroxetine, mirtazapine (primary care)

# Obsessive-compulsive disorder (OCD)

- Obsessional symptoms or compulsive acts, or both, must be present on most days for at least 2 successive weeks
- The obsessional symptoms should have the following characteristics:
  - they must be recognized as the individual's own thoughts or impulses;
  - there must be at least one thought or act that is still resisted unsuccessfully;
  - the thought of carrying out the act must not in itself be pleasurable;
  - the thoughts, images, or impulses must be unpleasantly repetitive.

# OCD: acute treatment

- SSRIs
- Clomipramine
- Exposure therapy/CBT



# Psychotic illnesses

# Schizophrenia – positive symptoms

- Auditory hallucinations
- Delusional beliefs
- Thought interference
- Passivity phenomena
- Formal thought disorder

# Schizophrenia – negative symptoms

- Affective blunting
- Apathy
- Poverty of thought and speech
- Social withdrawal
- Self neglect

# Treatment

- First episode – second generation antipsychotic
  - Titrate to response
- If ineffective switch to different antipsychotic
- If ineffective – clozapine
  
- In relapse check compliance/ comorbidity
- If necessary switch to different antipsychotic
- If ineffective – clozapine

# Personality disorders

# Classification

Represent persistent and characteristic patterns of behaviour

## Cluster A

Paranoid, Schizoid

## Cluster B

Dissocial, Emotionally unstable, Histrionic

## Cluster C

Anankastic, Anxious (avoidant), Dependent

# Borderline personality disorder

- Common in psychiatric settings
- Presence of co-morbidity
- Uncertainty about the usefulness of pharmacological therapies – no evidence
- Target specific symptoms
- Use of psychotherapy

# Medication



# Pharmacological treatments

- Antipsychotics
- Antidepressants
- Mood stabilisers
- Anxiolytics

# Prescribing factors

- EBM
- Comorbidity
- Tolerability
- Medical factors
- Drug interactions
- Discontinuation effects

# Antipsychotics

# Types of antipsychotics

- First generation – ‘typicals’
  - Chlorpromazine
  - Haloperidol
- Second generation – ‘atypicals’
  - Olanzapine
  - Risperidone
  - Quetiapine
  - Clozapine
- Third generation
  - aripiprazole

# Drug action

- Excess release of dopamine in the mesolimbic pathway linked to psychotic experiences
- Antipsychotics tend to block D<sub>2</sub> receptors
- Not particularly selective, also block dopamine receptors in other pathways – side effects
- Atypical antipsychotics also block or partially block serotonin receptors

# Extrapyramidal side effects

- Dystonic reactions
- Pseudoparkinsonism
- Akathisia
- Tardive dyskinesia

# Metabolic side effects

- Hyperprolactinaemia
- Weight gain
- Lipid dysregulation
- Blood sugar abnormalities

# Other side effects

- Sedation
- Anticholinergic
- Cardiotoxic
- Increased risk of venous thromboembolism
- Increased risk of stroke
- Neuroleptic malignant syndrome



# Antidepressants

# Types of antidepressants

- Selective serotonin reuptake inhibitors
- Monoamine oxidase inhibitors
- Tricyclic antidepressants
- Others

# Selective serotonin reuptake inhibitors (SSRIs)

- Have broad spectrum anxiolytic efficacy
- Well tolerated
- Easy to manage
- Less drug interactions than older antidepressants
- Generally represent first-line pharmacological treatment

# SSRIs: pharmacokinetics

- Inhibit the reuptake of serotonin
- Works on postsynaptic receptors
- Increase levels of serotonin

# SSRIs: side effects

- Increased agitation and anxiety
- 'suicidal ideation'
- Gastrointestinal
- Changes in appetite
- Hyponatraemia
- Sexual dysfunction
- Discontinuation syndrome

# Monoamine oxidase inhibitors (MAOIs)

- Limited use
- Inhibit the activity of monoamine oxidase, increase availability of monoamines
- Irreversible (Phenelzine)/reversible (Moclobemide)

# MAOIs: side effects

- Hypertensive crisis, 'cheese reaction'
- Drug interactions e.g. indirect-acting sympathomimetics
- Sleep disturbances
- Dizziness
- Gastrointestinal complaints

# Tricyclic antidepressants (TCAs)

- Certain TCAs efficacious in some anxiety disorders
- 'sedating'/less 'sedating
- Inhibits reuptake of norepinephrine and serotonin
- Greater propensity for adverse effects
- Virtually spares dopamine
- Antimuscarinic
- Antihistaminic ( $H_1$ )



# TCAs: side effects

- Arrhythmias and heart block
- Dry mouth
- Blurred vision
- Constipation
- Urinary retention
- Sedation
- Hyponatraemia

# Others

- Venlafaxine
  - Serotonin and noradrenaline re-uptake inhibitor
  - Nausea, headache, sexual dysfunction, hypertension
- Duloxetine
  - Serotonin and noradrenaline re-uptake inhibitor
- Mirtazapine
  - Increases central noradrenergic and serotonergic neurotransmission
- Reboxetine
  - Selective inhibitor of noradrenaline reuptake

# Mood stabilisers

# Lithium

- Indications
  - Hypomania/mania
  - Bipolar affective disorder
  - Recurrent depression
- Monitoring
  - Lithium levels
  - Renal function
  - Thyroid levels
  - Calcium levels

# Adverse effects and toxicity of lithium

- Side effects
  - Fine tremor, polyuria, thirst
  - Hypothyroidism
  - Hyperparathyroidism
  - Nephrotoxicity
- Toxicity
  - Gastrointestinal effects
  - CNS effects
  - Coma, death

# Sodium valproate

- Indications
  - Mania
  - Bipolar affective disorder
- Adverse effects
  - Gastric irritation, nausea
  - Weight gain, peripheral oedema
  - Liver failure
  - Blood abnormalities
- Teratogenic

# Anxiolytics

# Anxiolytics

- Buspirone
  - Acts at serotonin receptors
  - Side effects – nausea, dizziness, headache, nervousness, excitement
- Pregabalin
  - Works on calcium channels; decreases the release of some neurotransmitters, but increases neuronal GABA
  - Side effects – dizziness, drowsiness, visual disturbances, sexual dysfunction, oedema, weight gain
- Benzodiazepines



# Benzodiazepines

- Commonly used as an anxiolytic
- Should be reserved for short-term relief
- Some have proven efficacy in the treatment of panic disorder, GAD and social phobia

# Benzodiazepines: pharmacokinetics

- Short acting/long acting
- Modifies the release of GABA and potentiates the inhibitory effect of GABA
- Leads to sedatory and anxiolytic effects

# Benzodiazepines: side effects

- Paradoxical agitation and aggression
- Dependence and withdrawal
- Drowsiness
- Light-headedness
- Confusion
- Ataxia
- Amnesia

# Summary

- There is a wide variety of mental disorders and accurate assessment and diagnosis leads to appropriate treatment
- There are multiple efficacious treatments both pharmacological and psychological
- Patient engagement is a key factor to a successful outcome

Thank you