Heart failure and depression

A very brief introduction / refresher

Dr Mary Docherty, Consultant Psychiatrist

Mary.Docherty@kcl.ac.uk

What is depression?

“It’s like drowning, except everyone around you is breathing.”

“When you’re depressed you don’t control your thoughts, your thoughts control you. I wish people understood that.”

“*Depression is feeling like you’ve lost something but* having *no clue when or where you last had it. Then one day you realize what you lost is yourself*.”

- ***“That’s the thing about depression: A human being can survive almost anything, as long as she sees the end in sight. But depression is so insidious—and it compounds daily—making it impossible to ever see the end. That fog is like a cage without a key.”***

- ***“The only thing more exhausting than being depressed is pretending that you’re not.”***

- ***They ask, “How are you doing?” But what they mean is, “Are you over it yet?”***

Depression symptoms

- Number of symptoms, severity of symptoms AND degree of functional impairment
- > 2 weeks. Symptoms present most of every day
- Clusters: Biological, cognitive, psychological and social
- Depressed mood and/or loss of pleasure in most activities (core)

Symptoms

- continuous low mood or sadness
- feeling hopeless and helpless, low self-esteem, tearful
- feeling guilt-ridden, **irritable** and intolerant of others
- having no motivation or interest in things
- no enjoyment from life
- anxious, worried, suicidal thoughts, thoughts of self harm
- low energy, reduced sex drive, slowed down, disturbed seep, disturbed appetite
- avoiding friends and family, problems at work or home, neglecting interests

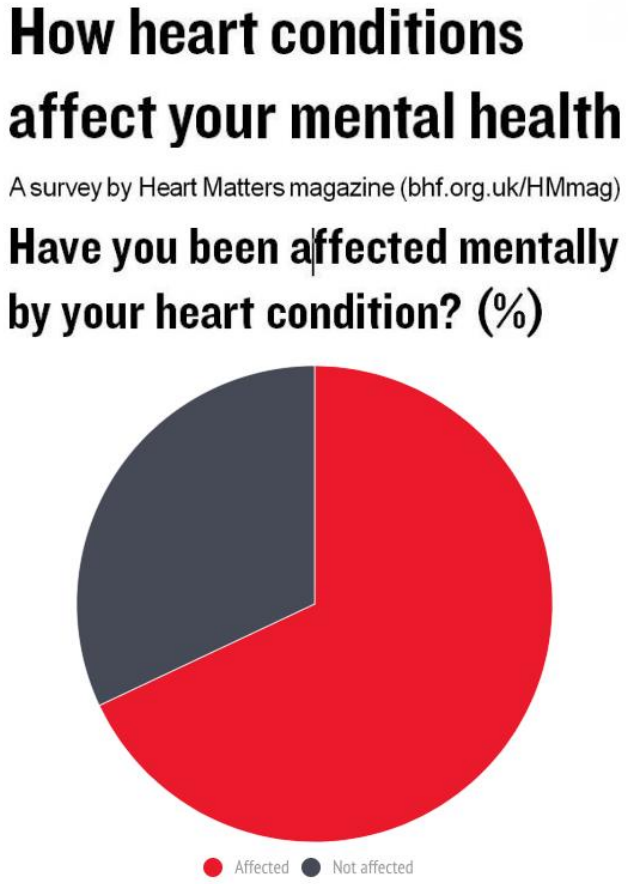
How common is depression in CVD?

- UK depression prevalence rates – 17% - approx. 1 in 6.
- 31–45% of patients with CVD have clinically significant **depressive** symptoms
- At least **DOUBLE** gen pop. in CVD patients
- EUROASPIRE- up to 35% of men and up to 65% of women
- (ENRICHD) (post MI) 74%
- Severity of cardiac disease some correlation with increased depression prevalence: 10% in general practice clinics: 30% in outpatient clinics: **50%** in those who are an inpatient for coronary artery bypass surgery

Why is co-morbidity so common?

- **Depression increases the risk for CVD and CVD increases the risk for depression**
- Lifestyle/ behavioural factors
- Physiological mechanisms: likely multifactorial including sympathetic activation, hypothalamic–pituitary activation, endothelial dysfunction, platelet activation, proinflammatory cytokines, and atherosclerosis development along with cardiac vascular and rhythm abnormalities.

How good are we at identifying psychological needs?



‘Our’ priorities may not be the patient’s priorities

“Nobody has ever asked me how I feel mentally. They only ask about me physically.”

Telling people about the risk of low mood is important

Giving a safe space for people to offload is very very important

Managing depression

- 1. **Ask** about it- be **curious**, listen - you don't need to fix it.

- Treatment:

A. Activity and self management (do not underestimate how hard this is for people) – Gentle steps. Stay with them.

B. Talking therapies- CBT, counselling. Other…

C. Medication

I never prescribe unless we have a plan for A and B.

Evidence on medication in depression and heart failure?

- Data limitations.
- Suggestion that depression outcomes less good than for general population
- BUT populations are different (older; biological sys may not improve on rating sales due to HF sys overlap)
- Possible that depression in HF is biologically distinct
- Decisions on treatment are based on efficacy data from the non-HF population: prescribing guided by likelihood of drug/ drug interactions and adverse effects that could worsen HF sys.

Counselling about medication is **extraordinarily** important

Antidepressant medication

- **Is overall effective, saves lives, impacts on mortality and morbidity**
- It needs to be thoughtfully prescribed and thoughtfully monitored
- Collaboration is everything. **Transparency** is everything.
- Have they tried it before, what do they know about it, what are they worried about?
- HOW you do it is (nearly) as important as what you prescribe
- Lots of myths about medication and stigma (I don't want to be weak..)

Side effects – usually mild and transient

- feeling agitated, shaky or anxious
- feeling or being sick, indigestion, diarrhoea or constipation, loss of appetite and weight loss
- dizziness, blurred vision, dry mouth, sweating
- sleeping problems (insomnia) or drowsiness
- headaches
- **low sex drive, difficulty achieving orgasm during sex or masturbation, difficulty obtaining or maintaining an erection (erectile dysfunction)**

Primary risks in antidepressant prescribing

- SSRIs and **bleeding**
- TCAs (amitriptyline) and **QTc prolongation**
- SNRIs (mirtazapine) and **weight gain**
- **Hyponatremia**- all of them - mirtazapine best

Serotonin syndrome- rare but real and serious

- Increased levels of serotonin following SSRI. Serious.
- Usually a result of an erroneous combination (eg St Johns Wort) or dual prescription of SSRI
- Confusion, agitation, muscle twitching, sweating, shivering, diarrhoea
- 38C +, seizures (fits), (arrhythmia), loss of consciousness

Hyponatraemia- a refresher

Older populations. Elderly vulnerable because fluid levels become more difficult for the body to regulate.

Side effect occurs because SSRIs can block the effects of a hormone that helps to regulate levels of sodium and fluid in the body.

Mild hyponatremia can cause symptoms similar to depression or side effects of SSRIs, such as:

- **feeling sick, headache, muscle pain, reduced appetite, Confusion**

More severe hyponatremia:

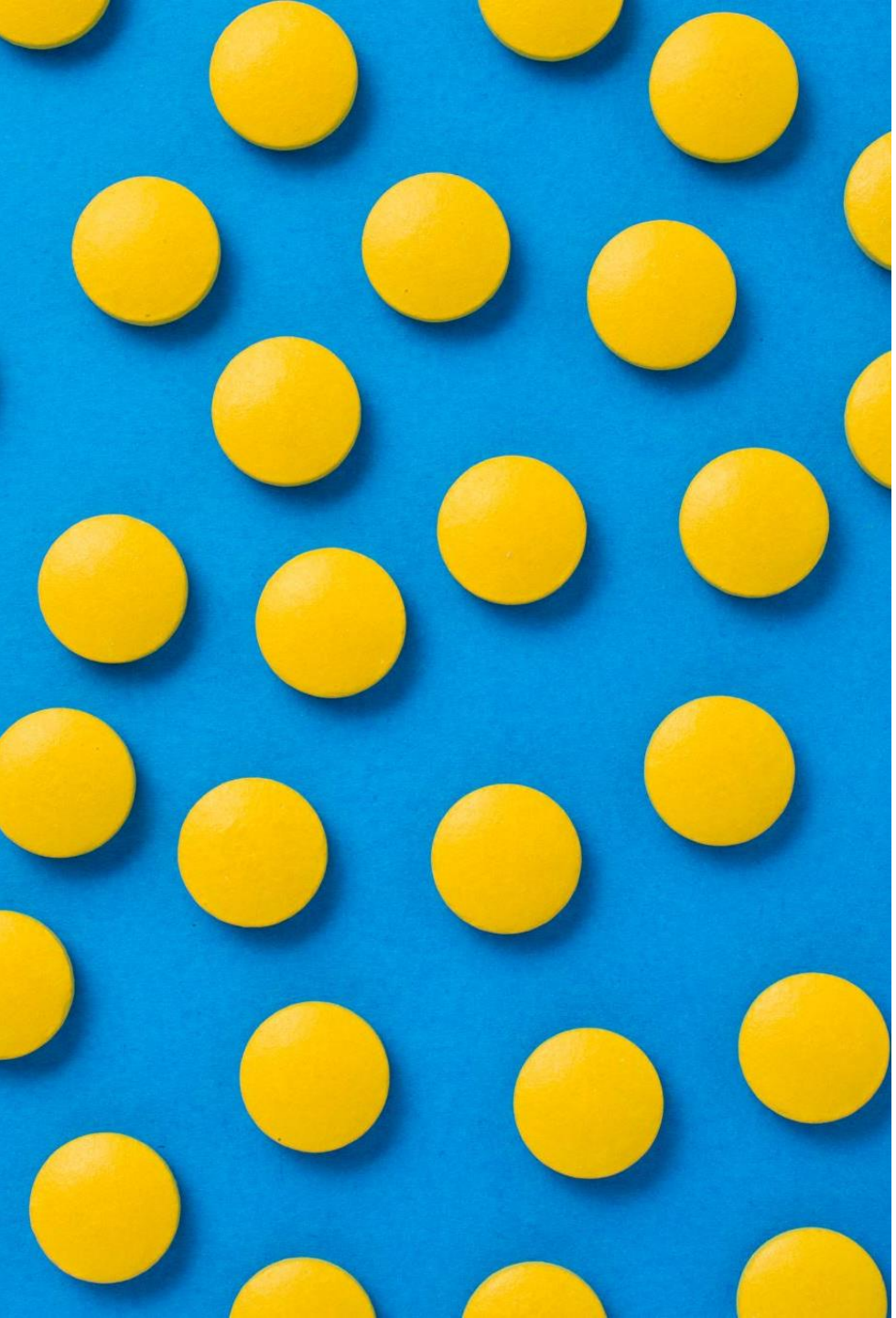
- **feeling listless and tired, disorientation, agitation, psychosis, seizures**

Monitoring following starting an antidepressant

- **Hyponatremia**
  - Baseline, 2 weeks, 4 weeks and then 3 monthly
- QTc prolongation, for patients on bupropion, citalopram, escitalopram, moclobemide, lofepramine or venlafaxine:
  - Baseline, 1 week after every dose increase

Drug-drug interactions

- ACEi / ARB
  - + TCA: additive hypotension
  - + lithium: lithium toxicity due to reduced excretion
- Diuretics
  - (furosemide) + risperidone: increased mortality in dementia
  - + lithium: lithium toxicity
- Ivabradine
  - + fluoxetine / paroxetine: increased plasma concentration of ivabradine
- Digoxin
  - + trazodone / diazepam: increased plasma concentration of digoxin
  - + bupropion: reduction in effect of diazepam



Practical prescribing

Sertraline or mirtazapine unless a good reason why not to.

Sertraline or mirtazapine unless a good reason why not to

- Diabetes- Use sertraline avoid mirtazepine
- Warfarin/ anticoag- mirtazapine (if SSRI check on PPI)
- Stroke- caution mirtazapine (? Data on secondary stroke)
- Stroke + DOAC + Warfarin- citalopram/ escitalopram and PPI
- AF- sertraline, mirtazapine (avoid TCA and citalopram)
- Falls- SSRI (avoid TCAs)
- ACEi- sertraline, mirtazapine, vortioxetine (avoid TCA and caution bradycardia)

Any questions?