Poverty, pathology and pills

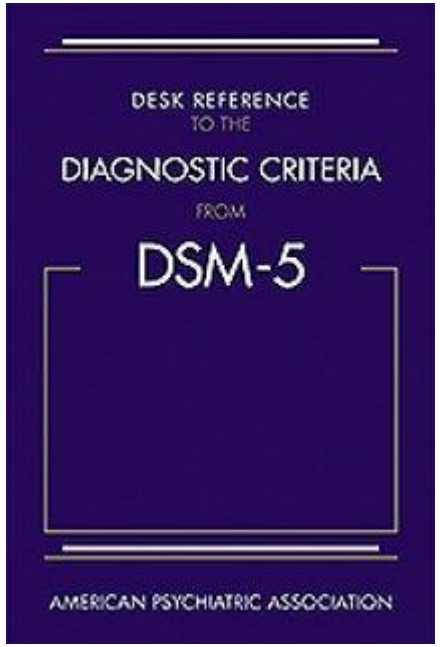
15th-16th January 2019, London

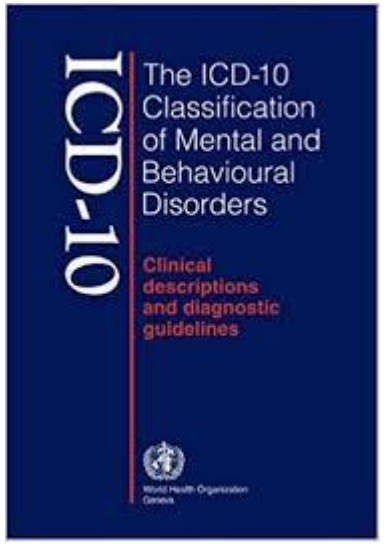
University of Exeter Medical School | University of Plymouth | ESRC Economic & Social Research Council | NHS Health Education England

Understanding what diagnosis in mental health really is, and what treatments really do!

Joanna Moncrieff, Destress conference, January 2019

Diagnosing mental health problems





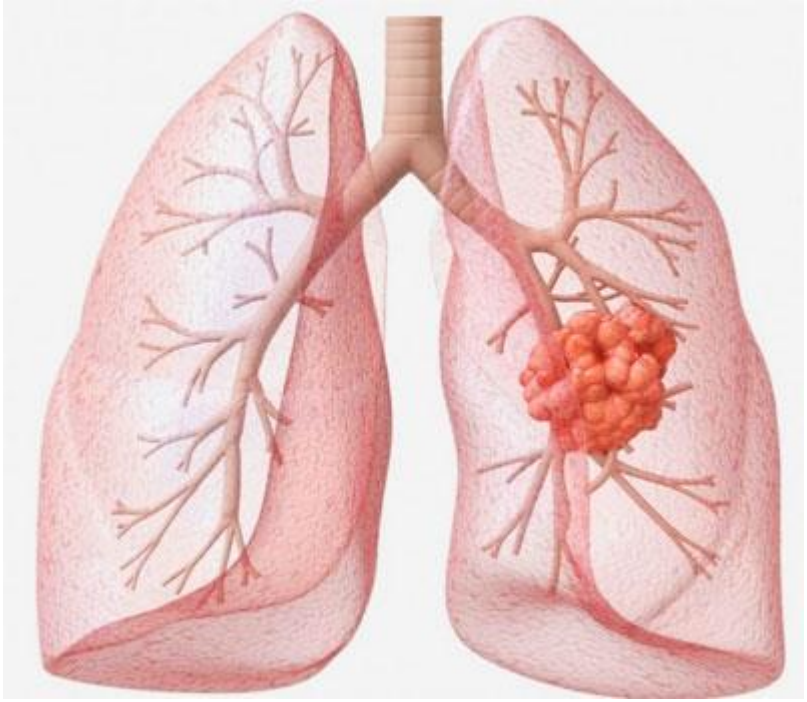
ICD 10 depression criteria:

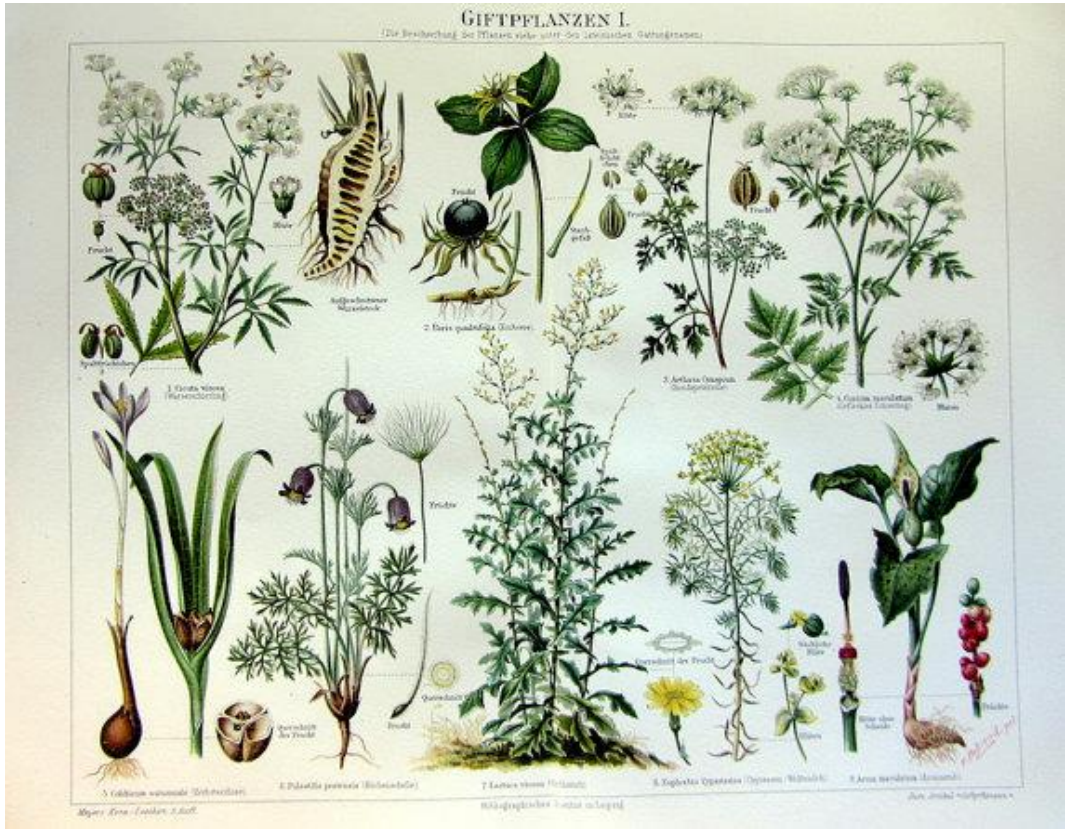
Table 1 - Diagnostic criterion of depressive episode according to the ICD-10*[45]

Main symptoms
1. Depressed mood
2. Loss of interest
3. Fatigability
Accessory symptoms
1. Reduced concentration and attention
2. Reduced self-esteem and self-confidence
3. Ideas of guilt and unworthiness
4. Bleak and pessimistic views of the future
5. Disturbed sleep
6. Diminished appetite

***** *Mild episode: 2 fundamental + 2 accessory symptoms*
Moderate episode: 2 fundamental + 3 to 4 accessory symptoms
Severed episode: 3 fundamental + > 4 accessory symptoms

Diagnosis vs classification





Diagnosis in medicine

- Diagnosis indicates the presence of a specific biological abnormality that produces symptoms and signs
- Everyone with a particular diagnosis has the same underlying biological abnormality
- The outcome for everyone with a particular diagnosis will fall within a range of outcomes determined by the nature of the biological process.
- Effective treatments will act on the biological basis of the condition.

- Not all medical terms are diagnoses, some are classifications, some mixed e.g. epilepsy; rash

Psychiatric diagnosis is tautological

- Criteria consisting of certain behaviours or experiences equate to the diagnosis
- The ‘diagnosis’ indicates the same behaviour and experiences that define it
- There is an implication of an underlying mechanism but it plays no part in the diagnostic process

Is depression a disease?
Evidence for a ‘chemical imbalance’

- Serotonin and noradrenalin abnormalities have been proposed (monoamine theories of depression)
- Independent evidence of serotonin or noradrenalin function in depression is highly contradictory
- No specific abnormalities linked with depression have been consistently found

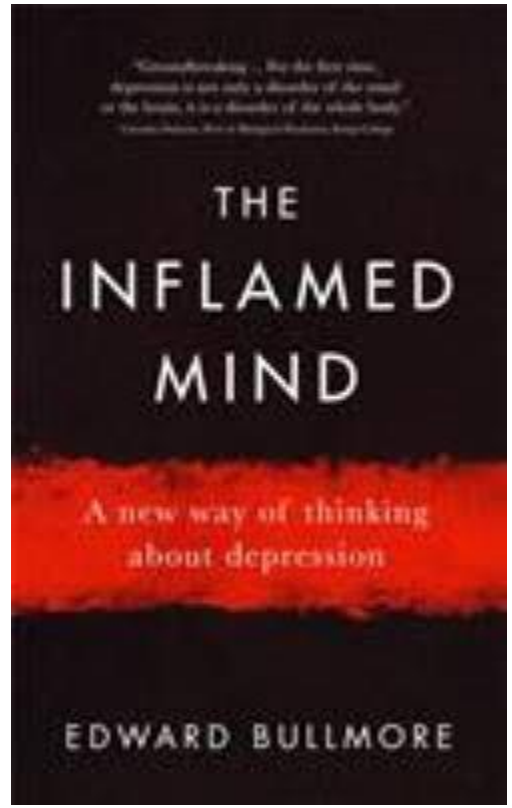
Serotonin 1A receptor studies

- Lower levels in depressed people compared to ‘normals’ (Drevets et al, 1999; Sargent et al, 2000)
- Higher levels (Parsey et al, 2006; Reivich et al, 2004)
- No difference (Meyer et al, 2009; Parsey et al, 2006)
- Suicide victims: also inconsistent (Lowther et al, 1997; Matsubara et al, 1991; Stockmeier et al, 1997)

Serotonin depletion studies

- Tryptophan depletion: does not produce depression in volunteers (Murphy et al, 2002). Some studies show depression in people previously treated for depression with SSRIs (Delgado et al, 1999)

- Parachlorophenylalanine studies: reduced serotonin associated with insomnia, aggression, hypersexual behaviour, irritability, hypersensivity to the environment, paranoia (Mendels and Frazer, 1974)


THE
INFLAMED
MIND
A new way of thinking about depression
EDWARD BULLMORE

Depression and inflammation

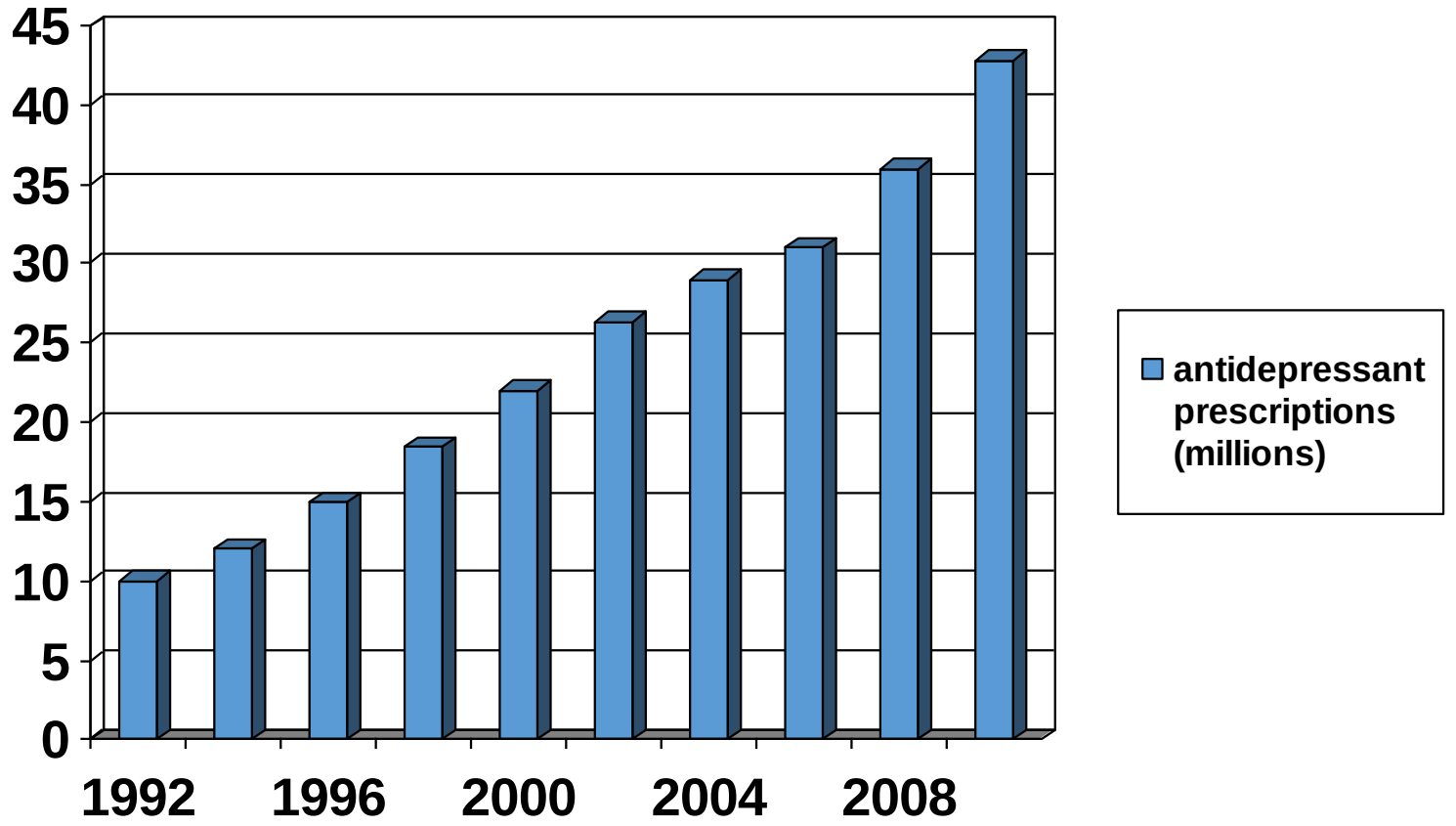
- Depression is associated with deviations in some inflammatory markers
- They are also associated with social class, obesity, exercise, sleep deprivation etc
- A causal association specific to depression has not been demonstrated

- Reference:

- “People with depression may have an imbalance of the brain’s neurotransmitters” Eli Lilly, 2003

- “Paxil CR helps balance your brain’s chemistry” PaxilCR.com, 2009

Trends in antidepressant prescribing 1992-2010



Models of drug action

Moncrieff & Cohen, 2005, 2006; Moncrieff, 2008

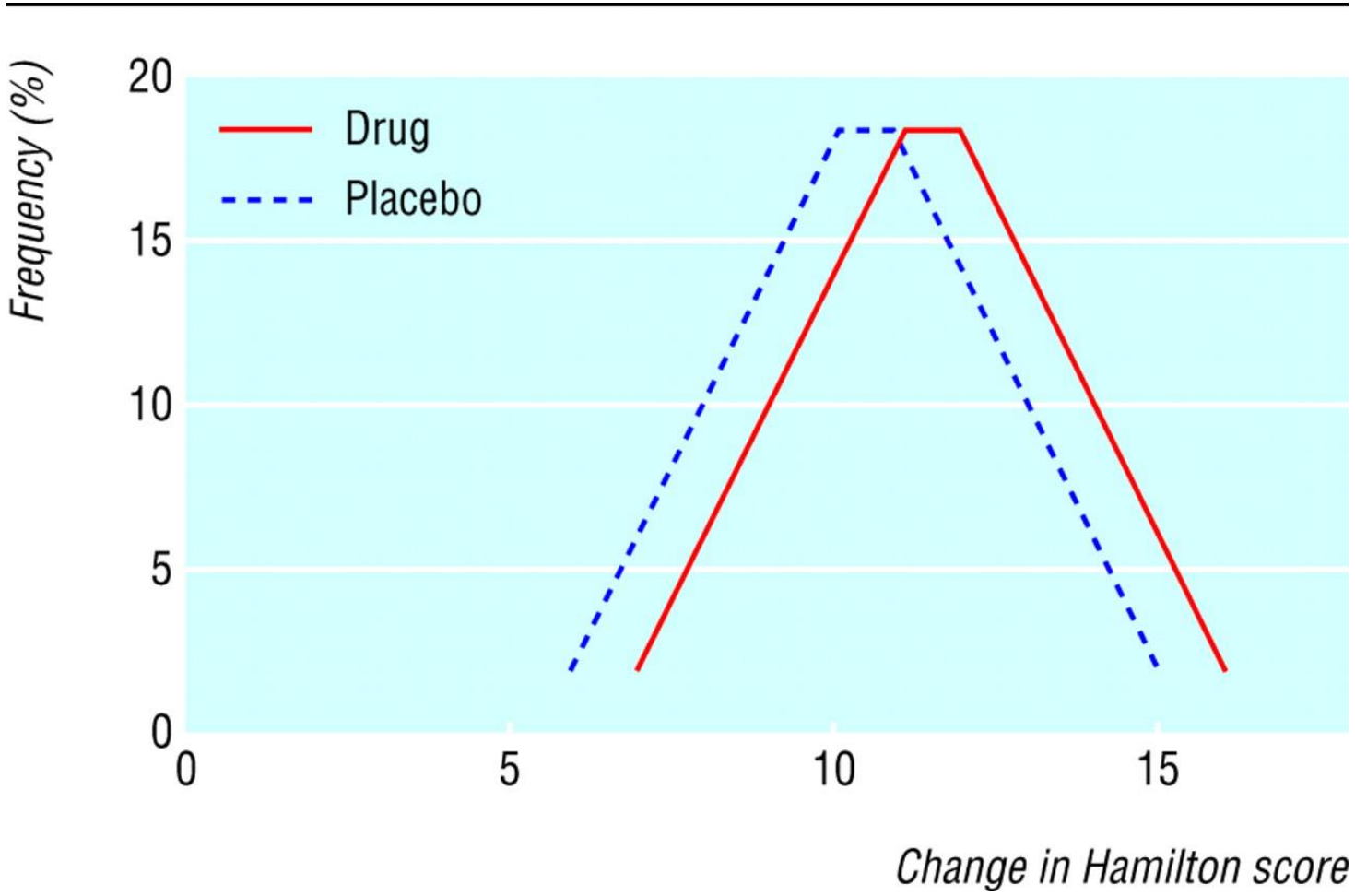
Disease centred model	**Drug centred model**
Drugs correct an abnormal brain state	Drugs create an abnormal brain state
Drugs as disease treatments	Psychiatric drugs as *psychoactive drugs*
Therapeutic effects derived from effects on (presumed) disease pathology	Useful effects are a consequence of the drug induced state
Paradigm: insulin for diabetes	Paradigm: alcohol for social anxiety

The drug-centred model- how antidepressants ‘work’

- Interaction of psychoactive effects and symptoms
- Placebo and ‘amplified placebo’ effects

- Both may produce differences from placebo in RCTs.
- But are they worthwhile?

Difference between antidepressants and placebo is small (around 2 points on HRSD in meta-analyses Kirsch et al, 2002; Sugarman et al, 2014)



Psychoactive effects of “antidepressants” (Herrmann, W.M. & McDonald, R.J. 1978)

TCAs

- Profound sedation
- Cognitive and motor impairment
- EEG slowing
- Dysphoria
- Complex effects on numerous neurotransmitter systems
- Some have dopamine blocking activity (esp. amitriptyline and clomipramine

Pychoactive effects of SSRIs and venlafaxine:
(Goldsmith L. & Moncrieff J. 2011)

- Lethargy, mild cognitive impairment and emotional flattening or restriction
- Insomnia, agitation, restlessness, feelings of tension and mood instability- especially prevalent in younger people

- Not euphoriant like amphetamines
- Not calming/relaxing like benzodiazepines

- Increased suicidal ideation and behaviour

Pychoactive effects of SSRIs and venlafaxine (Efexor): (Goldsmith & Moncrieff, 2011)

- “listlessness and lethargy”
- “sleepy all the time”
- “difficulty focusing”
- “fogginess”
- “total loss of libido”
- “inability to care about anything”
- “general numbness/mental blankness”
- “Increased anxiety.., borderline panic, mild insomnia”
- “mood swings”
- “irritability”
- “sometimes suicidal”

So what is depression? Adolf Meyer

- With the disease model, the doctor ‘surrenders his common sense attitude’ and fails ‘to view the **abnormal mental trend as a genuine but faulty attempt to meet situations, an attempt worthy of being analysed**’ 1948, p 136

A social constructionist viewpoint

- Emotions are complex and sophisticated human reactions to the human environment
- They have biological correlations, but are not the same as pure physiological states like being hungry, tired or having a cold
- Emotions do not map onto particular physiological states- e.g. arousal is associated with a range of different emotions like anger, anxiety and elation
- Emotional terminology and probably experience varies between cultures
- Emotions involve *moral* evaluations of events
- They have a communicative function

Rom Harré, An outline of the social constructionist viewpoint. In Harré, Editor, The social construction of emotions. 1986, p 2-14

Alternative treatment options

- “The power of a diagnosis is that it changes the way that people understand and identify and treat themselves” Greenberg, P 229

- Believing mental health problems are diseases – i.e. inherent biological defects – is potentially debilitating and disempowering.

- Treatment needs to enable people to develop their own coping mechanisms and resources