Dementia, Depression and Memory

Mood Disorders Unipolar or Bipolar Depression. Hugely problematic from a diagnostic point of view.

- **Severe Depression:** More marked cognitive impairment. Impaired working, long-term memory. Can occur in old people.
- **Symptoms of Depression:** depressive episodes. depressed mood, loss of interest of pleasure, weight loss, insomnia, fatigue, thoughts of suicide etc.
- **Epidemiology:** 1:2 MF ratio. 10-25% lifetime prevalence. Smaller genetic for unipolar than bipolar. Mostly environmental (traumatic events).
- **Cognitive (Mild/Moderate):** Mixed findings and subtle effects of working, long-term and implicit (procedural) memory. Retrieval is most impaired especially for emotional memories.
- **Brain Basis:** Disruption of **fronto-subcortical pathways**. Dysfunction of monoamine neurotransmitters such as serotonin and noradrenaline.
- **Treatment:** CBT, tricyclics, SSRI, ECT (electro convulsive therapy), lithium (esp. with bipolar), anticonvulsant drugs.

Dementia: a chronic or persistent disorder of the mental processes caused by brain disease or injury and marked by memory disorders, personality changes, and impaired reasoning. OED

Depression: a condition of mental disturbance characterised by such feelings to a greater degree than seems warranted by the external circumstances, typically with lack of energy and difficulty in maintaining concentration or interest in life *: clinical depression*. *OED*

Methodological Issues: Longitudinal vs. Cross Sectional

Subcortical Dementia Degenerative disease of pathways to the frontal lobes. Therefore similar to dementias directly affecting frontal lobes.

- **'Parkinsons Disease'** (others include Huntingtons) characterised by resting tremor, **bradykinesia** (reduced velocity of movement), **akinesia** (impairment of movement initiation). postural disturbance, **'shuffling gait'**
- **Epidemiology:** linked to degeneration of **dopamine receptors in basal ganglia** (explains impairments of movement). Around 1 in 1000. 1:1 mf ratio. Little genetic link.
- **Cognitions:** Overlaps with AD.

Cortical Dementia Degeneration of frontal lobes.

- **Alzheimer's Disease** DSM-IV TR states: Aphasia (language), Apraxia (ability for movements), Agnosia (recognise objects, people ec.) and Executive Dysfunction. Decline and impairment of everyday life (onset to death - about 8 years)
  - **ABCD:** Activities, Behaviours, Cognition and Distress Affected.
  - **Epidemiology:** Increase with age (1 in 5 >85). Memory deficits are usually the first sign.
  - **Brain Basis:** Genetic factors, abnormal structures in brain (plaques and tangles) and nerve cell death.
  - **Early AD:** Minor memory failures, losing objects, word-finding difficulty, metacognition of AD intact.
    - **Memory:** anterograde impairment (episodic), semantic memory (e.g. words, names), procedural (only repetition priming), reduced memory span (impaired central executive)
  - **Advanced AD:** Lost in own home, failure to recognise people, unsure of time, date and year, poor judgment, delusions.
    - **Memory:** Marked memory impairment. Impairment of language, semantic memory, visuospatial, impaired social cognition and personality change, **mentalising.**
  - **Medication:** Drugs allow for improvement of cognitive impairments. Sometimes antipsychotics used for behavioural problems.
  - **Other Treatments:** Alter environment to minimise memory demands. Memory training. Reality orientation (Spectore et al. 2001) (spend time discussing previous times leads to reduced anxiety and depression but effects are not convincing).
- **Vascular Dementia** Multiple areas of cortical damage (also deep white matter damage). Linked to stroke etc. (pattern depends on where damage is. Linked to breakdown of vascular symptoms)
- **Frontotemporal Dementia:** Early personality change. Impairment of social cognition.