

# What is and isn't Dementia

Dr Sen Kallumpuram MD MRC Psych DGM  
Consultant Psychiatrist & ACD  
Older People's Services, Luton

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## Luton Population

- Luton has a population of **215,000**
- **26,000** above the age of 65 years
- Population is **younger** and **super diverse**
- **Over 50% BAME background**
- Dementia Prevalence in Luton **1600**
- **We receive over 750 referral/ year**

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# Dementia

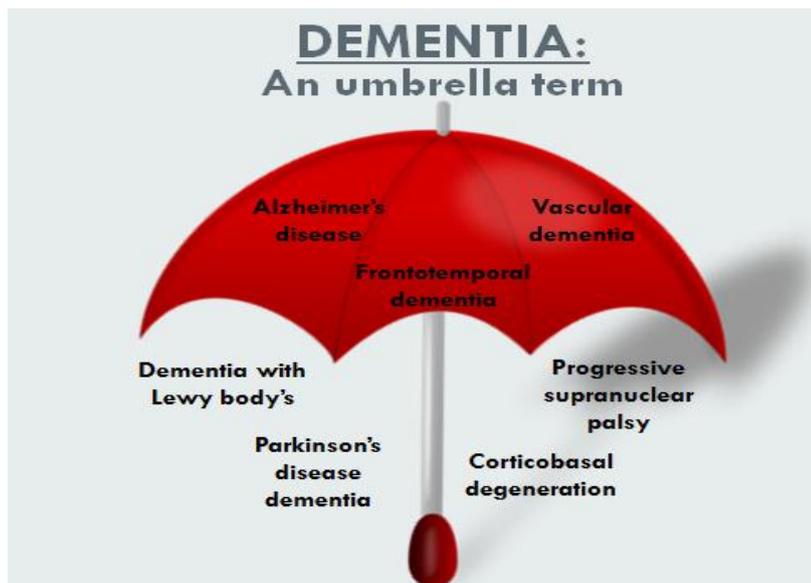
A neurodegenerative illness



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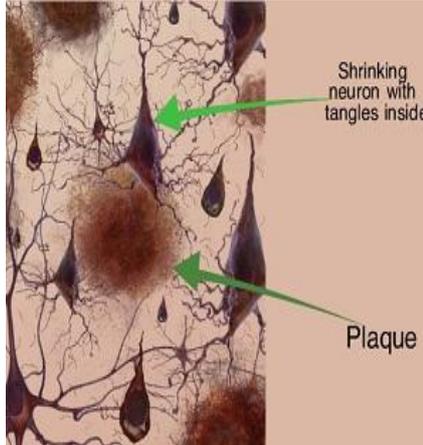
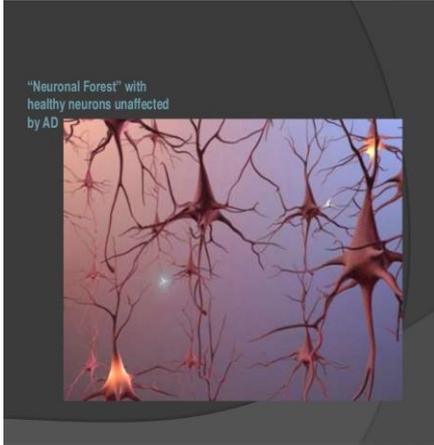


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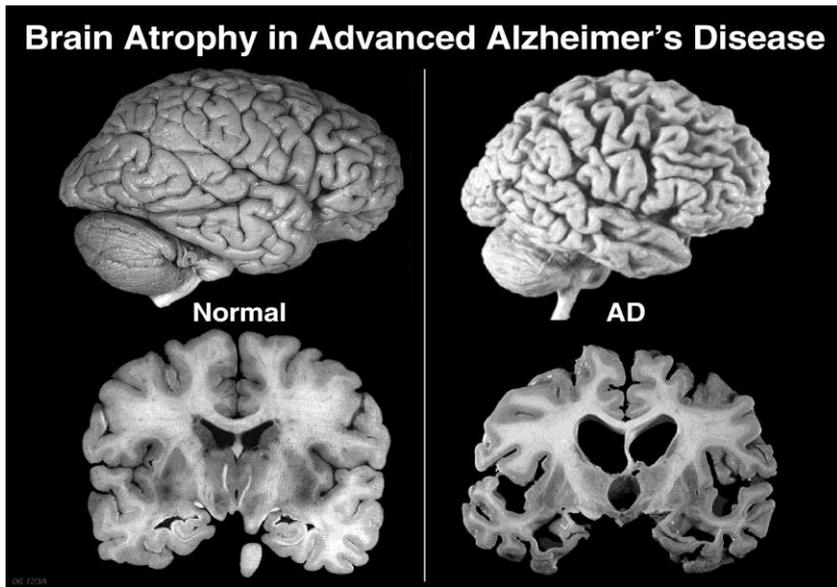
# Neuropathology



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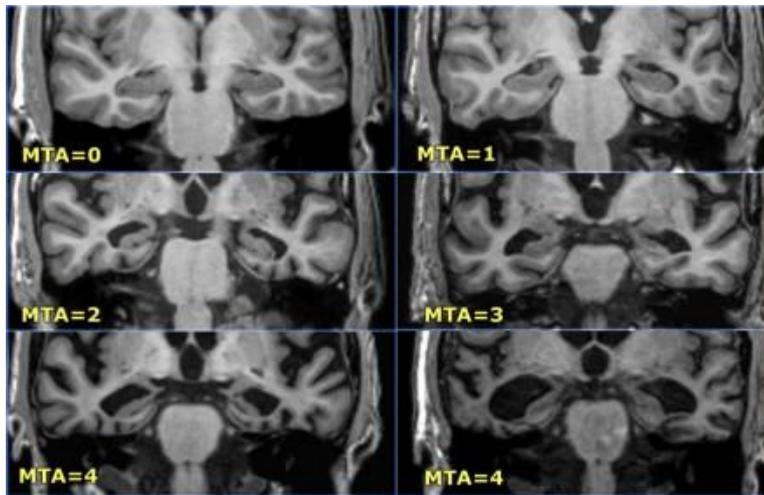


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## MRI- Atrophy of Hippocampus

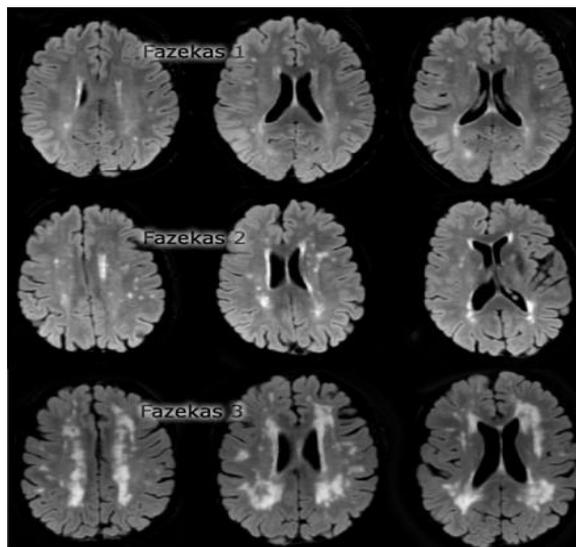


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## MRI- Vascular Dementia

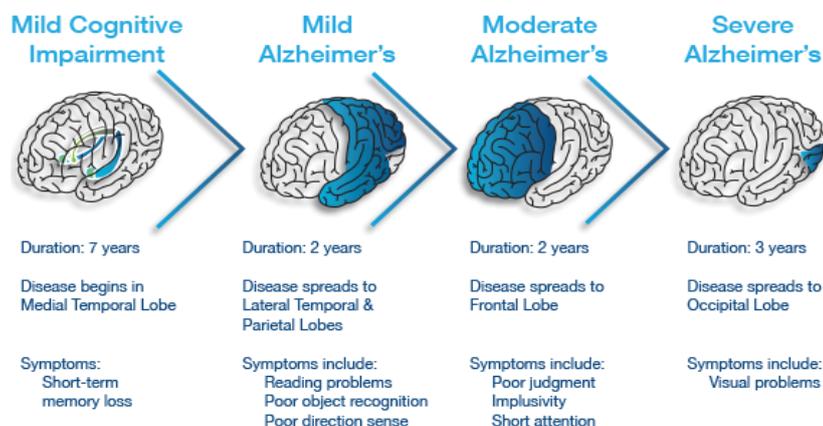


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# Stages of Alzheimer's disease

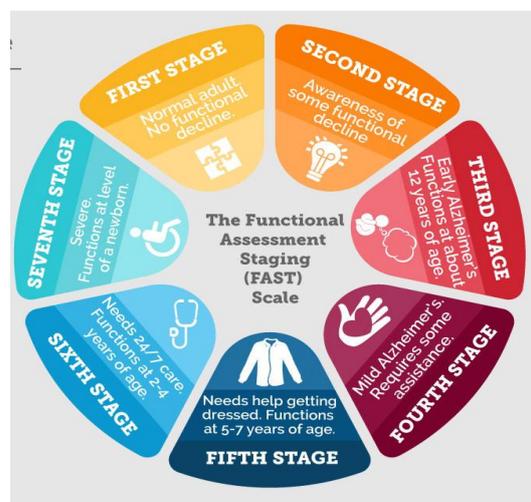


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# Stages of Alzheimer's Disease

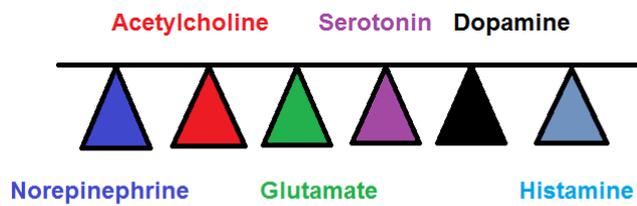


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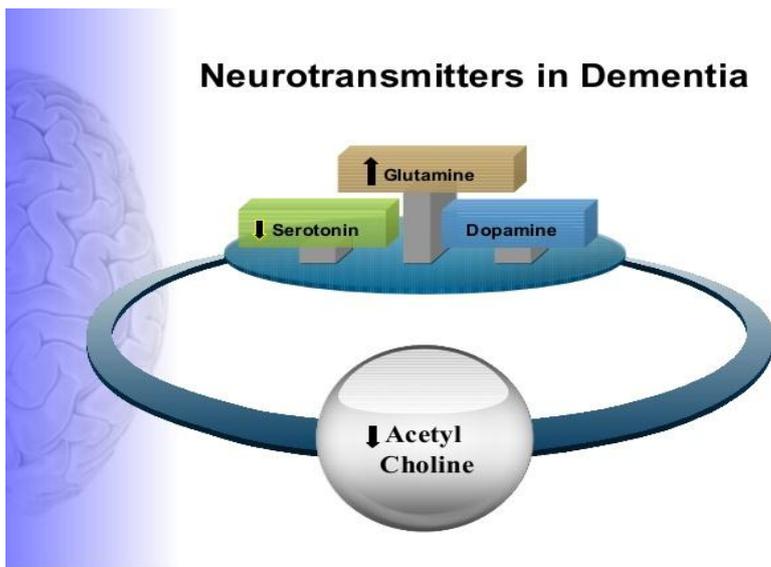
# Neurotransmitters in the Brain



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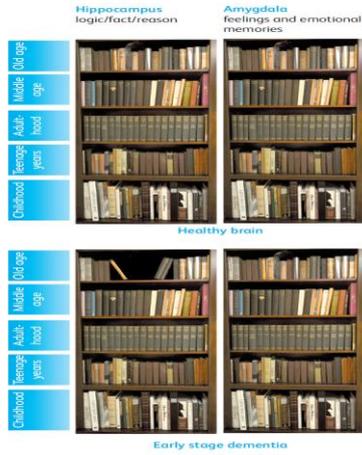


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## The bookshelf model of memory storage



The brain stores memories in many complex ways. This model shows two fundamental types of memory: factual, including logic and reason – stored by the **hippocampus** system; and emotional, feelings-based memory – stored by the **amygdala**.

Both factual and emotional memories can be attached to all experiences.

For a person with dementia, the factual memory bookshelf – the hippocampus – is the first to be damaged. In the early days there may only be a small amount of damage to the most recent memories (stored on the top shelves). This may mean that the information is still there – albeit a little muddled or hard to find – for example, dates and times may be confused.

Over time this bookshelf will start to collapse resulting in the loss of factual memory and the order of time. If the top shelves, the recent memories, have been damaged then the person will have the strongest memories from many years ago. This could mean that the person believes themselves to be much younger than they are and if so, they may have difficulty 'placing' those around them in their life.

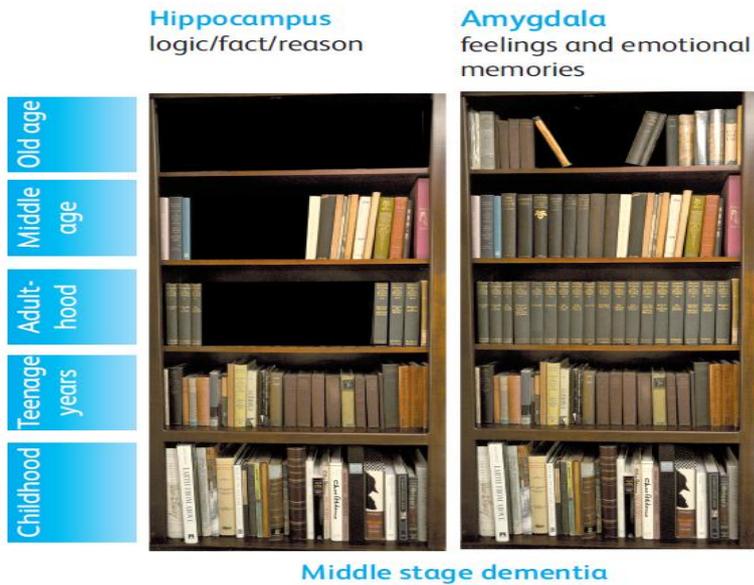
### Reference

Braak, H (1991). Review: Neuropathological staging of Alzheimer-related changes. Acta Neuropathologica. Vol 82. pp239–259.

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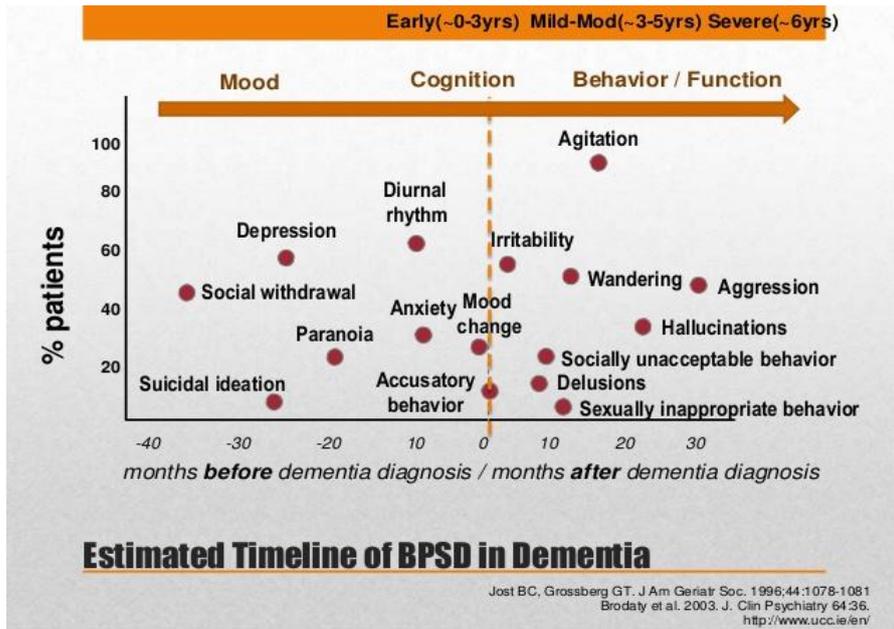
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## Dementia – what can we do?

- Preventing well
- Diagnosing well
- Supporting well
- Living well
- Dying well

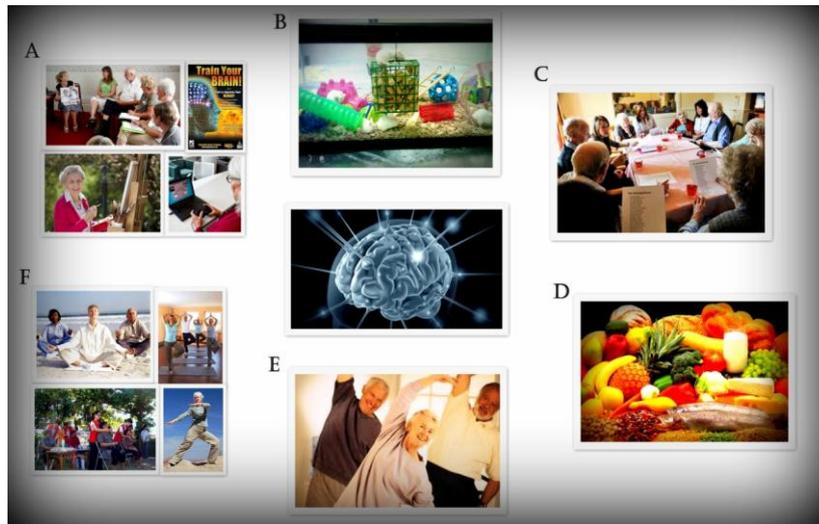
Prof. Alistair Burns

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## Non pharmacological



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## Dementia Medications

### Cholinesterase Inhibitors

Donepezil  
Galantamine  
Rivastigmine

### Memantine

- Antidepressants
- Antipsychotics

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**Thank you!**

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