## Worksheet 9: Models for understanding behaviour viewed as challenging

**The Biomedical Model** of dementia assumes a causal relationship between neuropathology and dementia. This model suggests that 'challenging behaviour' may not be secondary to neurological impairment but it can be as a direct result of lesions to the structure of the brain or changes to the conduction of messages between brain cells.

- **Occipital Lobes:** if the occipital lobes are damaged it can lead to a person experiencing difficulty with vision or recognising objects. Shapes, form or colours may become distorted. A person may experience hallucinations or have perceptual difficulties (2D can appear to be 3D). A person may experience blindness or an inability to see specific objects (either stationary and/or moving). A person may experience poor processing of visual information.
- **Hippocampus:** the hippocampus is where the formation, organisation, and storage of new 'short-term' memories occurs. It is here that these short term memories are turned into long-term memories. These are then stored elsewhere in the brain. The hippocampus is also responsible for connecting certain sensations and emotions to these memories. If there is damage to this part of the brain, then new memories may not be formed. A person may have increasing difficulty recording and remembering new facts.
- **Frontal Lobes:** these are involved in the control of primitive emotional responses in response to perceived experiences. If these parts of the brain are damaged it may result in the person experiencing personality changes, and difficulties with concentration and planning. They may display impulsive, disinhibited and socially inappropriate behaviour.
- Wernicke's Area: this area manages our understanding of language. Damage can result in receptive or fluent aphasia (difficulty with language or speech). Unlike more common types of aphasia, Wernicke's aphasia does not affect a person's ability to produce words. Instead a person may lose their ability to understand the meaning of words.

**The Biological Model** identifies the effect on the whole person of conditions leading to acute confusional states or delirium. Changes in behaviour are attributed to altered body chemistry where homeostatic equilibrium is disturbed. (e.g. due to a urinary tract infection or constipation). **Delirium is not dementia, and it can be treated and resolved very easily!** 

**The Psychiatric Model** of dementia explores the 'psychiatric' features of dementia.

■ **Delusions** are false beliefs that conflict with reality. Delusions are often reinforced by the misinterpretation of events. Many delusions also involve some level of paranoia. Some people may experience delusions that could happen in real life (being poisoned, followed, lied to, conspired against, or loved from a distance).

- 37% of people with Vascular disease and Alzheimer's disease are thought to experience delusions.
- **Hallucinations** are where someone sees, hears, smells, tastes or feels things that do not exist outside of their mind. 80% of people with Lewy Body disease are likely to experience visual hallucinations.
- **Anxiety** is a feeling of unease, such as worry or fear, that can be mild or severe. A person can feel nervous, on edge, panicky, overwhelmed, full of dread or out of control. Some people may have insomnia, low appetite, concentration problems, tiredness and irritability. They may believe they are having a heart attack, feel faint, have stomach cramps, sweat more than usual and and/or need to go to the toilet more than usual.
- **Depression** is a low mood that can last for weeks or months. It presents as feelings of unhappiness, hopelessness, low self-esteem and/or lack of pleasure in things the person would usually enjoy. In its mildest form, depression can be defined as being in low spirits. In this form, it doesn't necessarily stop a person leading their 'normal' life but it can cause everything to seem harder than usual and less worthwhile. At its most severe, depression can be life-threatening because it can make a person feel that their life has no value or meaning, leading to suicidal thoughts.

**The Psychological Model** of dementia considers the needs of human beings to maintain their ego, sense of self and autonomy. Actual or perceived threats to these aspects of human experience can be damaging. People therefore adopt defence mechanisms and coping strategies to deal with these situations.

- **Denial:** is a defence mechanism that usually involves a person ignoring, not acknowledging or denying the consequences of their reality or of the reality of the situation that they may find themselves in. This is usually in order to avoid them experiencing feelings of distress or anxiety.
- **Adaptive paranoia** is experienced by some people with dementia, especially after experiencing distress. They may experience 'paranoid thinking' as an adaptive means to balance what appears to be happening to them with what is actually happening. For example, they may mislay things and reason that they have been stolen or moved by others.
- **Confabulation** is where a person will make up a story to explain away gaps in their experiences or memory. Some people with dementia can become very skilled at utilising past memories in order to cope with changes or to explain their difficulties. Confabulations are often linked to previous real-life experiences and are therefore very plausible. This process can help persuade the person themselves and others that the explanation given is the correct one.
- **Isolation** is the experience of being separated from others. It may result from a real or perceived physical or emotional separation. It is not uncommon for an isolated person to experience loneliness, low self-esteem, social anxiety, depression, or other mental health concerns. Some people with dementia may be anxious about leaving a place of safety and security because here they can carry out familiar tasks in a familiar environment. Others may choose to avoid other people so to minimise any sense of pressure to 'perform' or speak.

■ **Inflexibility** and increasingly rigid routines and responses are evident in some people with dementia, especially if they experience fear or anxiety when doing something 'new'. For these individuals, the need to stick to a predictable pattern is important in maintaining a sense of security and achievement. Some people with dementia can feel lost, confused or distressed if they are taken away from their usual patterns or routines. The response can be to refuse to be taken away from their pathway.

## What other needs may drive the behaviour of a person with dementia?

