



Walking Together

Making our Way Along the Dementia Path

Session 1

Glossary of Key Terms used in Session 1 – What is Happening?

The following terms are associated with Session 1 of *Walking Together's* educational sessions for supporting persons who are living with dementia.

| Term | Definition |
|---------------------------|--|
| Alzheimer's Disease | The number one cause of dementia. It is an irreversible and progressive brain disorder that causes deterioration of the brain. It affects people's daily functioning and eventually leads to death. With Alzheimer's disease recent details are lost first. |
| Amygdala | The Amygdala is deep in the temporal lobe and part of the limbic system. It is responsible for what we often call the "fight or flight" response. |
| Apathy | Apathy can be a symptom of Parkinson's disease, Alzheimer's disease or mental health issues. It is a lack of motivation and a general feeling of not caring what is occurring around you. |
| Brain Stem | The brain stem located just above the spinal cord is responsible for the body's vital functions such as breathing, heartbeat and regulation of blood pressure. This area is often impacted early in Lewy Body Dementia. |
| Cerebral Cortex | The cerebral cortex is the outside wrinkled covering of the brain also called gray matter. It has four lobes the frontal, the parietal, the temporal and the occipital. |
| Dementia | A range of neurological conditions that affects the brain leading to brain cell deterioration and death. |
| Dementia with Lewy Bodies | Dementia with Lewy bodies caused by abnormal protein deposits in the brain, initially can have symptoms similar to Alzheimer's Disease but then develop motor, sleep and visual hallucinations. |
| Frontal Lobe | The Frontal lobe is located behind the forehead. It is that part of the brain that helps us with executive functioning including time management, impulse control, planning, problem solving and decision making. It is also involved in voluntary movement. |
| Frontotemporal dementia | Frontotemporal dementia is not a particular disease but a group of disorders that cause nerve cell loss in the frontal and temporal region of the brain. |
| Hallucinations | Hallucinations are sensory experiences that appear real but are not. They can affect all five senses (taste, touch, hearing, smell and sight). |
| Hippocampus | The hippocampus is a seahorse shaped structure deep in the temporal lobe. It is where new memories are formed and is often the first area of the brain to be impacted in Alzheimer's disease. |



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| Holistic | Related to a complete system rather than its distinct parts. |
| Hypothalamus | The hypothalamus is part of the limbic system. It controls hunger, thirst and body temperature. |
| Limbic System | The limbic system is a set of structures including the amygdala, hypothalamus and hippocampus located in the temporal lobe. These structures deal with emotions, memory and reinforce behavior. |
| Neurons | The brain contain over 100 billion brain cells also called neurons. |
| Occipital Lobe | The occipital lobe located at the back of the head is where visual information is processed. |
| Parietal Lobe | The parietal lobe is on top of the head, and this is where language is produced and interpreted. In this lobe we integrate sensory input like temperature, touch, taste and movement. It also helps us to understand the position and movement of our body. |
| Parkinson's Disease Dementia | Parkinson's Disease Dementia is caused by abnormal protein deposits in the brain. It presents with motor issues like tremors or shuffling gate first and later presents with cognitive involvement. |
| Plaques and Tangles | Plaques and Tangles are associated with Alzheimer's Disease. Plaques are proteins that cluster between the synapses preventing messages to get through. Tangles are abnormal tau proteins that unfolds on themselves and become like a knot inside the neuron eventually destroying it. |
| REM | REM stands for Rapid Eye Movement. It is the time during our sleep cycle where our brain is most active and is thought to consolidate memories. |
| Synapse | The synapse is the space that sends either a chemical or an electrical message between the brain cells (also called neurons). A single neuron can have thousands of synapses. This allows for messages to be sent throughout the body. |
| Temporal Lobe | The temporal lobe located by the ears, helps us with general knowledge which is knowledge we have gained over time. Understanding language is on the left side of the temporal lobe and rhythm is retained on the right side of the temporal lobe. |
| Vascular Dementia | Vascular dementia comprises 5 to 10% of all cases of dementia. It is the result of a reduction of blood flow to the brain. |