Brain Changes in Dementia and Associated Behaviours

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October 2013
Objectives for the Session

- Recognize the importance of understanding the meaning behind behaviour
- Have an understanding of the “normal” brain functions
- Know the difference between Instinctual, Emotional and Intellectual brain
- Have a working knowledge of the changes in the brain of a person with dementia
- Discuss the importance of honouring “the person inside”
- Be able to identify positive interaction strategies
3 Sections of the Brain

• **Instinctual Brain** — at the base of the brain

• **Emotional Brain** — midbrain areas

• **Intellectual Brain** — top of the brain
Understanding the Human Brain

- Frontal Lobe – abstract thought, problem solving, impulse control
- Temporal Lobe – two main functions are language and memory
- Parietal lobe – reading, writing, perception of space
- Occipital Lobe – visual interpretation and recognition
The Brain and Behaviour

• “Our brain determines how we experience the world around us” — Our reality is not Their reality

• Damage to different areas of the brain = varying behaviours

• All behaviour has meaning

• Understanding the brain and its losses can help guide our responses and interventions

Alzheimer Society
Dementia Care & Brain Health
1. Loss of Memory - Amnesia
2. Loss of Language - Aphasia
3. Loss of Recognition - Agnosia
4. Loss of Purposeful Movement - Apraxia
5. No Knowledge of their Disease – Anosognosia
6. Loss of Perceptual Acuity - Altered Perception
7. Loss of Initiation - Apathy
Brain Changes in Dementia

1) Loss of memory (Amnesia)

- Short-term memory
- Long-term memory
- Habitual memory
- Unconscious learning
Brain Changes in Dementia

2) Loss of language (Aphasia)
   - Verbal and non-verbal communication
   - Language is both speech and comprehension
Brain Changes in Dementia

3) Loss of recognition (Agnosia)

- Loss of recognition of people
- Loss of recognition of objects
- Loss of recognition of sounds
4) Loss of purposeful movement (Apraxia)

- Loss of ability to plan, sequence and execute the steps of a task
- “Last in, first out”
Brain Changes in Dementia

5) No knowledge of their illness (Anosognosia)
   - Impaired insight = resistance to care
   - Insight and impulse control as “executive functions”
Brain Changes in Dementia

6) Loss of perceptual acuity (Altered Perception)
   • 3-D centre of the brain
   • Loss of depth perception
   • Hallucinations
7) Loss of initiation (Apathy)

- Apathy or depression?
- Over half of all dementia persons are emotionally blunted, lack motivation and initiation
Honouring the Person Inside

- Changes in the brain can alter behavior, perceptions and coping strategies.
- A person’s core still recognizes pain, joy, loneliness and loss. It may just be presented in a different way.
Questions