

A New Perspective on Dementia and Aging

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Over the years changes in technology such as high resolution brain imaging is shifting psychology from a Freudian (psychoanalytic) or behavioral base (Skinnerian) to a more neuro-biological base. As in most changing environments this has led to the need to constantly re-evaluate... to identify, understand, and utilize the new research to benefit our primary audience... care providers for the aged and infirm. Because these changes have altered models we use in the education but are rarely mentioned in a broad overview of services we provide this, a new perspective on aging and behavior.

Dementia, in most forms, is not a disease of the aged but a disease of aging

Dementia, whether Alzheimer's disease, cardiovascular, Lewy body, early onset etc. has been increasingly found to be activated by how we interact with our environment. Even in the case of genetic predispositions to dementia, epigenetic research verifies how and where we live impacts when and at what pace dementia progresses. In most cases we are finding early adult choices in diet, education, exercise and social activities influence the onset of a brain degradation processes which only become symptoms of dementia in post-retirement years. In other words most dementia is, to some extent, elective.

The only two diseases associated with aging, whose incidence is growing are depression and dementia... what do they have in common

A 2013 report from the CDC on diseases of aging reported that the incidence of every disease associated with aging, such as a cancer, heart disease, etc. were in decline with two exceptions; depression and dementia.

Over the last 20 years the incidence of depression and death both have increased. One explanation lies in how depression are related. In most pre-dementia mental decline e.g. mild cognitive impairment depression is both a cause of depression and it's lack of treatment the cause of dementia.

Both of these are highly influenced by stress. Neurologically, stress causes a decline in brain activity, reduced neuroplasticity and even reduced neurogenesis. Over time this decline produces symptoms of dementia as the very size of the brain contracts.

The most common cause of depression is chronic stress. When most of us experience a major stressor, such as the loss of a loved one, depression offers a period of time for the brain to build behavioral workarounds. The brain uses new neurons (neurogenesis) and reworking neural paths (neuroplasticity) to build "workarounds" and relief from depression.

More often as we age building workarounds may take longer or the compilation of additional losses e.g. sight, hearing, pain etc., conspire to make the stress chronic and the symp-

toms of dementia appear. For the dementia patient progressively diminished memory and cognition reduce the patient's threshold to stress. In dementia stress is the singular cause of behavior problems.

Does moving to skilled nursing reduce or increase dementia?

Research on stress indicates three primary causes of stress; 1) novelty, 2) loss of control, 3) loss of social contact.

For the new resident everything is new or novel (different from previous living). Once a resident decisions and activities are provided causing a feeling of loss of control. I have yet to find a new resident who did not feel they were being isolated despite regular family visits... so most skilled nursing are designed to promote chronic stress.

For the resident with dementia, who most likely was transferred due to pre-existing behaviors, the average skilled or locked nursing unit amplifies the description above. Given historic SNF underfunding and current displacement of funding by home care.

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