Aging and Investment Decisions

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"I'm not broke, but I'm severely bent." —Anonymous

"Before my mother died a few years ago, she was pestered by a seemingly endless barrage of annuity schemes and mortgage offers. Despite the fact that she was suffering from throat cancer and could barely speak, she received repeated unsolicited sales pitches over the phone and even in person. Even though my father was suffering from Alzheimer's disease, the brokers preyed upon him as well."

Chairman Christopher Cox of the U.S. Securities and Exchange Commission made the above statement before the Special Committee on Aging of the United States Senate on September 5, 2007. The session was entitled, "Protecting Senior Citizens from Investment Fraud." The committee was formed because of the prevalence of fraudulent investment schemes directed primarily toward older adults. Factors such as greater wealth of the elderly, more free time, and lack of social support contribute to this recognized phenomenon.

Evidence by Natalie Denburg, PhD, and her colleagues at the University of Iowa and the University of Southern California in Los Angeles, suggest another reason: the elderly are prey because aging affects decision-making abilities adversely in some older individuals. Denburg recently published three papers in the area. The first, entitled, "The Ability to Decide Advantageously Declines Prematurely in Some Normal Older Persons." was published in Neuropsychologia, 2005/43 (7): 1099-1106.

In the 2005 paper, Denburg and her colleagues studied healthy adults divided into two groups, younger (26 to 55 years) and older (56 to 85 years). They used the Iowa gambling test (IGT), which is designed to provide a parallel to real life by figuring in reward, punishment, and unpredictability. It works like this: the participants choose cards from four decks, each of which has a different payoff. Then, the subjects receive feedback so that they know how much money they lost or gained. Because of the feedback, normal subjects learn to avoid card decks that give high immediate gains, but larger future losses over time.

But one group in the study was different. Denburg found that an older subset (35% to 40%) exhibited a decision-making impairment on the gambling test, even though they had otherwise intact cognitive functioning. They persisted in choosing the card decks that gave high immediate gains, but larger future losses over time, just the reverse of their age comparable colleagues and the younger group. Since the prefrontal cortex is critical to decision making, the authors postulated that this subset of the older group might have alterations in the prefrontal cortex that their age matched co-participants and younger controls did not.

In an recent e-mail to me, Denburg gave a summary of this work:

Those studies support the notion that some older individuals, approximately 35%, have significant difficulty with reasoning and decision-making, as indexed by the IGT. This impairment occurred in the absence of frank neurological or psychiatric disease, and there was no evidence that it could be explained by premorbid factors, overall health status, or cognitive weaknesses. This finding raises the possibility of disproportionate aging of the ventromedial prefrontal cortex in these individuals.

This aging deficit in some seniors could have important implications as to why some older people so often fall victim to fraud. It also could contribute to other poor financial choices. Recognition and appreciation of these findings among physicians can go a long way in not only recognizing this phenomenon in their patients, but also helping them prepare for their own financial vulnerability in old age. Poor financial decision-making in the elderly is a red light to a possible identifiable underlying cause. A referral to a neurologist is indicated. For the older physician, a personal action step that can be taken is to implement a sound money management succession plan and specify under what circumstances it should be employed.

In a Nutshell

Recent research by Denburg and colleagues suggest that there is an organic reason why some older adults make poor financial decisions. Aging itself may cause deficits in a subsection of the elderly population. Since the prefrontal cortex is critical to decision-making, the authors postulated that this subset of the older group might have alterations in the prefrontal cortex that their age matched co-participants and younger controls did not.

This finding has important implications for practicing physicians as well as older doctors. The former should aware of how to approach elderly patients who exhibit poor decisions. The latter could use the information to their benefit by assuring an orderly financial succession plan for themselves and other older adults in their families.