The aging physician

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When are physicians too old to practise medicine? In 1905, at the age of 55 years, Sir William Osler publicly spoke of the "comparative uselessness" of men older than 40 years of age. He contended that men should retire after age 60 and jokingly suggested that at 60 years of age, men be allowed a year of contemplation before being offered a peaceful departure by chloroform.[1] These comments provoked a storm of controversy, but Osler maintained his stance that men of intellect should retire at 60 years of age. While his beliefs might have been influenced by social and cultural factors of the time, the controversy of age-related forced retirement continues in professions such as medicine, in which public safety could be at risk.

Indeed, many studies among physicians have demonstrated decreasing practice performance with increasing years in medical practice.[2] Plausible explanations for these findings might include older physicians being less willing to adopt new therapies and new standards of care; ineffectiveness of continuing medical education programs; a cohort effect involving a generation of physicians faced with substantive changes in disease management and performance evaluation techniques; or, possibly, the neurocognitive changes associated with advancing age.

Age and cognitive decline

Normal cognitive aging involves a decline in fluid intelligence beginning in the middle adult years, whereas crystallized intelligence tends to remain stable.[3] Both crystallized and fluid intelligence are important to accurate clinical decision making. Crystallized intelligence is the cumulative information acquired throughout life and includes professional expertise and wisdom. Fluid intelligence is the capacity to process information and reason, which is critical to analyzing and solving novel or complex problems. Because of decline in fluid intelligence, adults in their 70s typically take about twice as long to process the same tasks as adults in their 20s.[4]

Experience, then, becomes a "double-edged sword," providing increasingly efficient diagnostic skill involving pattern recognition, countered by age-related decline in analytic reasoning skills. Older physicians tend to rely more heavily on clinical first impressions,[5] although overreliance on this strategy can result in diagnostic error as a result of premature closure. Studies of older physicians with competency concerns have found prevalent errors of noncomprehensive history taking, incomplete data gathering and interpretation, and deficient hypothesis generation.[6]

Yet other studies demonstrate that many older physicians can perform at or near the level of their younger peers.[7] The effect of age on any individual physician's competence can be highly variable.[8] There are likely many factors other than age that contribute to a physician's level of competence. These include physician factors such as intelligence and engagement in self-directed learning and deliberate practice to maintain expertise; patient factors such as acuity of the illness and complexity of the problem; and practice factors such as time pressures, support systems, and staffing in place.[4]

It is estimated that by 2026, 20% of Canadian physicians will be 65 years of age or older.[9] In the general population, the prevalence of dementia is estimated to be 13% and the prevalence of mild cognitive impairment (MCI) to be 10% to 20% in persons 65 years of age and older.[10,11] Of concern are studies that demonstrate that more than a third of physicians with competency concerns have moderate to severe cognitive impairment.[12,13] It is difficult to relate the degree of neurocognitive loss to physician competence because the precise levels of cognitive impairment that preclude safe practice are not known.[14] Unfortunately, studies also demonstrate that physicians have limited ability to self-assess competence and they might be unaware of decline in their cognitive performance.[15,16] Some physicians might therefore not recognize when they are too old to practice competently.

Preparing for retirement

It is clear that the transition into retirement can be difficult. Work provides structure, community, and purpose; in retirement, these needs must be fulfilled by other initiatives.[17] Physicians often experience a loss of identity and self-importance upon retirement.[18] Careful planning is required to reduce the emotional and psychological effects.

Should older doctors be forced to retire? Clearly, age should not be the only determinant. It remains a challenge for regulatory bodies to determine the appropriate physician, practice, and patient factors that, in combination, determine an individual physician's ability to practise safely. There are currently various provincial physician assessment and enhancement programs

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that target older practising physicians.[19] A constructive, proactive approach that balances patient safety with the rights of physicians who have provided a lifetime of dedicated service to their communities is required. Systemic changes that will allow dignified retirement for physicians diagnosed with MCI or dementia are needed.

For the older practising physician, we offer a few suggestions:

- Consider slowing down in aspects of practice that require rapid cognitive processing. Provide longer appointments for patients with complex medical problems.
- Listen carefully to the concerns of colleagues, patients, friends, and family. Given that physicians have limited ability to self-assess performance, the observations of others can be helpful.
- Carefully consider your own concerns. Subjective symptoms might be harbingers of further cognitive decline. A recent study demonstrated that healthy elderly persons with subjective symptoms of cognitive loss were at a 4.5-fold greater risk of future progression to MCI or dementia than those without symptoms (54% progressed to MCI or dementia within 7 years compared with 15% of those with no symptoms).[20]
- Maintain a healthy lifestyle. There are several studies that associate increased exercise, Mediterranean diet, and increased social engagement with a protective effect on cognitive functioning.[21-23]
- Plan for retirement. Eventually we all must face the limitations that accompany aging. Thoughtful planning can help to ease the emotional and psychological adjustments involved in retirement from practice. Some might choose a gradual reduction in responsibilities with a shorter workday or workweek, or a reduced scope of practice focusing on aspects of medicine that they most enjoy.

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Competing interests
None declared

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