Sixty-five is the time.

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In state service in South Africa, retirement is mandatory for doctors at 65 years while in private practice retirement age is not regulated. Is surgical retirement age an issue? Professor Michael DeBakey famously continued to operate until he was 90. Surely a lifetime of experience offsets the inevitable decline in motor and cognitive function that comes with age? There is however a growing body of evidence that physician experience and age is linked to worse patient outcomes. In one meta-analysis, 74% of studies showed a negative association between physician age and recognized standards of therapeutic care.[1]

Discussions regarding retirement are ever more necessary as the number of elderly surgeons increases. In Australia 19% of active surgeons are older than 65 years of age.[2] In the United States, in a study assessing the cognitive function of older surgeons with a mean age of 67 years, 33% of participants had plans to retire within 5 years while 30% had no plans to retire.[3] While this study did show that older practising surgeons were as good as their younger contemporaries, who were 41 to 59 years of age, in terms of cognitive function we know older surgeons are much less likely to offer laparoscopic surgery[4,5] or immediate breast reconstruction for their patients.[6] Even when older surgeons do take up a new treatment modality such as laparoscopic inguinal hernia repairs, their recurrence rates are higher than their younger colleagues.[7] Outcomes such as mortality have also been shown to increase related to surgeon age for both carotid endarterectomy[8] and coronary artery bypass grafting.[9] While a newer study added pancreatectomy to that list, the authors did attribute the worse outcomes shown by surgeons older than 60 to decreased individual surgeon volume.[10] The British Medical Journal published a study on 3574 thyroid procedures which suggested that the optimal surgeon performance age was between 35 and 50 years. Younger surgeons are still on a learning curve, while those over 50 years had a 3 to 7 fold increase in complications rate [11] All of these studies controlled for the oft cited "older surgeons take on the more difficult cases".

It is interesting to note that in a large American study reviewing 607 683 operations, the involvement of surgical trainees was associated with a higher morbidity rate (6.1 additional morbidity events per 1000 patients) but a decreased mortality rate (1.4 fewer deaths per 1000 patients) across a range of general surgical operations.[13] Age-related decline in both cognitive and physical function is inevitable and varies from person to person. In a study of 188 anaesthesiologists between 28 and 80 years of age, 66% had an abnormal audiogram, and 37% were unaware of their hearing problem. In those older than 65 years there was a 39% chance that one or more theatre alarms were below their hearing threshold.[14]

The retirement debate is further influenced by the major shortage in surgical services across the developing world.[12] Labour law prevents discrimination based on age. However a retirement age can be included in a work contract. No one complains that firemen and airline pilots are all under the age of 65. Such policies allow for appropriate retirement planning, a dignified exit from work and ensures the service is offered by younger doctors more recently trained and closer to their physical prime. Anaesthetists older than 65 have twice the number of poor patient outcomes compared to anaesthetists under the age of 50, despite taking on easier cases. They also have 1.5 times the risk of litigation even though they do fewer cases.[15] It should also be remembered that the prevalence of dementia in those under 65 is 4% but rises to 15% between 65 and 74 years of age.[17]

Transitioning out of a career focused on operative surgery needs to be managed well. Surgeon volume independent of hospital volume is directly linked to outcomes in major surgery.[16] A larger teaching or administrative role also needs to be well considered given that many studies have shown that elderly practitioners are not up to date with current guidelines.[1] The writing on the wall can only be read if it is well illuminated. To read comfortably at age 60 you need three times as much ambient light as you do at age 20.

"As an aside, after I had proposed mandatory retirement in a debate at a national meeting, I was approached by a recently retired surgical mentor who proffered in all earnestness the question. "Would you have your Whipple done by me or the young whipper-snapper fellow?" In the interest of not offending sensibilities I obviously replied "of course it would be you Prof…" However had I time to gather my thoughts I would have replied; "I would like to have my neuroendocrine pancreatic tumour resected in your unit as it is a high volume centre with a multidisciplinary team assessment process and good published outcomes. I would like the "younger" experienced surgeon in your team to perform the operation under your tutelage, safe in the knowledge that watching a surgeon evolve past your skill level is where true satisfaction lies."

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