

How old is too old to work for physicians?

Agnieszka Kimak, Anna Woźniacka

Department of Dermatology and Venereology, Medical University of Lodz, Lodz, Poland

Adv Dermatol Allergol 2023; XL (3): 368–371
DOI: <https://doi.org/10.5114/ada.2023.128977>

Abstract

The healthcare systems throughout the world are facing numerous problems, including aging and shortages of medical staff. Although senior medical practitioners are important to the healthcare, their competency may decline with age. A major problem experienced nowadays by some elderly practitioners is digital exclusion caused by difficulties with adopting new technologies. Some attempts are being made to determine the optimum moment to retire, considering its possible impact on the safety and wellbeing of patients, as well as on the health system and human resource allocation. Until legal regulations are adopted, the age-related screening programs can be used to determine the optimal retirement age.

Key words: COVID-19 pandemic, digital divide, doctor aging, healthcare system, retirement planning.

Introduction

The traditional retirement age varies between countries, but usually is determined around 65 years. As average life expectancy increases, people continue their career beyond this age. This article discusses the phenomenon of aging physicians and its possible consequences for the patients, healthcare system and physicians themselves.

Retirement planning

One of the most alarming concerns in the healthcare system is the increasing age of its medical staff. According to Statistics Poland, the mean age of a physician was 52 years old in 2017, with 22.7% of physicians practicing beyond the traditional retirement age of 65: this represents an increase of 5.1% in comparison to 2005 [1]. In addition, in 2020 the Polish healthcare sector included a total of 32 439 physicians, 100 743 of whom were practicing, and 24% (32 198 doctors) were at the retirement age. In some counties, this percentage was much higher, with the Lobeski county having the highest rate at 58% [2]. This disproportion becomes even more apparent when considering that only 13.1% of the total working population are at the pensionable age [3].

To understand the phenomenon of delayed retirement among medical staff, it is necessary to perform a retirement motives analysis. A systematic review by Silver *et al.* including 65 studies found that retirement

planning does not always translate into actual retirement actions. Although physicians may intend to retire at the age of 60, they will in fact typically retire at around 69. Commonly-reported reasons include career satisfaction, a feeling of purpose, strong work identity and lack of interests outside of Medicine. Moreover, physicians often postpone their retirement and complain about insufficient time for developing their career because of the lengthy training process and late entry into the work force. In many cases, delayed retirement is facilitated by institutional flexibility, i.e. flexible working hours, reduced work barriers and bureaucracy as well as prioritizing physician health [4]. Working in the health system can also be connected with better access to diagnostic procedures and treatment for physicians and their relatives. However, although the reasons for remaining in employment vary greatly between nations, they generally depend mainly on the economic standing and health status.

Alternatively, in some countries, there is a growing number of physicians transitioning to earlier retirement. For example, the level of retirement of UK medical graduates of 1974 and 1977 was surprisingly high, with a mean retirement age of 59.6 years. Among those who had retired early, some returned to part-time or less demanding posts [5]. The main obstacles to practice were the negative aspects of job satisfaction, such as burnout, excessive workload, unhealthy work-life balance and low job control. In addition, many reported fear of technological

Address for correspondence: Agnieszka Kimak, Department of Dermatology and Venereology, Medical University of Lodz, Lodz, Poland, e-mail: agkimak@gmail.com

Received: 1.10.2022, **accepted:** 21.12.2022.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0). License (<http://creativecommons.org/licenses/by-nc-sa/4.0/>)

advances, and new methods of diagnosis and treatment [4, 5]. In particular, the impact of COVID-19 on physician retirement plans cannot be neglected. Doximity's "2021 Physician Compensation Report" indicates that over one third of surveyed physicians considered another career or early retirement due to COVID-related overwork [6]. Given that the COVID-19 pandemic has not ended yet, this number may increase.

Digital divide

Despite its mostly negative outcomes, the COVID crisis has undoubtedly accelerated the digital transformation in healthcare. Even within its first couple of months, the pandemic had brought years of change, most notably in the uptake of telehealth.

A survey of telehealth usage found it to surge in April 2020 to 78-fold higher levels than before the pandemic. Following this, usage stabilized at 38 times above pre-COVID levels between June 2020 and the end of the study in February 2021. The uptake of digital medicine is expected to continue since over three quarters of surveyed users indicated an interest in using telehealth. Interestingly, prior to COVID, only 11% of consumers believed they would continue to use virtual care. Favourable telehealth consumer perception appears to arise from its convenience, ease of access, wide variety of options and affordability, particularly during the pandemic [7].

The digitization of the healthcare system is hampered by the divide between digitally-engaged physicians and those that are excluded. The Regional Medical Chamber in Lodz estimates that around 15% of working physicians may face this digital divide as they adopt technologies at their own pace [8]. This may even be a cause of resignation by medical staff as shown in the Duke University Medical Centre study, which identified a peak in provider attrition in the month preceding electronic medical record implementation [9]. Digital illiteracy can have negative outcomes in several areas. Firstly, physicians not recognizing the utility of telehealth will not meet the needs of patients, who want to be remotely consulted on demand through convenient channels. Secondly, telehealth ensures increased efficiency and cost savings. From an economic perspective, telehealth diminishes inequity in health access by expanding medical care in rural areas more quickly, more conveniently and at a lower cost. Moreover, virtual appointments reduce unnecessary face-to-face consultations and visits in the Emergency Departments since the patient can receive needed care remotely, leaving direct services for higher acuity cases [7]. Finally, technologically illiterate physicians may find it increasingly difficult to remain up-to-date with practices, resulting in lower quality or even obsolete services, thus enhancing the digital divide in the health service. Telemedicine is expected to have a permanent place in the healthcare system; as such, there is a need to close the

gap in technology adoption amongst physicians, both to meet patient demands, to retain medical practitioners and ensure their competency.

Small decision, big impact

Among physicians, retirement does not only have personal consequences, but also has broad implications for the healthcare system and society itself. According to Statistics Poland, specialist turnover was 628 in 2020, i.e. the difference between specialists beginning and finishing their career, and is estimated to be 2205 in 2026. Moreover, in 2020 it was estimated that while 21 271 doctors were completing specialist training, 16 800 would have reached retirement age within 6 years, indicating a surplus of 4471 specialists in 6 years' time. While these numbers seem promising, a disturbing picture emerges for individual specialties. Specialist turnover is in fact – 2565, –1154 and –724 for Internal Medicine, Paediatrics, and Surgery, all highly-demanded specialties. In addition, negative turnover is indicated for Dermatology, with 416 dermatologists reaching retirement age within six years and only 365 dermatologists in training [2].

Proper access to medical care in Poland is already below the EU average: in 2018, the number of doctors ranged from 2.4 to 3.46 per 1000 population in Poland compared to 3.8 per 1000 population in the EU [10]. Further shortage of medical staff is inevitable if no steps are taken.

The timing of retirement influences the healthcare system on many levels. On the one hand, the most experienced staff can be difficult to replace since they are an invaluable resource of knowledge and experience. More skilled physicians can reduce expenses thanks to higher efficacy and quality of care. On the other hand, a growing pool of younger physicians is waiting for their turn to replace retiring colleagues. Among the next generation of physicians, delayed entry into the work force may result in later retirement, and so on. In addition, early retirement can lead to staffing shortages and increased workload [11, 12]. If one fifth to one fourth of doctors retired abruptly, the health system may collapse. Another concern is the risk to patient safety associated with age-related deterioration of abilities and competences. While knowledge and skills can be maintained well into advanced age, decision-making, processing speed, working memory and executive function nevertheless decline [13]. Even though crucial for the healthcare system, senior physicians can present a risk if any such decline in competences remains unnoticed.

Aging surgeon

Physiological aging and neurodegenerative diseases significantly affect cognition and physicality. The most important changes are slowing of processing speed,

working and prospective memory, selective and divided attention, executive cognitive function and spatial orientation. Conversely, some aspects are well maintained into advanced age, such as cumulative knowledge, procedural memories, experiential skills and speech and language function. Thus, aging physicians may encounter greater difficulty transforming information to decisions, quickly responding to stimuli, focusing on specific information in a busy environment or handling multiple and complex tasks simultaneously. In addition to cognitive decline, a physician is still at risk of deteriorating vision or hearing [13]. There is also the problem posed by remoteness of education and its obsolescence; such issues can be observed in Dermatology with the rapid changes in diagnostic and treatment methods, such as dermoscopy. As the first hand-held dermoscope and its standardized terminology were only developed in 1989 [14], it would not have been a part of the formal specialty training for a dermatologist over 60 years old; as such, this knowledge would have to be acquired outside formal education.

Moreover, although knowledge remains relatively intact with age, its retrieval and new learning abilities decline, meaning an older physician does not only have problems with retrieving learnt information but also with absorbing new knowledge [13]. Studies examining the link between age and clinical outcomes are inconclusive yet concerning. Higher mortality rates have been noted for both older cardiovascular surgeons [15], and younger gastrointestinal surgeons [16]. Anaesthesiologists aged 65 or more were also found to have twice the risk of litigation than their peers below 51 years old [17].

Surgeons are common subjects for studies on the effect of age on performance, not only because of the risk associated with their occupation, but also because of their reluctance to retire. For example, the Regional Medical Chamber in Lodz includes 68 surgeons registered with an average age of 60 and the median age of 67. The impact of age on cognition should represent a point of concern for all proceduralists, dermatologists included: skin surgery, laser treatment and cryotherapy demand exceptional physical and cognitive performance, and in some cases, an underperforming operator may become a surgical risk factor.

The patient's point of view

The relationship between patient and doctor is based on knowledge, trust, longitudinal care, and regard [18]. Retirement potentially puts patients at risk of missing this foundation of care by losing their trusted clinicians. The effect of discontinuity of care on patients is poorly studied. A systematic review by Lam *et al.* encompassing a small number of anecdotal, qualitative, and quantitative studies from the United States, Canada, the United Kingdom, Australia and Norway, found that physician

retirement has an unfavourable outcome on most patients, especially those who have aged with their doctors. Comorbid, frail, elderly patients with multiple health and social care needs are in danger of experiencing the most harm from interruption of care; the most common effects are emotional distress, loss of a trusted advisor, feelings of abandonment, and difficulty with choosing a new provider and assessing care. Patients who lose the trusted medical opinion of their physician may seek healthcare in the emergency departments, instead of transitioning to a new provider. Thus, it can lead to only fragmented care, poor handover of information and eventually adverse clinical outcomes. Forced discontinuity of care has also been associated with adverse drug events, myocardial infarction and increased mortality [19]. Physicians are aware of these problems, and feelings of personal responsibility for their patients make retirement decisions particularly challenging [4]. Although unavoidable, retirement is in most cases a predictable event and efforts should be made beforehand to smooth the transition to another healthcare provider.

In addition, patients may also have a preference regarding the age of their doctors. A questionnaire conducted in Scotland by McKinstry and Yang found that 58% of patients considered the age of their doctor to be unimportant; the remainder did not have any strong preferences as long as their doctor was between 27 and 65 years old [20]. Another survey study published in the Iowa Orthopaedic Journal found that 52% of participants had no age preference for their orthopaedic surgeon and the patients who indicated an age preference chose a surgeon of a similar age to them [21]. Given the uncertainty surrounding this topic, further studies are needed to better understand patients' needs and preferences.

The right time to retire

It is widely accepted that there should be a set retirement age for air traffic controllers and commercial airline pilots. However, no such mandatory guidelines exist for medical professionals. If the law does not impose a mandatory retirement age for physicians and competence cannot be measured by chronological age, how is it possible to confirm the ability of senior physicians? One viable solution may involve a combination of skills and competence assessment with improvement programs. "MicroCog", a series of tests developed by Trunkey and Botney, indicates that advancing age is accompanied by a decline in dexterity, eyesight, hearing and mental processing, leading to suboptimal performance. Even though scores on the MicroCog decline with age, there is yet no clear correlation between MicroCog score and incompetency on practical medical ground [22, 23]. Some institutions have developed their own protocols for senior doctor evaluation. The PACE SM Program developed by the UC San Diego School of Medicine provides volun-

tary evaluation services through the UCSD Late Career Health Screening for practitioners over 70 years old and is aimed at detecting any physical or mental health problem among individuals with no known impairment. The evaluation consists of a self-reporting health questionnaire, history and physical examination, cognitive and mental health screening, as well as dexterity testing in some cases. Results indicate whether any impairment exists, and further evaluation is recommended [24].

However, age-based screening programs may be considered as violating discrimination laws, which was the subject of the Equal Employment Opportunity Commission (EEOC) complaint against the Yale New Haven Hospital and its Late Career Practitioner Policy [25]. In this case, medical practitioners of 70 years old or above must complete ophthalmological and neuropsychological exams in order to continue practicing. In the lawsuit, EEOC alleges that the Policy discriminates employees because of their age and deprives them of equal employment opportunities. The trial is currently ongoing at the time of writing. The ruling on this suit will likely impact other hospitals and medical institutions with similar policies. Despite its limitations, voluntary screening and recertification may now be the best way to assess when a physician stops meeting standards.

Conclusions

Although the topic of aging medical staff and the digital divide in Poland is rarely discussed, its consequences are increasingly visible. Further investigation is needed to gain a fuller picture of the nature of retirement among Polish physicians, and the concerns of their patients regarding the issue. The question of optimal retirement age remains open. One possible solution to monitor the medical profession and proactively identify physicians lacking competencies could be age-related testing.

Conflict of interest

The authors declare no conflict of interest.

References

- Główny Urząd Statystyczny, Departament Badań Społecznych, Urząd Statystyczny w Krakowie, Zdrowie i ochrona zdrowia w 2017r., ISSN 2084-0470, https://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultaktualnosci/5513/1/8/1/zdrowie_i_ochrona_zdrowia_w_2017.pdf (access 01.10.2022).
- Ministerstwo Zdrowia, Mapy Potrzeb Zdrowotnych, Kadry Medyczne <https://basiv.mz.gov.pl/index.html#/visualization?id=3759> (access 1.10.2022).
- Departament Statystyki i Prognoz Aktuarialnych, Pracujący emeryci – XII 2018 <https://www.zus.pl/documents/10182/2422424/Pracujący+emeryci+raport.pdf/1e3bd82c-988c-83e4-bf8e-d60f2447d28f> (access 1.10.2022).
- Silver MP, Hamilton AD, Biswas A, Warrick NI. A systematic review of physician retirement planning. *Hum Resour Health* 2016; 14: 67.
- Smith F, Goldacre MJ, Lambert TW. Retirement ages of senior UK doctors: national surveys of the medical graduates of 1974 and 1977. *BMJ Open* 2018; 8: e022475.
- Doximity 2021 Physician Compensation Report, Fifth Annual Study, <https://c8y.doxcdn.com/image/upload/v1/Press%20Blog/Research%20Reports/Doximity-Compensation-Report-2021.pdf>, (access 01.10.2022).
- McKinsey&Company Telehealth: A quarter-trillion-dollar post-COVID reality? <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality> (access 01.10.2022).
- Łukomski W. Rozsądek w cyfryzacji. *Gazeta Lekarska* 2019, 47-9.
- Crowson MG, Vail C, Eapen RJ. Influence of electronic medical record implementation on provider retirement at a major academic medical centre. *J Eval Clin Pract* 2016; 22: 222-6.
- OECD Health at a Glance: Europe 2020 Report https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2020_82129230-en (access 01.10.2022).
- Silver MP. Critical reflection on physician retirement. *Can Fam Physician* 2016; 62: 783-4.
- Grandjean B, Grell C. Why no mandatory retirement age exists for physicians: important lessons for employers. *Mo Med* 2019; 116: 357-60.
- Murman DL. The impact of age on cognition. *Semin Heart* 2015; 36: 111-21.
- Buch J, Criton S. Dermoscopy saga – a tale of 5 centuries. *Indian J Dermatol* 2021; 66: 174-8.
- O'Neill L, Lanska DJ, Hartz A. Surgeon characteristics associated with mortality and morbidity following carotid endarterectomy. *Neurology* 2000; 55: 773-81.
- Prystowsky JB. Are young surgeons competent to perform alimentary tract surgery? *Arch Surg* 2005; 140: 495-500.
- Tessler MJ, Shrier I, Steele RJ. Association between anesthesiologist age and litigation. *Anesthesiology* 2012; 116: 574-9.
- Ridd M, Shaw A, Lewis G, Salisbury C. The patient-doctor relationship: a synthesis of the qualitative literature on patients'; perspectives. *Br J Gen Pract* 2009; 59: e116-33.
- Lam K, Arnold CG, Savage RD, et al. Does physician retirement affect patients? A systematic review. *J Am Geriatr Soc* 2020; 68: 641-9.
- McKinstry B, Yang SY. Do patients care about the age of their general practitioner? A questionnaire survey in five practices. *Br J Gen Pract* 1994; 44: 349-51.
- Abghari MS, Takemoto R, Sadiq A, et al. Patient perceptions and preferences when choosing an orthopaedic surgeon. *Iowa Orthop J* 2014; 34: 204-8.
- Trunkey DD, Botney R. Assessing competency: a tale of two professions. *J Am Coll Surg* 2001; 192: 385-95.
- Blasier RB. The problem of the aging surgeon: when surgeon age becomes a surgical risk factor. *Clin Orthop Relat Res* 2009; 467: 402-11.
- UC San Diego School of Medicine, PACE Program, Physician Assessment and Clinical Education (http://www.paceprogram.ucsd.edu/Documents/PACE_Program_Assessment.pdf) (access 1.10.2022).
- EEOC v. Yale New Haven Hospital, Civil Action No. 3:20-cv-00187 https://ecf.ctd.uscourts.gov/cgi-bin/show_public_doc?2020cv0187-89 (access 1.10.2022).