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## The changing face of medical professionalism and the impact of COVID-19

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Medical professionalism is changing with the increasing gap between what doctors have traditionally been trained to do and the realities of modern clinical practice.<sup>1</sup> In high-income countries, the changing demographics of patients with an ageing population, the large proportion of patients with long-term conditions and multiple comorbidities, and rising health-care costs have placed huge pressures on health systems globally.<sup>2</sup> Advances in technology and science have changed the way health professionals interact with patients, and democratisation of knowledge and increased accountability that come with changing patient and societal expectations have added to the

demands placed on physicians.<sup>3</sup> In many countries, inadequate staffing levels aggravate this situation.<sup>4</sup> Morale among doctors is generally declining—eg, a survey in the UK showed 54% of physicians reported morale as low or very low<sup>4</sup>—and burnout is rising (prevalence about 66–80%).<sup>5,6</sup> There is a crisis in staff retention in some countries with up to 48% doctors considering leaving the profession.<sup>7</sup>

COVID-19 has exacerbated these tensions between medical professionalism and physician wellbeing. The pandemic has placed substantial demands on already overstretched, understaffed, and under-resourced health systems. COVID-19 has tested doctors and health-care

workers to the limits of their professional competence and taken a considerable toll on their health and wellbeing.<sup>8</sup> Core principles of medical professionalism—ie, primacy of patient welfare, patient autonomy, and social justice—have been challenged during the pandemic.<sup>9</sup> Many doctors worldwide have had to change the way they work, having to prioritise patient care and make difficult decisions based on insufficient resources, including withholding and withdrawing potentially life-saving treatments.<sup>10,11</sup> Doctors have had to balance their personal risk with their duty to care for patients as well as balance professional versus caring responsibilities for household members in high-risk groups.<sup>12</sup> The need to self-isolate if they or their family members have symptoms of COVID-19 take them away from front-line responsibilities. All these factors have caused a sense of guilt, tension, and moral injury.<sup>13</sup> Moral injury in this context occurs when doctors are forced to make decisions that contradict their professional and moral commitments—the challenge of knowing what care patients need but being unable to provide it due to constraints beyond their control. The moral injury concept helps reframe such challenges from a focus on the individual to a system-wide perspective.<sup>14</sup>

The COVID-19 pandemic has changed how health professionals work, how we behave and interact within our teams and organisations, our understandings of personal health and risk, inequalities between doctors with different risk factors, and wellbeing and mental health.<sup>8</sup> Globally more than 300 000 health-care workers have been infected with COVID-19 in 79 countries, over 7000 have died, and many more have suffered as a result of stress, burnout, and moral injury.<sup>13,15</sup>

There is an urgent need for a system-level approach to address the issues that COVID-19 has created to better protect and safeguard our medical workforce for the future. Such approaches need to focus on organisational culture and staff wellbeing as integral to professionalism and central to patient care.<sup>16</sup> Physicians' wellbeing must be recognised as a care quality indicator for all health systems.<sup>17</sup> Improving the working lives of clinicians can optimise the performance of health systems, improve patient experience, drive population health, and reduce costs.<sup>16,18</sup>

Targeted interventions are likely to be less effective if only aimed at the individual.<sup>17</sup> During COVID-19, there have been many wellbeing initiatives for clinicians that



have been well received.<sup>19</sup> However, they need to be combined with organisational interventions including flexible working arrangements, enhanced teamwork, reductions in administrative burdens, and optimal use of technology.<sup>20</sup> Health professionals need to be well supported throughout the COVID-19 pandemic. The medical profession, health systems, and society all have a part to play in ensuring this support is provided. Individual doctors need to be empowered to recognise their own limitations as well as their wellbeing and support needs.

The professions must adapt to the changing needs of modern clinical practice and shape how we balance the many competing demands on us. Health professionals must build on the changes that are good for patient care and resist those that are not. COVID-19 has shown that we must move away from a model of medical professionalism that can lead to moral injury and towards one that provides proactive support for professionals in a systematic way and is focused on supporting moral repair.<sup>21</sup> With the second and subsequent waves of COVID-19 now well established in many countries, we need to ensure that we as a profession support our doctors and promote ways of working that incorporate the doctor, the patient, teams, health-care organisations, workplace environment, and health systems.<sup>1</sup> Over time, this wider system approach will lead to greater cohesiveness within health care and support individual professionals in a safer, more sustainable way.

AFG is the President and MP the Global Vice President of the Royal College of Physicians, UK. We declare no other competing interests.

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## SARS-CoV-2 variants and ending the COVID-19 pandemic

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The COVID-19 pandemic has devastated health-care systems, shut down schools and communities, and plunged the world into an economic recession. While 2020 was a challenging year, 2021 looks to be difficult with the emergence of multiple variants of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The race to vaccinate the world will need to respond to the pathogen’s constant evolution to evade immunity. What marks the path to the end of this pandemic?

2020 saw the successful development and testing of COVID-19 vaccines within timeframes not considered possible before. Two mRNA COVID-19 vaccines produced the first results, with impressive efficacy (94–95%).<sup>1,2</sup> A disadvantage of these two vaccines is their low temperature storage requirements. Although other COVID-19 vaccines developed to date that use viral vectors, subunit particles, or inactivated viruses have comparatively lower levels of efficacy, with estimates of 70% for ChAdOx1 nCoV-19<sup>3</sup> and 92% for Gam-COVID-Vac (Sputnik V)<sup>4</sup> adenovirus

vector vaccines, they do not have the ultracold storage temperature requirements of the mRNA vaccines and are therefore easier to deliver. Data available so far for COVID-19 vaccines have shown protection only against clinical forms of infection, with the exception of recent data showing reduction in the duration of viral shedding and viral load among recipients of the ChAdOx1 nCoV-19 vaccine compared with placebo recipients, suggesting potential impact on viral transmission as well.<sup>5</sup>

In December, 2020, an unexpected rise in reported COVID-19 cases was attributed to the emergence of the new SARS-CoV-2 variants 501Y.V1 (B.1.1.7) in the UK and 501Y.V2 (B.1.351) in South Africa.<sup>6,7</sup> In South Africa, high transmission in the context of high population immunity<sup>8</sup> may have favoured the emergence and subsequent spread of the variant. Both variants had a mutation (N501Y) in the receptor-binding domain of the spike protein that is reported to contribute to increased transmission,<sup>9</sup> with estimates ranging between 40% and 70% for increased transmission.<sup>6</sup>