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Correspondence

COVID-19, Monkeypox and the mounting burden of surgical diseases: A call for social innovation in surgery? – Correspondence

Dear Editor,

Since March 2020, consecutive COVID-19 outbreaks have resulted in considerable restriction of surgical practice and training. Since May 2022 Monkeypox (MPX) cases have been detected around the globe leading to a declaration of a Public Health Emergency by the World Health Organization on July 23, 2022 [1]. This development has raised concerns about the possibility of further limitations to surgical care and education. Simultaneously, novel SARS-CoV-2 variants and subvariants have led to the reintroduction of hygienic measures and restrictions in several countries [2]. This seemingly vicious circle puts the accessibility and the quality of surgical care on peril and calls for structural reforms towards this end.

Two variables to consider in this frame are contemporary surgical risk factors and the position of surgery in contemporary health policy. With regard to the former, multiple risk factors can cumulatively increase surgical burden in the near future. Infectious outbreaks tend to prolong operation waiting lists and restrict surgical training to emergencies and life threatening conditions. In the short-term this leads to worse outcomes among people who cannot access surgery on time. In the long-term this renders younger surgeons less experienced, and hence makes iatrogenic complications more probable. This is the aftermath of COVID-19 and is a reasonable scenario in case of rapid MPX spread [3–5]. On these grounds, surgeons are expected to increase operating volumes to such an extent that they can sufficiently cover both those waiting for surgery and those presenting at the moment with surgical conditions. To make things worse, a number of social and environmental factors exerts a multiplying effect on surgical morbidity. These include climate change, urbanization, sedentary lifestyle, alcohol abuse and violence in households, in the community and in conflict regions. Surgical burden associated with these drivers ranges from cardiovascular, oncological and orthopedic surgery to trauma and reconstructive surgery [6]. The cumulative effect of such diverse surgical risk factors has a major potential to overwhelm surgical care.

This challenge emerges in an era when governments and international organizations envision a community-based recovery from the COVID-19 pandemic. EU4Health, the relevant plan in Europe, boils down to the prevention and early diagnosis of non-communicable diseases – largely by means of primary-outpatient care and telehealth. This strategy is certainly coupled with stark epidemiological surveillance to mitigate the paralysing effect of large-scale infectious outbreaks. With regard to surgical pathologies, this approach translates into gaining the lost operative ground and momentum, while minimizing transmission among healthcare workers, patients and the community [7]. Several safety valves can serve this purpose, the principal ones being 1) surgical safety checklists adapted to the pathogens in question and 2) hiring sufficient personnel to ensure that surgical healthcare professionals are not allocated to infectious wards [5]. However, this might be not sufficient.

Involving primary and community care in surgery can decrease the work volume associated with preoperative examination and postoperative follow-up. Having physicians and allied healthcare professionals capable of assessing the suitability of a patient for a given operation and handling its wound care at home or in dedicated outpatients clinics could save time and resources for hospital-based surgical departments. To achieve so, primary care professionals would need additional exposure to surgical cases and workflow during their training. While this is a valid point of concern for training in primary care, it cannot serve as a solution in the near future. Dispatching surgeons to the community and enabling them to perform pre- and postoperative checks outside the hospital would help both patients and primary care professionals who could gain experience in the outpatient management of surgical patients.

Such a move could stir disagreement among surgeons, whose primary task is offering specialised services on an emergency or elective basis. Piloting community surgical interventions could prove whether the proposed model is sustainable and has a potential to contribute to better workflow in hospital-based surgical departments. A bolder approach would entail rethinking the social mission of surgery. Modern surgeons excel in operating complicated pathologies, often times harnessing spear technology and personalized planning tools. Nonetheless, surgeons can contribute to dissecting the social and environmental determinants of surgical disease, informing stakeholders and the public and driving social innovation towards this end. Although this is a complex endeavor, the first step could be surgeons explaining to the public the need for hygiene and vaccination on the grounds of access to surgery. A second step could include surgical advocacy on environmental and social issues affecting surgical morbidity and outcomes. The path from there onwards is challenging, but hopefully rewarding.

Ethical approval

This correspondence does not involve any subjects, laboratory animals or sensitive data. Ethical approval was not deemed necessary. All the cited sources are publicly available on the internet.

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Christos Tsagkaris is the sole author of the paper. He conceptualized, wrote, formatted and edited the correspondence in his own capacity.

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The correspondence entitled "COVID-19, MONKEYPOX AND THE MOUNTING BURDEN OF SURGICAL DISEASES: A CALL FOR SOCIAL INNOVATION IN SURGERY?" is based exclusively on resources that are publicly available on the internet and duly cited in the "References" section.

No primary data was generated and reported in this manuscript. Therefore, data has not become available to any academic repository.

Declaration of competing interest

The author has no conflict of interest to disclose with regard to this article.

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