



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

journal homepage: [www.ejcancer.com](http://www.ejcancer.com)

Editorial



## Cancer during the COVID-19 pandemic: did we shout loudly enough and did anyone listen? A lasting legacy for nations

As the COVID-19 pandemic has ravaged the globe, the interdependence of nations' health and their economies has been brought into harsh focus. Governments are being advised by public health and infectious disease modellers and economists on trade-offs between economic effects of lockdowns and health services being overrun with cases of severe COVID-19. Economists are even putting a monetary value on COVID-19 vaccination speed and uptake strategies [1]. The article by Gheorghe *et al.* [2] in this edition provides a timely, well-sourced analysis quantitating and comparing both the health and economic cost of delays in diagnosis of cancer caused by the commencement of non-pharmaceutical interventions (NPIs) introduced in response to the COVID-19 pandemic in the UK. This makes for very uncomfortable reading.

In just four cancer types (breast, colon, lung and oesophagus), studies during the first wave of the COVID-19 pandemic (published July 2020 [3]) predicted 60,000 lost life years. The quality-adjusted life years and the productivity losses due to these excess cancer deaths have been estimated in this new article to be 32,700 and £104 million over 5 years, respectively. This is nearly 1.5 times higher per capita than that of deaths directly related to COVID-19 in that time. The authors confirm that this is a conservative estimate for these cancer groups as it does not take into account additional productivity losses due to delays or reduction in quality of treatment and stage migration. If this figure is then multiplied for all tumour types in every European country, in all three waves, the real quality of life and economic impact of excess cancer deaths due to COVID-19-induced diagnostic and treatment delays in Europe is going to be catastrophic. Couple this with the

costs of needing to 'building back better' for disrupted cancer services, this is not just the worse cancer crisis in our lifetime for patients but an economic disaster for governments.

As a qualification of this alarming position, there has been radical disruption of cancer services worldwide caused by the COVID-19 pandemic resulting in a backlog of as yet undiagnosed patients with cancer, interruptions in complex multidisciplinary cancer services, follow-up, screening services and clinical trials not yet fully restored. The disruption varies between countries and providers, at different phases of the pandemic, but all healthcare systems have seen a significant drop in cancer referrals. A recent study from the UK Institute of Public Policy [4] confirms that during the pandemic in 2020 alone, there was a 32% drop in urgent cancer referrals, 18–61% drop in cancer investigations and 14–40% drop in cancer treatments with 30% of cancer clinical trials disrupted. There is also evidence of patients presenting late with stage migration and cancer survival gains of the last ten years being eradicated, for example, in colon cancer returning to survival rates of 10 years ago. This is underpinned by a meta-analysis showing that for every 4-week delay in cancer diagnosis and treatment, there is around on average a 10% loss of survival [5]. It follows that when counties are able to open up cancer services, they may be overwhelmed by the backlog as patients return and hard-working front-line staff exhausted from this first year being unable to cope.

Countries have different levels of cancer recovery plans, and few may have considered such economic complexities. The concept of defensive expenditures (those which protect people from things unpleasant) should be used to value treating our patients with cancer, and cancer should not be lumped in with all 'non-COVID-19' elective healthcare recovery as cancer

DOI of original article: <https://doi.org/10.1016/j.ejca.2021.04.019>.

<https://doi.org/10.1016/j.ejca.2021.04.020>

0959-8049/© 2021 Elsevier Ltd. All rights reserved.

treatment is time sensitive. The article by Gheorghe *et al.* [2] in this edition clearly concludes that “There is an urgent need for investment to manage the rising cancer diagnostic and treatment backlog”. Pre-COVID-19 national cancer plans have to be urgently revised because we are by no means starting in the same place. There are backlogs to be addressed, and technology and innovation which helped other areas in the pandemic should be rapidly introduced in cancer care to provide for a more resilient and different cancer service going forward.

Those in charge of pandemic preparedness and response did not appear to understand (and thus mitigate) the impacts of NPIs on non-COVID-19 health care, particularly cancer care. Are they making the same mistakes in second and third waves? The facts suggest that pandemic leadership lacks the welfare/economists to help balance out the wider consequences of public health actions as borne out in the study by Gheorghe *et al.* [2]. Input is urgently needed from cancer experts who understand the complexities of cancer diagnostic and treatment pathways.

Is there sufficient unified and prominent national and international cancer leadership? Are lives of patients with cancer valued as much as other lives? Does the immediacy of distressing COVID-19 deaths on overcrowded intensive treatment unit (ITU) focus the mind more than the quiet deaths at home from cancer months or years later? We need to address and place these difficult questions in perspective.

Therefore, did we shout out enough for patients with cancer during the pandemic or was there a failure of state? Future enquires will provide some answers, but for now, we are relying on professionals in the field to stand up, provide evidence-based data, advocate for our patients and our speciality and not settle for denials and obfuscation. More strategic investment which is lead by clinical need and minimises bureaucracy is needed in

cancer services now. Services need to learn from the major disruption caused by the pandemic and be made fit for purpose for the future. To this end, we need to have our voice heard by decision makers.

### Funding

None.

### Conflict of interest statement

None.

### References

- [1] [Martin Weale Financial Times. How much are the Covid-19 jobs actually worth to us all? Financial Times \(ft.com\); 26 March 2021.](#)
- [2] Adrian Gheorghe, Camille Maringe, James Spice, Arnie Purushotham, Kalipso Chalkidou, Bernard Rachet, Richard Sullivan, Ajay Aggarwal, Economic impact of avoidable cancer deaths caused by diagnostic delay during the COVID-19 pandemic: a national population-based modelling study in England, UK., *Europ J Cancer*, 2021;152:233–242
- [3] [Maringe C, Spicer J, Morris M, et al. The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis in England, UK: a national, population-based, modelling study. \*Lancet Oncol\* 2020;21\(8\):1023–34.](#)
- [4] [state-of-health-and-care-mar21.pdf \(ippr.org\) March 2021.](#)
- [5] [Hanna TP, King WD, Thibodeau S, et al. Mortality due to cancer treatment delay: systematic review and meta-analysis. \*BMJ\* 2020; 371:m4087.](#)

Pat Price

*Department of Surgery and Cancer, Imperial College London, B Block, Hammersmith Campus, Du Cane Road, London, W12 0NN, UK*

*E-mail address: [p.price@imperial.ac.uk](mailto:p.price@imperial.ac.uk)*

12 April 2021