To the Editor:

The outbreak of severe acute respiratory syndrome coronavirus-2 and the coronavirus disease 2019 (COVID-19) pandemic represent an international public health emergency. Patients with cancer are at higher risk of developing severe COVID-19 manifestations and hence the whole clinical decision-making process for oncological care is being revised, to balance the risk—benefit ratio for each treatment offered to patients. This scenario forces health care providers, including radiation therapy professionals, to undergo substantial reorganization in terms of staffing, resources, working processes, treatment allocation, and delivery and safety measures. This situation is supposed to have practical and psychological consequences for both patients with cancer and healthcare workers. This is even magnified on a personal level because the response required by the COVID-19 pandemic calls for draconian measures (quarantine for entire communities, social isolation), which are a potential source of further distress. Individuals facing traumatic events usually experience distressing emotions such as anxiety, sadness, guilt, and anger. For healthcare providers, an important stressor is related to the fear of being exposed to severe acute respiratory syndrome coronavirus-2 at hospital and the consequent anxiety of bringing the infection home. For patients with cancer, the fear of being infected adds to the cancer condition, which represents per se a traumatic event. Exposure to trauma is usually associated to psychological distress and trauma- and stressor-related disorders such as posttraumatic stress disorder. High levels of posttraumatic stress disorder were observed among medical staff during the H7N9 avian flu outbreak. Nevertheless, the presence of negative consequences in the aftermath of the trauma does not exclude the possibility of developing positive outcomes thereafter. Indeed, trauma can be a fertile ground for an unexpected outcome observed in survivors: posttraumatic growth (PTG). PTG refers to "positive psychological change experienced as a result of the struggle with highly challenging life circumstances." The Posttraumatic Growth Inventory is the most reliable measure to evaluate the positive change following a traumatic event. It measures 5 domains: (1) appreciation of life, (2) intimate relationships with others, (3) sense of personal strength, (4) recognition of new possibilities, and (5) spiritual change.

Growth, however, does not occur as a direct result of trauma. Different factors could foster the development of PTG. They are related to sociodemographic features such as age (higher growth for younger individuals), personality characteristics (extraversion, open-mindedness to experience), and coping strategies to manage distressing emotions. Also crucial is the activation of a cognitive processing allowing individuals to disengage with previous core beliefs and to build new schemas and meanings. Eventually, the presence of social support can help in elaborating narratives about the traumatic event experienced.

Sources of support: none.
Disclosures: The authors declare no conflicts of interest.
* Corresponding author: Pierfrancesco Franco, MD, PhD; E-mail: pierfrancesco.franco@unito.it.
In conclusion, traumatic and stressful events, like the COVID-19 pandemic, have definitely negative acute effects, but can lead to mid- to long-term positive outcomes. Hence, both healthcare providers and patients with cancer should be supported whenever experiencing psychological distress or difficulties in changing personal cognitive beliefs or struggling as a result of a lack of social help. This is important to foster the process of positive growth.

References

1. Meattini I, Franco P, Belgioia L, et al. Radiation therapy during coronavirus disease 2019 (covid-19) pandemic in Italy: A view of the nation’s young oncologists. *ESMO Open*. 2020;5:e000779.
2. Romesser PB, Wu AJ, Cercek A, et al. Management of locally advanced rectal cancer during the COVID-19 pandemic: A necessary paradigm change at Memorial Sloan Kettering Cancer Center. *Adv Rad Oncol*. 2020;5:687-689.
3. Wu AJ, Rimner A, Sheperd AF, et al. Thoracic radiation therapy during COVID-19: Provisional guidelines from a comprehensive cancer center within a pandemic epicenter. *Adv Rad Oncol*. 2020;5:603-607.
4. Braunstein LZ, Gillespie EF, Hing L, et al. Breast radiotherapy under COVID-19 pandemic resource constraints — approaches to defer or shorten treatment from a comprehensive cancer center in the United States. *Adv Rad Oncol*. 2020;5:582-588.
5. Zaorsky NG, Yu JB, McBride SM, et al. Prostate cancer radiation therapy recommendations in response to COVID-19. *Adv Radiat Oncol*. 2020;5:659-665.
6. Franco P, De Rose F, De Santis MC, et al. Omission of post-operative radiation after breast conserving surgery: A progressive paradigm shift towards precision medicine. *Clin Transl Oncol*. 2020;21:112-119.
7. Filippi AR, Russi E, Magrini SM, Covò R. Covid-19 outbreak in Northern Italy: First practical indications for radiotherapy departments [epub ahead of print]. *Int J Radiat Oncol Biol Phys*. https://doi.org/10.1016/j.ijrobp.2020.03.007. Accessed May 5, 2020.
8. Simcock R, Thomas TV, Estes C, et al. COVID-10: Global radiation oncology’s targeted response for pandemic preparedness [epub ahead of print]. *Clin Transl Oncol*. https://doi.org/10.1016/j.ctro.2020.03.009. Accessed May 5, 2020.
9. Shanafelt T, Jonathan R, Mickey T. Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic [epub ahead of print]. *JAMA*. https://doi.org/10.1001/jama.2020.5893. Accessed May 5, 2020.
10. Sindhu KK, Gupta V. Fear in the age of COVID-19 [epub ahead of print]. *Adv Rad Oncol*. 2020;5:525-526.
11. Tang L, Pan L, Yuan L, Zha L. Prevalence and related factors of post-traumatic stress disorder among medical staff members exposed to H7N9 patients. *Int J Nurs Sci*. 2016;4:63-67.
12. Romeo A, Di Tella M, Ghiggia A, Tesio V, Torta R, Castelli L. Posttraumatic growth in breast cancer survivors: Are depressive symptoms really negative predictors? *Psychol Trauma*. 2020;12:244-250.
13. Shakespeare-Finch J, Lurie-Beck J. A meta-analytic clarification of the relationship between posttraumatic growth and symptoms of posttraumatic distress disorder. *J Anxiety Disord*. 2014;28:223-229.
14. Tedeschi RG, Calhoun LG. Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychol Inquiry*. 2004;15:1-18.
15. Tedeschi RG, Calhoun LG. The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *J Trauma Stress*. 1996;9:455-471.