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## Journal Pre-proofs

Letter to the Editor

Cancer patients in covid-19 era: swimming against the tide

Gregucci Fabiana, Morena Caliandro, Alessia Surgo, Roberta Carbonara, Ilaria Bonaparte, Alba Fiorentino

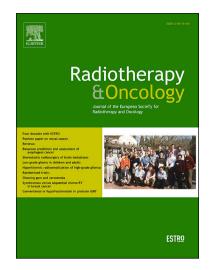
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# Cancer patients in Covid-19 era: swimming against the tide

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keceiving diagnosis of cancer leads the establishment of several psychological dynamics: fear of dying, uncertainty, loss of control, change in interpersonal relationships and self-image. In this patients' setting, the psychological structure often represents a "baggage" during their oncological treatments, which are "LIFE-SAVING" and cannot be postponed.

In the present context, SARS-CoV-2 infection has a significant impact on everyone's daily life, due to some recommendations to reduce its spread (wash your hands, avoid contact with other people, keep a distance, **remain at home**) [1]. These latter recommendations could have a negative impact on the life of oncological patients. In fact, they experience a different emotional state between the need to undergo LIFE-SAVING treatments (often in a COVID-Hospital) and the fear of exposing themselves to the contagion risk.

Radiotherapy (RT) provides significant survival benefit for patient affected by cancer [2], but "How can daily RT session be lived by patients?". Today, undergoing RT takes on a different meaning. It is necessary to put it in a world that swims against the tide: "The healthy people stay at home while I must go out! Why me??? I am weak!...

Based on this background, not only the organizational setup but also the psychological approach are necessary in Radiation Oncology Department [3, 4].

The sense of loneliness affects all oncological patients and this feeling reduces compliance to lifesaving treatments for fear of infection losing sight of the importance of care. On the other hand, it is important not to underestimate the dependence that patients can develop towards the following therapeutic plan.

It is necessary to help the patients to dimension the various dynamics of life, cognitively and emotionally, at hospital and at home. Small spontaneous groups, in which patients have the opportunity to express their emotions were useful. A real psycho-education could be performed comparing emotions (sadness, anger, fear, anxiety) to their somatic reactions (headache, stomachache, difficulty relaxing and sleeping).

Journal Pre-proofs conversely, auring the maividual psychological interview, the mechanisms of thought that can trigger should be evaluated: 1) catastrophizing (I could get die), 2) perception of responsibility (I could be infected and infect others), 3) feeling of vulnerability (I am powerless), 4) pay attention to negative aspects (data on the Covid-19 infected/deaths). In response to these thoughts, the behaviors implemented may be different: 1) cognitive (I don't think about it); 2) behavioral avoidance (I get distracted by doing many activities); 3) relational (difficulty in emotional expression). The sense of powerlessness and Covid-19 physical suffering (deterioration and transformation of the body image, breathing difficulties and dying in solitude) scare and could become generalized anxiety.

Easy tools, including Mindfulness-based stress reduction techniques, could be performed to manage stress, pain perception, reducing physical symptoms, mood and sleep disturbances [5]. They help to "observe" thoughts from a wider perspective, to be able to identify "thoughts" as "simple words" and not reflections of reality.

In relationship between stressful events and diseases, including cancer, the possibility of receiving support from a reference figure both in the intimate and extended environment is a relevant aspect. Covid-19 infection leads to the loss of an essential part in the inter-human relationship: physical contact that until now represented a resource, today represents a danger. The hug that until recently was the expression of closeness, care, container of joys and fears, is denied.

Thus, in the field of RT, the "touch" (mandatory for positioning patients) could be experienced as a danger [6] or a consolation for the cancer patient. Most patients, during RT, reported feeling of protection by the physician, the radiotherapist, the nurse who wears gloves and masks: "someone takes care of me concretely" in this society where trusting, for some people, is experienced as difficult. Other patients report fear of being touched, while being carefully positioned on the treatment table.

"How to manage the need for physical contact and the attitude that derives from it?" In our department, treatment rooms are decorated with Italian landscape to reduce anxiety [Figure 1], and the radiotherapist asks each patient for a favorite song, a melody that helps to relax, to recreate with

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mind episodes of the in which patient has experienced a state of well-being, thus regulating emotional intensity and managing to complete the treatment session.

In conclusion, in the present Covid-19 emergency, the psychological approach for cancer patients is mandatory to prevent the fear of infection from causing death by taking the patients away from their life-saving treatments.

### References

- 1. Rosenbaum L. Facing Covid-19 in Italy Ethics, Logistics, and Therapeutics on the Epidemic's Front Line. N Engl J Med. 2020 Mar 18. doi: 10.1056/NEJMp2005492.
- 2. Fiorentino A, Mazzola R, Lancellotta V, Saldi S, Chierchini S, Alitto AR, Borghetti P, Gregucci F, Fiore M, Desideri I, Marino L, Greto D, Tebala GD. Evaluation of Italian radiotherapy research from 1985 to 2005: preliminary analysis. Radiol Med. 2019 Mar;124(3):234-240.
- 3. Krengli M, Ferrara E, Mastroleo F, Brambilla M, Ricardi U. Running a Radiation Oncology Department at the time of coronavirus: an Italian experience. Adv Radiat Oncol. 2020; doi.org/10.1016/j.adro.2020.03.003
- 4. Covid-19 outbreak in northern italy: first practical indications for radiotherapy departments. Filippi AR, Russi E, Magrini SM, Corvò R. Int J Radiat Oncol Biol Phys. 2020; https://doi.org/10.1016/j.ijrobp.2020.03.007
- 5. Carlson, L.E., Speca, M, Patel, K.D., Goodey, E. Mindfulness-based stress reduction in relation to quality of life, mood, symptoms of stress and levels of cortisol, dehydroepiandrosterone sulfate and melatonin in breast and prostate cancer outpatients. Psychoneuroendocrinology 2004, 29(4):448-474.
- 6. Rose C. Am I Part of the Cure or Am I Part of the Disease? Keeping Coronavirus Out When a Doctor Comes Home. N Engl J Med. 2020 Mar 18. doi: 10.1056/NEJMp2004768

Figure 1: Treatment rooms

