



Reply to: “Quality of life and death anxiety among caregivers of patients with advanced cancer: the mediating effect of trait anxious personality and the moderating effect of social support”

Kohei Kajiwara¹ · Jun Kako² · Masamitsu Kobayashi³ · Yoshiyasu Ito⁴ · Michihiro Tsubaki⁵ · Makoto Yamanaka⁶ · Hideaki Sakuramoto¹ · Takahiro Kakeda⁷

Received: 5 July 2024 / Accepted: 5 September 2024

© The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature 2024

To the Editor,

We read with great interest the article published in *Supportive Care in Cancer* on June 29, 2024, by Ying et al. titled, “Quality of life and death anxiety among caregivers of patients with advanced cancer: The mediating effect of trait anxious personality and the moderating effect of social support” [1]. Ying et al. identified that Quality of Life (QoL) was directly related to an increased risk of death anxiety (DA) and indirectly related to DA by increasing the risk of trait anxious personality among caregivers [1]. In this study, we present a point pertaining to this study for further discussion.

Ying et al. pointed out that QoL is negatively related to DA among caregivers, and trait anxiety mediates the association between them [1]. Moreover, the study highlighted

that in a cross-sectional survey using random cluster sampling, all caregivers of patients with breast, liver, bladder, brain, stomach, and lung cancers were included in the study [1]. A prior study indicated that the factors associated with DA were age, primary caregivers, adult children, treatment methods (targeted therapy and supportive therapy), and activities of daily living from bivariate analyses, showing statistical significance [2]. We believe that the treatment options vary greatly depending on the disease-causing cancer type. Additionally, other studies have highlighted the disease characteristics of brain tumors in relation to fear of cancer recurrence, a variable akin to DA [3]. This study used random sampling of various cancer types. This study aimed to examine the method of how the disease characteristics of cancer influence the results and analyze authors’ conclusions in this regard. We are particularly interested in a more detailed discussion by the authors regarding the disease-specific characteristics of cancer.

Undoubtedly, it is important to focus on DA and QoL among caregivers of patients with advanced cancer, and the study conducted by Ying et al. provided useful data in this regard. We believe that this study will contribute to effective caregiver support in caring for patients with advanced cancer.

Author contribution Kohei Kajiwara, Jun Kako, Masamitsu Kobayashi, Yoshiyasu Ito, Michihiro Tsubaki, Makoto Yamanaka, Hideaki Sakuramoto and Takahiro Kakeda conceived and designed the study. Kohei Kajiwara penned the first draft of the manuscript. All authors provided feedback on all subsequent drafts, and reviewed and approved the final version of the manuscript.

Funding This study was supported by the JSPS KAKENHI [grant number: JP21K11073]. The funders played no role in the study design, decision to publish, or preparation of the manuscript as well as data collection and analysis.

This comment refers to the article available online at <https://doi.org/10.1007/s00520-024-08653-6>.

✉ Kohei Kajiwara
k-kajiwara@jrckicn.ac.jp

¹ Faculty of Nursing, Japanese Red Cross Kyushu International College of Nursing, Munakata 811-4157, Japan

² Graduate School of Medicine, Mie University, Tsu 514-8507, Japan

³ Graduate of Nursing Science, St. Luke’s International University, Chuo-Ku 104-0044, Japan

⁴ Faculty of Nursing Science, Tsuruga Nursing University, Tsuruga 914-0814, Japan

⁵ School of Nursing, Kitasato University, Sagami-hara 252-0373, Japan

⁶ School of Nursing, Aichi Medical University, Nagakute 480-1195, Japan

⁷ Faculty of Nursing, Kawasaki City College of Nursing, Kawasaki 212-0054, Japan

Data availability No datasets were generated or analysed during the current study.

Declarations

Competing interests The authors declare no competing interests.

References

1. Ying L, Yuyu D, Qinqin Z, Zhihuan Z (2024) Quality of life and death anxiety among caregivers of patients with advanced cancer: the mediating effect of trait anxious personality and the moderating effect of social support. *Support Care Cancer* 32(7):471. <https://doi.org/10.1007/s00520-024-08653-6>
2. Hong Y, Yuhan L, Youhui G et al (2022) Death anxiety among advanced cancer patients: a cross-sectional survey. *Support Care Cancer* 30(4):3531–3539. <https://doi.org/10.1007/s00520-022-06795-z>
3. Braun SE, Aslanzadeh FJ, Thacker L, Loughan AR (2021) Examining fear of cancer recurrence in primary brain tumor patients and their caregivers using the actor-partner interdependence model. *Psychooncology* 30(7):1120–1128. <https://doi.org/10.1002/pon.5659>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.