## LETTER OF REVIEWERS

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Reviewer A:
Recommendation: Revisions Required
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**Relevance:** Moderated
**Novelty:** Moderated
**Presentation and writing:** Moderated

**Comments for authors:**
Title
1. Title: We recommend explicitly indicating the study design in the title, in accordance with the STROBE guidelines. For example: “The Role of Empathy and Emotional Labor as Predictors of Burnout Syndrome in Brazilian Oncologists: A Cross-Sectional Study”.

Abstract:
2. The opening sentence should be reformulated to avoid overly general language. For example: “Among medical specialties, oncologists have been consistently identified as a group with heightened risk for Burnout Syndrome…”.
3. The sentence “Overall prediction of Burnout Syndrome was best assessed by…” should be revised for improved grammatical clarity.
4. Consider whether “doctor-patient relationship” should be replaced with “physician-patient relationship”, which is more commonly used in academic writing.
5. The names of the scales used should be included in the Methods subsection of the abstract.
6. Verify that all listed keywords are MeSH terms.

Introduction
7. The objective of the study should be clearly stated at the end of the Introduction section.

Method
8. In the Study Design section, the authors should indicate that the study follows the STROBE guidelines. Additionally, we recommend including the completed STROBE checklist as Supplementary Material 1.
9. In the Participants section, a sample size justification based on power analysis for multiple regression is missing. A calculation should be included to ensure at least 80% statistical power.
10. The Procedures and Measurement Instruments sections should be separated for clarity.
11. In the Instruments section, references to the Brazilian validation studies of the “Emotional Demand” and “Emotional Dissonance” scales should be included. Furthermore, the presentation format of the different instruments should be standardized to facilitate readability.
12. In the Ethics section, the data collection period should be specified. It should also be stated whether informed consent was obtained in written, verbal, or online form.
13. In the Analysis Plan section, the criteria for including variables in the adjusted model are unclear. Were only statistically significant variables included? Was stepwise selection, forward selection, or backward elimination used? The method for selecting variables should be clearly described and justified.

Results
14. The Methods and Results sections should be clearly separated.
15. Greater emphasis should be placed on effect sizes in the narrative, rather than relying solely on p-values. Some effects may be statistically significant but clinically negligible.

Discussion
16. A dedicated subsection on Strengths and Limitations should be added to improve readability. Although this content is present, the use of a distinct heading would enhance clarity.
17. A subsection addressing Practical and Public Health Implications should be included.
18. The discussion of potential protective mechanisms of empathy against Burnout should be expanded, as these are currently only briefly mentioned.

Romeiro, F., Carlotto M., Figueiredo-Braga, M., Brust-Renck, P. (2025). The Role of Empathy and Emotional Labor as Predictors of Burnout Syndrome in Brazilian Oncologists. *Interacciones, 11*, e465. https://dx.doi.org/10.24016/2025.v11.465

**RESPONSE LETTER**

August 7th, 2025

Dear Mg. Anthony Copez-Lonzoy and Mg. David Villarreal-Zegarra
Editors-in-Chief
Revista Interacciones

We would like to thank you for the feedback on our manuscript ID-465 entitled "The role of empathy and emotional labor as predictors of burnout syndrome in Brazilian oncologists" submitted to your journal.

We have implemented the changes in the revised manuscript (changes were highlighted in yellow), which we describe below addressing each point. We worked hard to make this a very responsive revision. We think that all of the suggestions have made the manuscript stronger; we hope that you agree.

Thank you again for your consideration.

Sincerely,
Priscila

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**Reviewer A:**

Response: We thank you for your feedback. We think that all of the suggestions have made the manuscript stronger; we hope that you agree.

**Title**

1. Title: We recommend explicitly indicating the study design in the title, in accordance with the STROBE guidelines. For example: "The Role of Empathy and Emotional Labor as Predictors of Burnout Syndrome in Brazilian Oncologists: A Cross-Sectional Study".

Response: Thank you for your recomendation. We have added the study design to the title as recommended.

**Abstract:**

2. The opening sentence should be reformulated to avoid overly general language. For example: "Among medical specialties, oncologists have been consistently identified as a group with heightened risk for Burnout Syndrome…".

Response: We have replaced the first sentence following your recommendation. The sentence now reads "Among medical specialties, oncologists have been consistently identified as a group with heightened risk for Burnout Syndrome".

3. The sentence "Overall prediction of Burnout Syndrome was best assessed by…" should be revised for improved grammatical clarity.

Response: We have re-written the sentence that starts with "Overall precition" following your recommendation, which now reads "Overall, burnout syndrome was best predicted by higher levels of emotional demand, while some dimensions were also predicted by emotional dissonance and empathy".

4. Consider whether "doctor-patient relationship" should be replaced with "physician-patient relationship", which is more commonly used in academic writing.

Response: We have replaced the term physician-patient relationship in the entire manuscript for consistency, starting with the abstract.

5. The names of the scales used should be included in the Methods subsection of the abstract.

Response: The names of the scales used were included in methods subsection of the abstract per your recommendation.

6. Verify that all listed keywords are MeSH terms.

Response: Three keywords were replaced. Now all of keywords are MeSH terms.

**Introduction**

7. The objective of the study should be clearly stated at the end of the Introduction section.

Response: We revised the last paragraph of the introduction to make sure the objective was clearly stated, the sentence now reads: the present study aimed to examine how frequently emotional demands and dissonance in addition of lack of empathy occur and how strongly they predict burnout syndrome among oncologists.

**Method**

8. In the Study Design section, the authors should indicate that the study follows the STROBE guidelines. Additionally, we recommend including the completed STROBE checklist as Supplementary Material 1.

Response: We have indicated that the study follows the STROBE guidelines in the Design section. We have also included the completed checklist as Supplementary Material.

9. In the Participants section, a sample size justification based on power analysis for multiple regression is missing. A calculation should be included to ensure at least 80% statistical power.

Response: Thank you for your suggestion. Although we had previously conducted a sample size analysis (using power size=95%), we had not included it in our manuscript. We have now added the following detailed explanation: "Sample size calculation was conducted using G*Power version 3.1.9.6 (Faul et al., 2007) based on Gil-Monte et al. (2023) broad analysis of the use of the Spanish Burnout Inventory in 17 countries. We have used the lowest effect size observed in all samples, which was 0.39 (the highest was 0.96) with a a significance criterion of $\alpha$=.05 and $\beta$=.05. The minimum sample sized needed to reach adequate power was estimated at 79 for bivariate normal models."

10. The Procedures and Measurement Instruments sections should be separated for clarity.

Response: A Data Collection Procedure section was created to separate procedures from materials.

11. In the Instruments section, references to the Brazilian validation studies of the "Emotional Demand" and "Emotional Dissonance" scales should be included. Furthermore, the presentation format of the different instruments should be standardized to facilitate readability.

Response: We have included information about the Brazilian validation studies developed by Taube, Carlotto, and Brust-Renck (2025).

12. In the Ethics section, the data collection period should be specified. It should also be stated whether informed consent was obtained in written, verbal, or online form.

Response: We moved the data collection period from the Data Collection Procedure section to the Ethical Procedures section.

13. In the Analysis Plan section, the criteria for including variables in the adjusted model are unclear. Were only statistically significant variables included? Was stepwise selection, forward selection, or backward elimination used? The method for selecting variables should be clearly described and justified.

Response: All variables were included in the model. There was no selection procedure, which is why we only explain that the multiple linear regression analysis was performed using Enter method. Text indicates that the dependent variables were each of the dimensions of the Burnout Syndrome and the independent variables were all the scales of emotional labor and all the dimensions of empathy.

**Results**

14. The Methods and Results sections should be clearly separated.

Response: Methods and Results sections are separated sections. We understand you meant separating Results and Discussion sections, which we agree would improve the readability of the manuscript. Thus, we have separated those sections.

15. Greater emphasis should be placed on effect sizes in the narrative, rather than relying solely on p-values. Some effects may be statistically significant but clinically negligible.

Response: We agree with your concern and we have replaced our comments about missing significance based on p-values and included information about the magnitude of the effects in the Results section.

**Discussion**

16. A dedicated subsection on Strengths and Limitations should be added to improve readability. Although this content is present, the use of a distinct heading would enhance clarity.

Response: Thank you for your suggestion. We have included a dedicated subsection on Strengths and Limitations to improve readability.

17. A subsection addressing Practical and Public Health Implications should be included.

Response: We have included a dedicated subsection on Practical and Public Health Implications as suggested.

18. The discussion of potential protective mechanisms of empathy against Burnout should be expanded, as these are currently only briefly mentioned.

Response: We agree the discussion of potential protective mechanisms of empathy against Burnout should be expanded and have included a full paragraph, as follows: “Although not always a consistent result (Altmann & Roth, 2021), similar results were found in a sample of general practitioners, indicating that empathy is an important and protective aspect for Burnout Syndrome (Lamothe et al., 2014). Empathy has not always been directly associated to Burnout Syndrome, but studies conducted with healthcare professionals have shown indirect effects mediated by resilience (Wu et al., 2022), professional support (Bredicean et al., 2021), job commitment and job satisfaction (Yue et al., 2022), mental health vulnerability and several others were also described in a recent systematic review (Zhou, 2025). Although teaching empathy might not be an easy task, helping professionals to establish professional and mental health support, as well as develop commitment and satisfaction to work might be a suitable proxy for preventing Burnout Syndrome.”