



CONSIDERATIONS ON THE ASSOCIATION BETWEEN ANXIETY AND DEPRESSION IN MEDICAL STUDENTS

CONSIDERACIONES SOBRE LA ASOCIACIÓN ENTRE ANSIEDAD Y DEPRESIÓN EN ESTUDIANTES DE MEDICINA

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Dear Editor:

We have carefully read the article titled "Association between Anxiety and Depression in Medical Students at Universidad Ricardo Palma during 2021"⁽¹⁾, published in the fourth issue of volume 22 (2022) of the Revista de la Facultad de Medicina Humana. The authors conducted a cross-sectional study with the objective of determining the association between anxiety and depression in medical students at Universidad Ricardo Palma. Below, we present some comments that we consider pertinent:

Concerning the main objective, the authors report a significant association between anxiety and depression, as well as between low socioeconomic status and depression. These findings are consistent with those reported by Perales et al. (1998), who, in a sample of 1,115 medical students from a state university in the same country, found a correlation of 0.80 between anxiety and depression, supporting the hypothesis that both conditions could constitute a unitary disorder⁽²⁾. Additionally, the multivariate analysis in that study showed that depression is associated with psychosocial variables, while anxiety is linked to motor and physical symptoms⁽²⁾. We believe that it would be valuable for the authors to discuss their results in comparison to this similar study.

In the results section, we observed that the variable "socioeconomic level" was categorized into three levels: low, middle, and high. However, in the Methods section, the criteria used for this categorization are not specified. In Peru, socioeconomic status is traditionally classified into five levels (A, B, C, D, and E)⁽³⁾. Moreover, it is not detailed how the information about this variable was obtained. Were the students directly asked about their socioeconomic level?.

Regarding the study design, the authors describe it as observational, analytical, cross-sectional, and quantitative. However, it is important to clarify that an analytical study aims to establish causal relationships between variables⁽⁴⁾, which is not compatible with the cross-sectional design, as this is based on the simultaneous measurement of variables, preventing the evaluation of cause-effect relationships⁽⁴⁾. In this sense, we suggest that the study be more appropriately classified as descriptive, as it better fits the methodology used.

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In relation to the sample size calculation, we recommend detailing the values for precision, confidence level, variability, and the correction rate for non-response, losses, or dropouts. Considering that the authors calculated the sample size for a proportion ($n = Z^2 pq / d^2$) with correction for finite populations ($n_{adj} = \frac{n}{N} n$)⁽⁴⁾, where N represents the population (according to the article, 2,046), we obtained a value of 323 people, with a precision of 5%, a confidence level of 95%, and variability of 50%.

This result differs from the sample size calculated by the authors, which was 110 people. Additionally, the sample size would be larger if a loss rate were considered, which, according to previous studies, is 25%⁽⁵⁾ or 20%⁽⁶⁾. In reference to sampling, it is mentioned that it was stratified probabilistic, with the

distribution of students according to the nature of the courses: Preclinical, Clinical, and Internship. However, the criterion for establishing this distribution is not explained, nor is it detailed how the recruitment of participants was conducted.

Finally, we suggest that the results section specify if any students were excluded from the study and, if so, how many. This would allow us to know the non-response rate, which would be useful for future researchers interested in continuing this line of research. We take this opportunity to congratulate the authors for their initiative in exploring this field, providing results that help to understand the levels of anxiety and depression in medical students at other universities in Peru. These findings reinforce the need for early intervention by educational institutions.

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