LETTER TO THE EDITOR

About the article entitled "Characteristics and frequency of tuberculosis before and during the COVID-19 pandemic among adults treated in a primary healthcare center in Lima, Peru, 2019-2020"

A propósito del artículo "Características y frecuencia de tuberculosis antes y durante la pandemia por COVID-19 en adultos atendidos en un centro de atención primaria, Lima-Perú, 2019-2020"

Patricia A. Pernia Gavedia* 1

Dear Madam Editor:

I have read the article "Characteristics and frequency of tuberculosis before and during the COVID-19 pandemic among adults treated in a primary healthcare center in Lima, Peru, 2019-2020" (1) with great interest. It was written by Calixto et al. and published in *Horizonte Médico (Lima)* journal, volume 23, issue 1, and concluded that in 2020 the prevalence of tuberculosis (TB) was higher in a primary healthcare center because of a reduced implementation of the TB programs due to the COVID-19 pandemic. Therefore, it is appropriate to reflect on such matter because of its high importance.

Every research encouraging to question the current approach to such disease at the different health levels contributes to improve the quality of service and, particularly, to correct mistakes that have turned Peru into one of the countries with more burden of TB and multidrug-resistant tuberculosis (MDR TB), not only in Latin America but worldwide. The high prevalence of such disease in this country may be explained by the population's sociodemographic, clinical and environmental factors mostly evidenced in the epidemiologic context of the COVID-19 pandemic. Thus, research results allow developing critical thinking among readers and setting up new strategies to approach the current issues (2).

Dilas et al. (3) mention nurses' potential to significantly contribute to the success in the treatment of TB patients since they play a leading educational role to help them improve their preventive behavior, which generates more participation and lower prevalence of subjects affected by TB. Also, they state that according to research studies health education (HE) may be essential for the success of treatment adherence. Hence, the results show the positive and significant effect of social support on HE. Likewise, they claim that TB patients need health information and motivation-based social support as well as treatment adherence surveillance.

In contrast, it is evident that there is little relationship between the approach to risk factors, HE and TB programs given by different health levels in Peru, which has been previously reported by Ortiz-Ruiz et al. (4) and by Dilas et al. They state that pharmacological treatment alone is not enough since fighting this disease involves a comprehensive approach (3), which agrees with the sociodemographic factors found by Calixto et al. (1).

Considering such findings, there should be a comprehensive approach to treat TB patients, as well as social support to favor adherence to TB drugs. This will contribute to improve psychological health, decrease stress and increase self-efficacy in the presence of the disease. Both physicians and nurses should exert more influence and increase motivation for the treatment of TB patients ^(3,4).

Therefore, the dissemination of the article is necessary since there is the risk that TB can become an incurable disease because of resistance to drugs and mismanagement of pharmacovigilance and disease control programs. In consequence, identifying the issues will allow preparing comprehensive and sustainable plans over time.

¹ Universidad Ricardo Palma, School of Human Medicine, Lima, Peru.

^{*}Corresponding author.

Author contributions: PAPG participated in the conceptualization, research and writing of the original draft.

Funding sources: This article was funded by the author.

Conflicts of interest: The author declares no conflicts of interest.

BIBLIOGRAFIC REFERENCES

- 1. Calixto F, Pantoja LR. Características y frecuencia de tuberculosis antes y durante la pandemia por COVID-19 en adultos atendidos en un centro de atención primaria, Lima-Perú, 2019-2020. Horiz Med [Internet]. 2023;23(1):e2146.
- 2. Honorio F, Zavaleta G. Covid 19: Risk factors and development of pulmonary TB in household contacts, Lima, Peru. J Clin Tuberc Other Mycobact Dis [Internet]. 2023;30(100345):100345.
- 3. Dilas D, Flores R, Morales-García WC, Calizaya-Milla YE, Morales-García M, Sairitupa-Sanchez L, et al. Social Support, quality of care, and patient adherence to tuberculosis treatment in Peru: The mediating role of nurse health education. Patient Prefer Adherence [Internet]. 2023;17:175-86.
- 4. Ortiz-Ruiz N, Díaz-Grajales C, Zamudio-Espinosa D, Satizabal-Reyes M, López-Salamanca DE, López-Paz Y, et al. Vulnerabilidad social y tuberculosis: un círculo vicioso. ENTRAMADO [Internet]. 2022;19(1):e-8797.

Corresponding author:

Patricia Alexandra Pernia Gavedia

Address: Jr. Trinitarias 474, Santiago de Surco, Lima, Perú.

Telephone: +51 941 286 501 E-mail: pperniag2410@gmail.com

> Reception date: March 20, 2023 Evaluation date: April 17, 2023 Approval date: May 04, 2023

© The journal. A publication of Universidad de San Martín de Porres, Peru.

© Torrestive Commons License. Open access article published under the terms of Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0).

ORCID iD

Patricia Alexandra Pernia Gavedia https://orcid.org/0000-0002-4192-0677