

# The Indirect Impact of COVID-19 Pandemic on Lower Extremity Amputations – An Australian Study [Letter]

Suprijandan, Slamet Wardoyo , Demes Nurmayanti

Department of Environmental Health, Poltekkes Kemenkes Surabaya, Surabaya, Indonesia

Correspondence: Slamet Wardoyo, Email slametwardoyo91@gmail.com

## Dear editor

We are writing in response to the article titled “The Indirect Impact of COVID-19 Pandemic on Lower Extremity Amputations – An Australian Study” by Lakmali Anthony et al, published in *Vascular Health and Risk Management*. The study provides valuable insights into the impact of the COVID-19 pandemic on patients with peripheral vascular disease (PVD) in Australia. The authors conducted a comprehensive analysis of lower extremity amputation rates before and after the onset of the pandemic, shedding light on the significant increase in major amputations during the pandemic period. The findings underscore the indirect and deleterious effects of the pandemic on patient health, particularly for those with chronic conditions like PVD. The study also highlights the disruptions to revascularization procedures and the shift in the demographic profile of patients undergoing amputations during the pandemic. The implications of this study are far-reaching, especially in informing and directing future vascular surgery service delivery to prepare for the post-pandemic recovery. The evidence presented in this study emphasizes the need for better systems to be developed to address the disproportionate disadvantage faced by patients with chronic diseases during global crises affecting routine provision.<sup>1</sup>

Although this study provides valuable insights, there are some weaknesses to note. Firstly, this study was retrospective and used data from the AVA database which may not have included all amputation procedures performed in Victoria during the study period. This may affect the overall representation of the data analysed. In addition, this study was unable to distinguish between amputations caused by worsening diabetes and those caused by PVD alone, which may affect the interpretation of the results regarding the impact of the COVID-19 pandemic on patients with PVD. In addition, this study did not provide information on other factors that may have influenced the increase in amputations during the pandemic, such as healthcare accessibility, the level of patient adherence to treatment, and lifestyle changes during the pandemic. In addition, this study did not consider differences in the management of PVD cases between different hospitals or treatment units. Lastly, this study did not provide information on specific strategies used by vascular surgery units in Victoria to mitigate the impact of the pandemic on their services. Information on these strategies may provide valuable insights into best practices that other healthcare units may adopt in the future.

To increase the reliability and relevance of this study, several recommendations for improvement can be considered. Firstly, a prospective study with direct data collection from patients during the pandemic period would provide a more in-depth understanding of the direct impact of the COVID-19 pandemic on patients with PVD. This will also allow researchers to obtain more complete and accurate information on other factors that may influence the increase in amputations during the pandemic. In addition, expanding the scope of the study to include information on specific strategies used by vascular surgery units in Victoria to mitigate the impact of the pandemic on their services would provide valuable insights into best practices that could be adopted by other healthcare units in the future. Furthermore, considering subgroup analyses based on geographical location, type of healthcare service, and level of healthcare

accessibility would provide a more comprehensive understanding of the differences in the management of PVD cases during the pandemic. Lastly, expanding the study to include factors such as patients' level of adherence to treatment, lifestyle changes during the pandemic, and healthcare accessibility would provide a more complete picture of the impact of the COVID-19 pandemic on patients with PVD.<sup>2,3</sup>

With these recommendations in mind, further research may provide a more comprehensive understanding of the impact of the COVID-19 pandemic on patients with PVD and provide a stronger basis for the development of effective intervention strategies.

## Disclosure

The author(s) report no conflicts of interest in this communication.

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