

Improving outcomes in MASLD: the role of *H. pylori* eradication and lifestyle interventions

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I am writing to commend the article by Alvarez et al. for their significant contribution, which provides valuable insights into how *Helicobacter pylori* may contribute to the development of MASLD and other related metabolic conditions, offering new perspectives on potential preventative and therapeutic strategies for this high-risk population.¹ However, there are a few areas where I believe additional considerations could strengthen the study and its conclusions.

First, although the study has adjusted for several confounding factors, such as age, sex, education level, and smoking habits, there may still be other unaccounted-for confounders. For instance, factors like dietary habits, physical activity levels, socioeconomic status, and health behaviours could influence the development of MASLD or obesity. If these factors are not adequately controlled for, they may impact the study's findings.²

Second, since this study lacks long-term follow-up data, while associations between *H. pylori* and MASLD or obesity were observed, it remains unclear whether these associations change over time or serve as long-term predictors of health. Future research could include longer follow-up periods to continuously track individual health changes and incorporate experimental interventions to explore the long-term effects of *H. pylori* treatment, providing valuable insights into trends over time.³

Third, the study relies on self-reported health and lifestyle data (e.g., smoking status, diabetes diagnosis) from participants, which may be influenced by social desirability bias, recall bias, or subjective perceptions, potentially affecting the accuracy of the results. For example, participants may underestimate their unhealthy behaviours or fail to fully understand or report their health conditions, which could impact the reliability of the study findings.^{4,5} Future studies could incorporate objective measures, such as medical records or biomarkers, to verify self-reported data on health behaviours and conditions. Additionally, using standardized clinical assessments or conducting interviews with trained healthcare professionals may help reduce

biases related to social desirability, recall, or subjective perception.

In conclusion, this study provides valuable insights into the association between *H. pylori* infection and MASLD, highlighting the potential role of *H. pylori* in metabolic diseases, particularly in underserved Hispanic/Latino populations. As clinical doctors, we should actively screen patients with unexplained liver dysfunction, especially *H. pylori* in the Hispanic/Latino population, and immediately begin eradication treatment upon detection. Our treatment approach should combine infection control with comprehensive lifestyle interventions, including structured dietary adjustments and exercise plans, while closely monitoring metabolic parameters and MASLD progression throughout the entire treatment process to improve patient clinical outcomes.

Contributors

Zhiyi Zhang: Conceptualization, Methodology, Formal analysis, Writing - Original Draft, Writing - Review & Editing, Supervision.

Declaration of interests

The authors have no conflict of interest.

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