

LETTER

# Challenges and Considerations in Assessing GERD: A Critical Review of a Study in Southern Punjab, Pakistan [Letter]

Muneeba Iqbal Qureshi, Manahil Qadri, Abdullah Arshad

Shaheed Mohtarma Benazir Bhutto Medical College, Karachi, Pakistan

Correspondence: Muneeba Iqbal Qureshi, Shaheed Mohtarma Benazir Bhutto Medical College, Lyari, Karachi, Pakistan, Email muneebaiqbal I@gmail.com

### Dear editor

We congratulate Rasool et al for successfully conducting a study in Southern Punjab, Pakistan, aimed at assessing the frequency and risk factors associated with GERD in a population that was previously unstudied. The research adopted a cross sectional design which is appropriate for this type of study allowing various factors to be assessed at a single point in time. The use of GerdQ which is a self-administered questionnaire to detect the presence of GERD is also commendable as it provides a structured approach to screening for GERD symptoms. Findings from this research indicated that GERD was considerably prevalent in the studied population, with various modifiable risk factors significantly associated with the disease.

However, after carefully examining this study, we are inclined to express concerns about one of the conclusions from this study. It appears that this article discusses the correlation of GERD with soft drinks which contradicts several other well-reputed studies by Johnson et al,<sup>2</sup> and a recent study by Lim et al.<sup>3</sup> These studies clearly state that there is a lack of evidence and research that soft drinks/carbonated drinks cause or exacerbate GERD-related symptoms. These contradictory statements can raise questions regarding the generalizability of the results.

In addition to this, the survey instrument's reliance on self-reported soft drink consumption may have introduced recall bias, potentially affecting the precision of the reported results. Moreover, self-administered questionnaires are not exceptional for diagnostic accuracy of clinical assessments conducted by healthcare professionals.

Furthermore, the study's sample size consisted of 308 participants, which does not represent the entire population of Southern Punjab, adding generalizability of the findings. A larger sample size would enhance the study's statistical power and improve the precision of prevalence estimates.

Another study by Cuomo et al4 suggests that there is need for further research on the correlation of carbonated beverages and GERD. To enhance credibility of this research, methods like dietary records and biomarker analysis can be used. The study could also have benefited from multivariate analysis to assess the independent contribution of each risk factor while controlling for potential confounders. Variables such as lifestyle factors, smoking and dietary records can be controlled to draw out the true relation between GERD and carbonated beverages. Additionally, the study did not explore potential interactions between risk factors, which could provide valuable insights into the complex etiology of GERD.

GERD epidemiology is not entirely understood, however, by addressing the discrepancies highlighted in this study, we can pave the way for more robust research methodologies which will lead to deeper understanding. Dealing with these concerns is imperative in order to elucidate any confusion that stands between understanding the core risk factors concerning GERD. We express our sincere gratitude for your attention to this matter and expect continued efforts in exploring the multifaceted nature of GERD which will one day benefit individuals suffering from this widespread gastrointestinal disorder.

Qureshi et al **Dove**press

## **Disclosure**

The authors report no conflicts of interest in this communication.

#### References

1. Rasool MF, Sarwar R, Arshad MS, et al. Assessing the frequency and risk factors associated with Gastroesophageal Reflux Disease (GERD) in Southern Punjab, Pakistan. Risk Manag Healthc Policy. 2021;14:4619-4625. doi:10.2147/RMHP.S335142

- 2. Johnson T, Gerson L, Hershcovici T, Stave C, Fass R. Systematic review: the effects of carbonated beverages on gastro-oesophageal reflux disease. Aliment Pharmacol Ther. 2010;31(6):607-614. doi:10.1111/j.1365-2036.2010.04232.x
- 3. Lim SXB, Brownlee IA. Assessment of the acute effects of carbonated beverage consumption on symptoms and objective markers of gastric reflux. Gastrointest Disord. 2019;1(1):30-38. doi:10.3390/gidisord1010004
- 4. Cuomo R, Sarnelli G, Savarese MF, Buyckx M. Carbonated beverages and gastrointestinal system: between myth and reality. Nutr Metab Cardiovasc Dis. 2009;19(10):683-689. doi:10.1016/j.numecd.2009.03.020

Dove Medical Press encourages responsible, free and frank academic debate. The contentTxt of the Risk Management and Healthcare Policy 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Risk Management and Healthcare Policy editors. While all reasonable steps have been taken to confirm the contentTxt of each letter. Dove Medical Press accepts no liability in respect of the contentTxt of any letter, nor is it responsible for the contentTxt and accuracy of any letter to the editor.

#### Risk Management and Healthcare Policy

Dovepress

## Publish your work in this journal

Risk Management and Healthcare Policy is an international, peer-reviewed, open access journal focusing on all aspects of public health, policy, and preventative measures to promote good health and improve morbidity and mortality in the population. The journal welcomes submitted papers covering original research, basic science, clinical & epidemiological studies, reviews and evaluations, guidelines, expert opinion and commentary, case reports and extended reports. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: https://www.dovepress.com/risk-management-and-healthcare-policy-journal