

How Significant pH Study in Diagnosis of Symptomatic Patients in Saudi Community: A Cohort Study

Waleed Alhuzaim, MD*,** Atheer T. Alotaibi* Khawlah S. Alshahrani* Hatun F. Al-Rajeh* Muzun M. Alqumaizi* Noora O. Altamimi* Dalal H. Alkana'an*

ABSTRACT

Background: The study of pH levels is crucial in diagnosing symptomatic patients, providing insight into metabolic imbalances and gastrointestinal disorders. Evaluating pH variations helps health professionals make more precise treatments, improving health outcomes and proper interventions.

Aim: Present study aims to explore the role of pH monitoring in symptomatic patients diagnosed within the Saudi population and its worth in differentiating nonspecific symptoms. The focus of this study is to discuss the connection between clinical symptoms, chronic diseases, and pH DeMeester scores to increase the diagnostic sensitivity for GERD.

Methodology: A cohort observational study was conducted on a simple random sample of 130 participants, aged 18 to 70, recruited from a gastroenterology medical centre in Riyadh between June and July 2021. Sociodemographic and clinical data were collected, including associations of symptoms and chronic diseases with pH scores.

Results: Among 130 participants, 63.8% had GERD, 36.9% had IBS, and 92.3% reported dyspepsia. High pH DeMeester scores were observed in 37.7% of participants, while 41.5% had normal scores and 20.8% severe. Statistical analysis revealed no significant association between pH scores, clinical symptoms, or chronic diseases, highlighting diagnostic mismatches in 75.5% of cases.

Conclusion: These findings underscore the complexity of GERD diagnosis and the need for objective measures beyond symptom-based assessments.

Keywords: pH study, Saudi community, symptomatic patients.

Bahrain Med Bull 2025; 47 (2): 2145 - 2151

* Internal Medicine Department, College of Medicine
Imam Mohammed Bin Saud Islamic University, Riyadh, KSA

** Principal Investigator, College of medicine
Imam Mohammed bin Saud Islamic university, Riyadh, KSA.
Email: waleedalhuzaim@outlook.com