

GERD Symptoms among Medical Students: Prevalence and Associations

¹Mayar Essam Samaha, ²Amal Alhammadi, ³Nour Alhammadi, Ahmed Alowais, ⁴Yara Mohammad, Majd Shamaa

¹Kuwait Hospital, Sharjah, UAE, ²Al Qassimi Hospital, Sharjah, UAE, ³Mohammed Bin Rashid University (MBRU), Dubai, UAE, ⁴Sheikh Khalifa Medical City (SKMC) Abu Dhabi, UAE

Introduction and Aim

Gastroesophageal reflux disease (GERD) occurs when stomach acidic content backs up into the esophagus irritating and damaging its lining. Its prevalence was shown to be in an increase, studies conducted in India and KSA found its prevalence among medical students to be 52.5% (Karthik et al., 2017) and 53.2% (Gamal, & Masoodi, 2018), respectively. There were no published researches regarding the prevalence of GERD in the UAE at the time this study was conducted, indicating the need for local data. This study was conducted to determine the prevalence of GERD symptoms among medical students, its likelihood, characteristics of its distribution, and associations with certain factors, including age, gender, physical exercise, life habits, and quality of life.

Methodology

Study Design:

A cross-sectional design was used.

Sample:

450 students from the colleges of Pharmacy, Medicine, Dentistry, and Health Sciences at the University of Sharjah were employed.

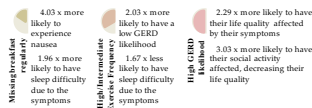
Instrument:

Self-administered 18-item questionnaires were used. They assessed GERD likelihood using the GERDQ scale, which depends on frequency of GERD symptoms (heartburn and regurgitation), negative predictors of GERD (epigastric pain and nausea), and positive predictors of GERD (sleep difficulty due to symptoms and use of medications to relief them). They also inquired about age, gender, frequency of physical exercise, life habits (including breakfast habits), quality of life, and aspects affected by GERD symptoms.

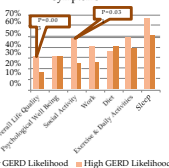
Data Analysis

Statistical Package for Social Sciences (SPSS) 25 was used to analyse the data, bivariate analyses were done using Chi-Square Tests to determine the presence of associations, after which the odds ratio was used to estimate these factors' relative risk.

Continuation of Results



Life Aspects Affected by GERD Symptoms



Discussion

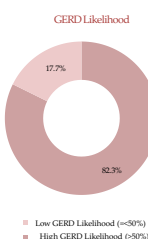
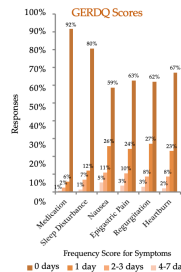
A high GERD likelihood was found in around one fifth of the sample, which is about half the GERD prevalence found by previous studies conducted in other countries (Karthik et al., 2017 and Gamal, & Masoodi, 2018).

- Missing breakfast regularly demonstrated conflicting results; it was associated with both a negative predictor, nausea, and a positive predictor, sleep difficulty due to symptoms. This is partially consistent with another study that found missing breakfast to be a risk factor for GERD among medical students (Sharma, Sharma, & Puri, 2018).
- High/Intermediate exercise frequency showed a significant association with a lower GERD likelihood and a lesser risk of having sleep difficulty due to GERD symptoms, which contradicts with the results found by Gamal and Masoodi (2018) when they conducted a similar study in Saudi Arabia, as they found no significant correlations in that regard.

•The influence of a higher GERD likelihood on life quality is consistent with the findings of another study conducted in Saudi Arabia (Algethami et al., 2018).

•Limitations of this study were due to the sampling method, as self-administered questionnaires are a non-probability sampling method; it is one of convenience which may result in bias of the results.

Results



Conclusion and Recommendations

A high GERD likelihood was found in 17.7% of the population, it demonstrates associations with missing breakfast regularly, a lower frequency of exercise, and a lower life quality. As missing breakfast regularly results in both nausea and sleep disturbances due to GERD symptoms, awareness programs regarding the importance of breakfast as a meal would be beneficial, as well as plans to promote a high exercise frequency, as that could pose as a protective factor against GERD.