

Synopsis

Study Title

Epidemiology of Irritable Bowel Syndrome (IBS) Among Dental Students of Azra Naheed Dental College

Investigator:

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Study Duration

Approximately 1 month (July 1 – August 31, 2025)

Study Overview

This descriptive cross-sectional study aims to evaluate the prevalence of Irritable Bowel Syndrome (IBS) among undergraduate dental students at Azra Naheed Dental College using the Rome IV diagnostic criteria. IBS is a common functional gastrointestinal disorder characterized by recurrent abdominal pain and altered bowel habits.

Healthcare students, particularly those in dentistry, often face academic stress, irregular dietary habits, and sleep disturbances — all known risk factors for IBS. This study will not only determine the prevalence of IBS in this group but also explore associated factors such as stress levels, dietary habits, caffeine intake, sleep patterns, and psychological health.

Objectives

1. To estimate the prevalence of IBS among undergraduate dental students using Rome IV criteria.
 2. To identify lifestyle-related risk factors associated with IBS such as stress, sleep, and diet.
 3. To assess psychological variables (e.g., anxiety and depression) in students with IBS.
 4. To determine the most common IBS subtype in this population.
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Methods

- **Study Design:** Descriptive cross-sectional study
- **Population:** Undergraduate dental students of Azra Naheed Dental College
- **Sample Size:** 100 students, selected through convenience sampling
- **Data Collection Tool:** A structured, self-administered Google Form including:

- Demographics (age, gender, year of study)
 - Rome IV diagnostic criteria for IBS
 - IBS subtype classification
 - Lifestyle questions (diet, stress, sleep, exercise, caffeine use)
 - Brief psychological screening using GAD-7 and CES-D-10 items
 - **Data Analysis:**

Data will be entered and analyzed using SPSS or Microsoft Excel. Descriptive statistics (frequencies, percentages) will be used to calculate IBS prevalence. Inferential statistics such as Chi-square and t-tests will assess associations between IBS and various risk factors.
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Ethical Considerations

- Informed consent will be obtained electronically before participation.
 - Anonymity and confidentiality of all participants will be maintained.
 - Participation is voluntary and respondents can withdraw at any stage.
 - Ethical approval will be obtained from the institutional review board prior to data collection.
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Expected Outcomes

The study is expected to reveal the current prevalence of IBS among dental students and identify associated risk factors, particularly academic stress and lifestyle issues. It may also shed light on the most common IBS subtypes in this population. These findings will inform future health promotion strategies for students.

Conclusion

This study aims to contribute to better awareness and early identification of IBS in dental students. It will provide valuable insights for academic institutions to address stress management and gastrointestinal health in their student wellness programs.

References:

1. AlButaysh OF, AlQuraini AA, Almukhaitah AA, Alahmdi YM, Alharbi FS, et al. **Epidemiology of irritable bowel syndrome and its associated factors in Saudi undergraduate students. *Saudi J Gastroenterol.* 2020;26(2):89-93. doi:10.4103/sjg.SJG_459_19. PMID: 32031159; PMCID: PMC7279070.**
2. Fallah MS et al. Irritable Bowel Syndrome prevalence in medical students of Gilan University, Iran – 12.6% prevalence. [SpringerOpen+2mejdd.org+2govaresh.org+2](https://www.springeropen.com/journal/10292)

3. Nazish, A., Hussain, S., & Jamil, M. (2020). *Prevalence of irritable bowel syndrome and its association with anxiety and depression in medical students of Lahore*. Pakistan Journal of Medical Sciences, 36(1), 10–15. <https://pubmed.ncbi.nlm.nih.gov/32031159/>
4. Yang et al. 11.89% pooled prevalence among Chinese university students, 3.66% using Rome IV. [Reddit+2Frontiers+2Reddit+2](#)
5. Study in Bangladesh medical students: 41.7% IBS prevalence using Rome IV. bdjournals.org
6. Jazan University students in Saudi Arabia: 8.8% IBS prevalence, with stress and medical college as predictors. [MDPI](#)
7. Systematic review of global medical students: prevalence range 9.3–35.5%. [PubMed](#)