

Investigating the Prevalence and Risk Factors of Gallstone Disease in Al Jouf region, the Kingdom of Saudi Arabia.

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ABSTRACT

Background: Gallstone disease, referred to as cholelithiasis, constitutes a widespread surgical disorder marked by the formation of calculi within the gallbladder or bile ducts. Patients may remain asymptomatic until incidentally detected through imaging studies. However, when a stone obstructs the bile ducts or triggers inflammation cholecystitis, symptoms such as upper abdominal discomfort and jaundice manifest. Cholelithiasis has consistently posed a global health burden. Numerous predisposing factors have been delineated, encompassing female gender, obesity, rapid weight reduction, familial history, and diabetes mellitus. In this study our principal objective is to ascertain the prevalence of cholelithiasis within the Al Jouf region. Additionally, the study seeks to determine the risk factors that give rise to cholelithiasis in this demographic and to elucidate the relationship between these risk factors and the occurrence of cholelithiasis.

Methods: A cross-sectional study was conducted among 582 participants in the Al Jouf region, Kingdom of Saudi Arabia. A self-administrated online questionnaire was used as the data collection tool; it consisted of multiple-choice questions. IBM SPSS Statistics version 25 IBM Corp., Armonk, NY was used to analyze the collected data.

Results: Our results have revealed a noteworthy prevalence of 48.79% for gallstone disease within the studied population, thereby establishing gallstone disease GD as a prominent health concern within this demographic. A heightened prevalence of symptoms was observed among respondents aged 45 years or older 38.2%, those classified as overweight 28.9% or obese 33.3%, housekeepers 43.1%, and those who are divorced 30%. Evidently, a group of factors demonstrates a positive correlation with gallstone disease in the Al Jouf region. These factors include age, employment status, familial predisposition to gallstone disease, concurrent medical conditions, usage of hormonal contraceptives among women, and a history of bariatric surgery. The outcomes of this study are poised to provide a fundamental groundwork for the implementation of evidence-based clinical practices and public health interventions. Ultimately, these findings offer a valuable insight into the current situation of gallstone disease, revealing how widespread the disease is and the risk factors linked to it in the Al Jouf region.

Conclusion: Our study revealed a gallstone disease prevalence of approximately 48.79% within our sample, with a higher incidence observed among females. Notably, a considerable proportion of cases exhibited absence of medical comorbidities and abstention from tobacco, alcohol, high-fat diet, and coffee consumption. The influence of a history of bariatric surgery emerged as a noteworthy factor in gallstone disease development.

Key Words: Prevalence , Risk, Factors, Gallstone Disease

Bahrain Med Bull 2025; 47 (2): 2852 - 2858

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