

**An-Najah National University**  
**Faculty of Medicine and Health Sciences**



**Management of neurogenic bladder disease: a mixed method exploring perspectives of healthcare providers and experiences of the patients**

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## Prevalence of overactive bladder bother symptoms and their impact on health-related quality of life of medical and dentistry students: A multicenter cross-sectional study

### Abstract

**Background:** Overactive bladder (OAB) is a popular distressing health condition that has negative impact on health-related quality of life (HRQoL) of the inflicted individuals. This multicenter study was conducted to determine the prevalence of OAB bother symptoms and their impact on the HRQoL of medical and dentistry students.

**Methods:** This study was conducted in a cross-sectional design in the 3 main universities in Palestine. In addition to the sociodemographic, health, and academic characteristics of the medical and dentistry students, the questionnaire also contained the OAB bother symptom (6-items) and HRQoL (13-items) Short-Form (OAB-q SF) scales. Kruskal-Wallis test, Mann-Whitney U test, Pearson Chi-Square/Fisher's Exact Test, Spearman's rank correlations, and a multiple linear regression model were used to analyze the data.

**Results:** Responses were collected from medical and dentistry students ( $n = 402$ ). The median OAB bother symptoms score was 54.1 (44.8, 81.9). Of the students, 60.4%, 36.3%, 20.1%, 28.1%, 43.8%, and 16.9% were bothered by OAB symptoms. The median HRQoL score was 94.4 (88.4, 94.4). Of the students, 21.6%, 18.7%, 12.4%, 11.7%, 9.5%, 21.4%, 8.5%, 1.5%, 13.4%, 4.7%, 10.2%, 14.4%, and 14.4% reported less than optimal HRQoL scores. There was a strong negative correlation between the OAB and HRQoL scores (Spearman's  $\rho = 64.4\%$ ,  $p$ -value  $< 0.001$ ). The multiple linear regression model showed that OAB scores were significantly higher among dentistry students, females, who had chronic disease, and those who reported stressful life. HRQoL scores were significantly higher among medicine students, those who reported less stressful life, and those who reported satisfaction with their social life.

**Conclusion:** Our findings suggested that OAB bother symptoms were prevalent among medical and dentistry students across Palestinian universities. Decision makers in academia, healthcare authorities, and advocacy groups might need to design appropriate interventions to address health and wellbeing issues of medical and dentistry students. Using appropriate diagnostic procedures, reducing stress, and improving the social life might help in reducing the burden on OAB and improve the HRQoL of medical and dentistry students. More investigations should be conducted to investigate if such interventions are effective in reducing OAB symptoms and improving HRQoL.

**Keywords:** Overactive bladder, Medical students, Dentistry students, Health-related quality of life, Palestine