Prevalence and Risk Factors of Overactive Bladder among Military
Healthcare Workers in a Quaternary Care Hospital in Thailand
: Implications for Workplace Productivity

Pasin Charnviboon MD., Vittaya Jiraanankul MD. Division of Urology, Department of Surgery, Phramongkutklao hospital, Bangkok, Thailand

Aims of study

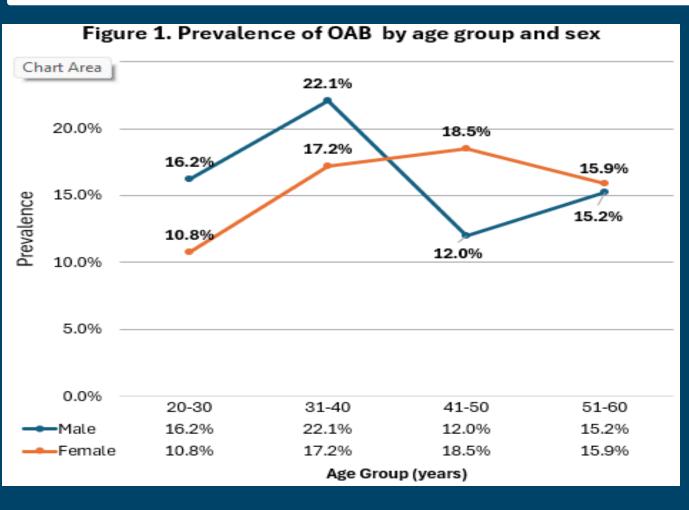
- Overactive bladder (OAB) is a prevalent condition known to significantly impact individuals' quality of life and work productivity.
- This study investigates the prevalence and risk factors of OAB among military healthcare workers, with a focus on understanding prevalence, risk factor and its implications for workplace productivity.

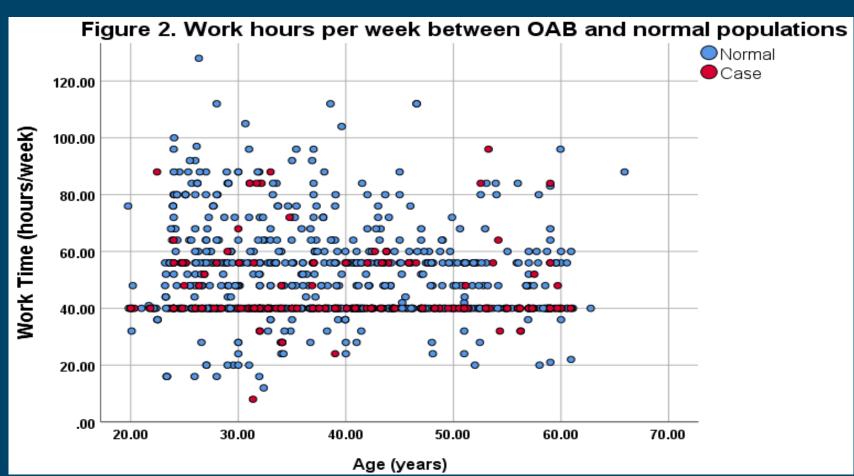
Study design & Methods

- A cross-sectional observational study: among military healthcare workers undergoing annual health checks in 2023.
- The prevalence of OAB was assessed using the validated Thai version of the Overactive Bladder Symptoms Score (OABSS-T) and a questionnaire identified potential risk factors.
- Participants with abnormal urine analysis were excluded

Results

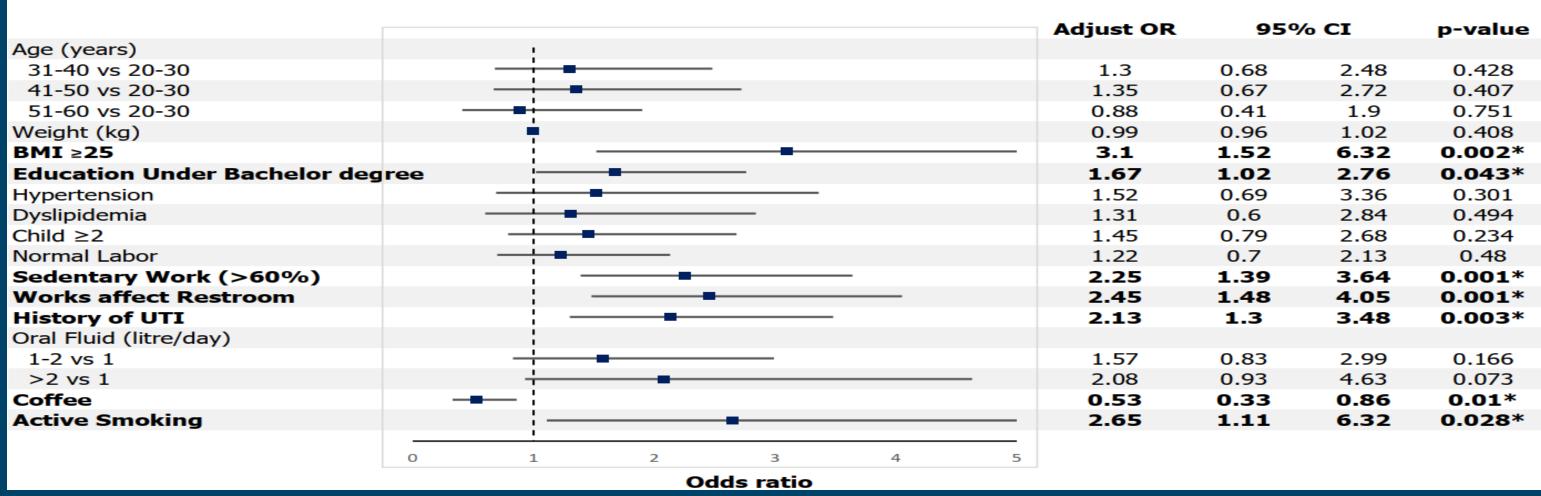
- The total study group consisted of 1,045 participants, with 122 excluded due to abnormal urinalysis results and incomplete questionnaires, leaving a final total of 923 participants.
- Overall prevalence of OAB was 15.8%, with no significant difference between male and female. Dry-OAB and wet-OAB were identified in 7.1% and 8.7% of cases, respectively.
- Moreover, within the OAB group, participants reported fewer work hours per week compared to those without OAB (46.85 ± 14.58 vs. 51.51 ± 22.75 hours/week; p = 0.017).





- Multivariate analysis revealed that risk factors for OAB included
 - BMI ≥ 25, education below a bachelor's degree, prolonged sedentary work (>60% of total time), work affects restroom accessibility, history of urinary tract infection, active smoking
 - Conversely, consuming coffee was identified as a protective factor.

Figure 3. Multivariate analysis of associated factors of overactive bladder



Conclusion

- This study revealed a moderately high prevalence of OAB among healthcare workers in Thailand, with associated reductions in work hours per week, potentially due to disruption from their OAB symptoms.
- Modifiable risk factors like high BMI, prolonged sitting, limited restroom access, smoking, and UTI
 history were identified that could be targeted through workplace interventions to reduce OAB burden.
- Interestingly, coffee consumption was associated with lower OAB prevalence, warranting further study.
- Attention to modifiable OAB risk factors and ensuring prompt diagnosis and treatment may help reduce symptom burden and improve quality of life and work capacity in this population of military healthcare workers in Thailand.

REFERENCES

1.Bunyavejchevin S. Reliability of Thai-version Overactive Bladder Symptom Scores (OABSS) questionnaire and the correlations of OABSS with voiding diary, International Prostate Symptom Score (IPSS), and Patient Perception of Bladder Condition (PPBC) questionnaires. J Med Assoc Thail Chotmaihet Thangphaet 2015;98:1064–74.

Condition (PPBC) questionnaires. J Med Assoc Thail Chotmaihet Thangphaet 2015;98:1064–74.

2.Chuang YC, Liu SP, Lee KS, et al. Prevalence of overactive bladder in China, Taiwan and South Korea: Results from a cross-sectional, population-based study. Low Urin Tract Symptoms. 2019;11(1):48-55. doi:10.1111/luts.12193

3.Naing, L., Nordin, R.B., Abdul Rahman, H. et al. Sample size calculation for prevalence studies using Scalex and ScalaR calculators. BMC Med Res Methodol 22, 209 (2022). https://doi.org/10.1186/s12874-022-01694-7