

# Tuberculosis awareness and preparedness among undergraduate health professional students in Baghdad: A KAP study highlighting tobacco smoke exposure and curriculum gaps

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## ABSTRACT

**Background:** Tuberculosis (TB) remains a major public health concern in Iraq. Tobacco smoke exposure is a well-established yet under-recognized risk factor that exacerbates TB transmission and disease progression. Undergraduate health professional students represent the future frontline workforce; however, evidence regarding their preparedness to address TB is limited.

**Objective:** This study aimed to assess the knowledge, attitudes, and practices (KAP) related to tuberculosis among final-year medical undergraduate health professional students in Baghdad, with particular focus on tobacco smoke as a TB risk factor and the adequacy of undergraduate curricula.

**Methods:** A cross-sectional questionnaire-based study was conducted among 400 final-year at medical, Nursing, Health technician, and Allied health workers colleges in Baghdad City (Madenat Alelem University, and Al Kindy College of Medicine). A validated KAP instrument was used. Descriptive and inferential statistical analyses were performed using SPSS v26.

**Results:** Overall knowledge of TB risk factors was suboptimal. Only 42% of medical students and fewer than one-third of allied health students correctly identified tobacco smoke as a significant TB risk factor. Less than 40% of students across all disciplines reported confidence in diagnosing or managing TB. Perceived adequacy of TB curriculum varied significantly by discipline ( $p < 0.05$ ), with non-medical programs reporting lower satisfaction.

**Conclusion:** Substantial gaps exist in TB-related knowledge, clinical confidence, and curricular coverage among undergraduate health students in Baghdad. Integrating tobacco control, interprofessional education, and community-based TB training into undergraduate curricula is essential to strengthen Iraq's future healthcare workforce.

**Keywords:** tuberculosis, knowledge attitude practice, tobacco smoke, medical education, undergraduate health students, Iraq

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