

Maheswaran A., Viraspillai J.

**KNOWLEDGE, ATTITUDES AND BARRIERS TO ADVERSE DRUG REACTION
REPORTING AMONG UNIVERSITY STUDENTS.**

Tutor: assistant Yakovleva M.

Department of Pharmacology

Belarusian State Medical University, Minsk

Relevance. Adverse Drug Reactions (ADRs) are a major global health concern, yet pharmacovigilance systems remain underutilized. ADRs contribute significantly to morbidity and healthcare costs, yet under-reporting remains a critical gap in medication safety. University students frequently self-medicate in high-stress environments, making them particularly vulnerable to ADRs and their consequences, including poor adherence and drug tolerance. However, data on pharmacovigilance engagement in this population, especially in Belarus, are scarce.

Aim: this study aimed to determine the prevalence of suspected ADRs, level of knowledge, attitudes, barriers to reporting, and factors associated with reporting behavior among university students in Belarus.

Materials and methods. A cross-sectional survey was conducted among 100 university students (mean age 21.12 ± 1.81 years; 60% female, 40% male) using a validated 42-item questionnaire based on the WHO pharmacovigilance indicators. The survey covered demographics, ADR knowledge, personal ADR experience, attitudes (5-point Likert scale), barriers, and impact on daily life. Data were analyzed using descriptive statistics, Chi-square tests, Pearson correlation, and logistic regression (SPSS). Statistical significance was set at $p < 0.05$.

Results and their discussion. The lifetime prevalence of suspected ADRs was 82% ($n=82$). The most common symptoms were drowsiness/fatigue (71%), headache (51%), and nausea (38%). Severity was mild in 45%, moderate in 48%, and severe (requiring hospitalization) in 7%. Only 8% of those who experienced an ADR officially reported it. Awareness of the national ADR reporting system was extremely low (18% — only 8% knew how to use it). Correct knowledge of ADR definition was 71%, but 36% falsely believed only doctors/pharmacists can report.

Attitudes: 91% agreed reporting is important, yet 54% believed only serious reactions need reporting, and only 38% felt confident to report. Major barriers: “didn’t know how” (69%), “not serious enough” (58%), “unsure causality” (47%), “wouldn’t make a difference” (34%). Logistic regression showed that awareness of the reporting system ($OR=6.2$; 95% CI 2.1–18.4; $p < 0.001$) and moderate/severe ADR experience ($OR=3.1$; 95% CI 1.2–8.0; $p=0.008$) were independent predictors of actual reporting. Gender, age, and current medication use were not significant. A strong negative correlation was found between confidence in reporting and the barrier “didn’t know how” ($r=-0.53$; $p < 0.001$). Notably, 76% stated a simple mobile app would increase their likelihood to report.

The 82% prevalence of suspected ADRs is substantially higher than general population estimates (typically 10–30%), likely reflecting polypharmacy, self-medication, and recall among students. Despite high prevalence, official reporting is negligible (8%) — similar to studies from other countries (5–15% in student populations). The major gap is not lack of willingness but lack of knowledge on how to report, compounded by the misconception that only serious events matter. The strong association between system awareness and actual reporting ($OR=6.2$) suggests that targeted educational campaigns at universities could quadruple reporting rates. The high endorsement (76%) for a mobile reporting app points to a feasible, low-cost intervention for this demographic.

Conclusions. Suspected ADRs are highly prevalent among university students, but official reporting is almost absent due to critical gaps in awareness and knowledge. Students are willing to report if given simple tools and education. We recommend, mandatory pharmacovigilance module in university curricula, a student-friendly mobile reporting app linked to the national authority, and feedback loops to encourage future reporting.