

## **ABSTRACT**

**Background:** Studies have shown the prevalence of self-medication among medical students worldwide. However, there is lacking evidence on this in Yogyakarta, Indonesia.

**Objective:** To determine the reasons and extent of self-medication with antibiotics and OTC drugs among medical undergraduate students in Yogyakarta, Indonesia.

**Method:** This study employed a cross-sectional design implemented in the form of a pre-validated, self-administered questionnaire. The study population consisted of 96 undergraduate medical students selected using a systematic random sampling approach and currently enrolled in 1<sup>st</sup> to 4<sup>th</sup> year in the Faculty of Medicine in Gadjah Mada University, Yogyakarta, Indonesia. Data collected was analyzed using Chi-square Test and Fisher's Exact Test. A p-value of <0.05 is considered significant for this study.

**Results:** Out of 96 students, 49% (n=47) were found to self-medicate with antibiotics and OTC drugs within the past 1 month. Two of those students self-medicated with only OTC drugs. A significant association was found between having health insurance and a student's tendency to self-medicate (p=0.034) as well as knowledge on antibiotic function and year of study (p<0.05). Families play major roles in contributing information to these students on the drugs that they self-medicate with (64%). Pharmacies are found to be the most common source of obtaining these drugs (70%). The most common condition leading to self-medication is headache (79%), while the most common antibiotic and OTC drug used for self-medication are Amoxicillin (62%) and Paracetamol (94%), respectively. Major reasons for self-medication include convenience and dissatisfaction with health services. From the students who self-medicate with antibiotics (n=45), 40% do not intend to stop this practice in future.

**Conclusion:** Self-medication is prevalent among medical undergraduate students here in Yogyakarta, Indonesia. Actions should be taken to educate all students on the hazards of irrational drug use. There is a dire need for stringent monitoring of drug distribution here in Yogyakarta, Indonesia.

**Keywords:** Self-Medication, Antibiotics, OTC, Drugs, Students, Undergraduate, University, Yogyakarta, Indonesia