

# A Comparative Piloting of Determinants of Self-Medication Among University Students in the MENA Region; UAE and Jordan as an Example.

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# Introduction

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- Self-medication (SM) is the practice of using drugs according to self-diagnosis without referring to physicians, or continuing the use of a physician-prescribed drug beyond its specified time.
- Self-medication (SM) is a growing trend among university students in the Middle East and North Africa region, with a prevalence of up to 98.7% in Saudi Arabia, 98% in Palestine, 92.4% in Iraq, and 62.9% in Egypt.
- SM habits are often influenced by TV commercials, online advertisements, and mass media, leading to missed diagnoses, drug resistance, addiction, and overdose.





- **Medical and pharmacy students** are the most prone to SM habits, with over-the-counter analgesics, NSAIDs, and antibiotics being the most widely used drugs.
- Furthermore, **over-the-counter analgesics and non-steroidal anti-inflammatory drugs (NSAIDs), as well as antibiotics**, have been found to be the most widely used SM drugs worldwide.
- Self-use of medicines can save time, cost, and reduce workload in **emergency departments, outpatient clinics, and primary healthcare** facilities.

*Al-Ameri RJ, Abd Al-Badri HJ, Lafta RK.2017*





**Aim**



**This research paper aims to show us how self-medication affects university students in the MENA region. Also, it shows how recommending SMs can affect university students and it compares between UAE and Jordan in terms of gender and university majors.**







# Methods

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- This study was conducted between September 2021 and June 2022, involving undergraduate students from Ajman University and Jordan University of Science and Technology.
- The study was approved by the Research Ethics Committee at Ajman University and adhered to the Declaration of Helsinki.
- A stratified sampling technique was used to recruit participants, who were eligible for healthcare-related and non-healthcare-related majors.
- Descriptive statistics were used for analysis, with proportions and frequencies presented as proportions and frequencies. 5





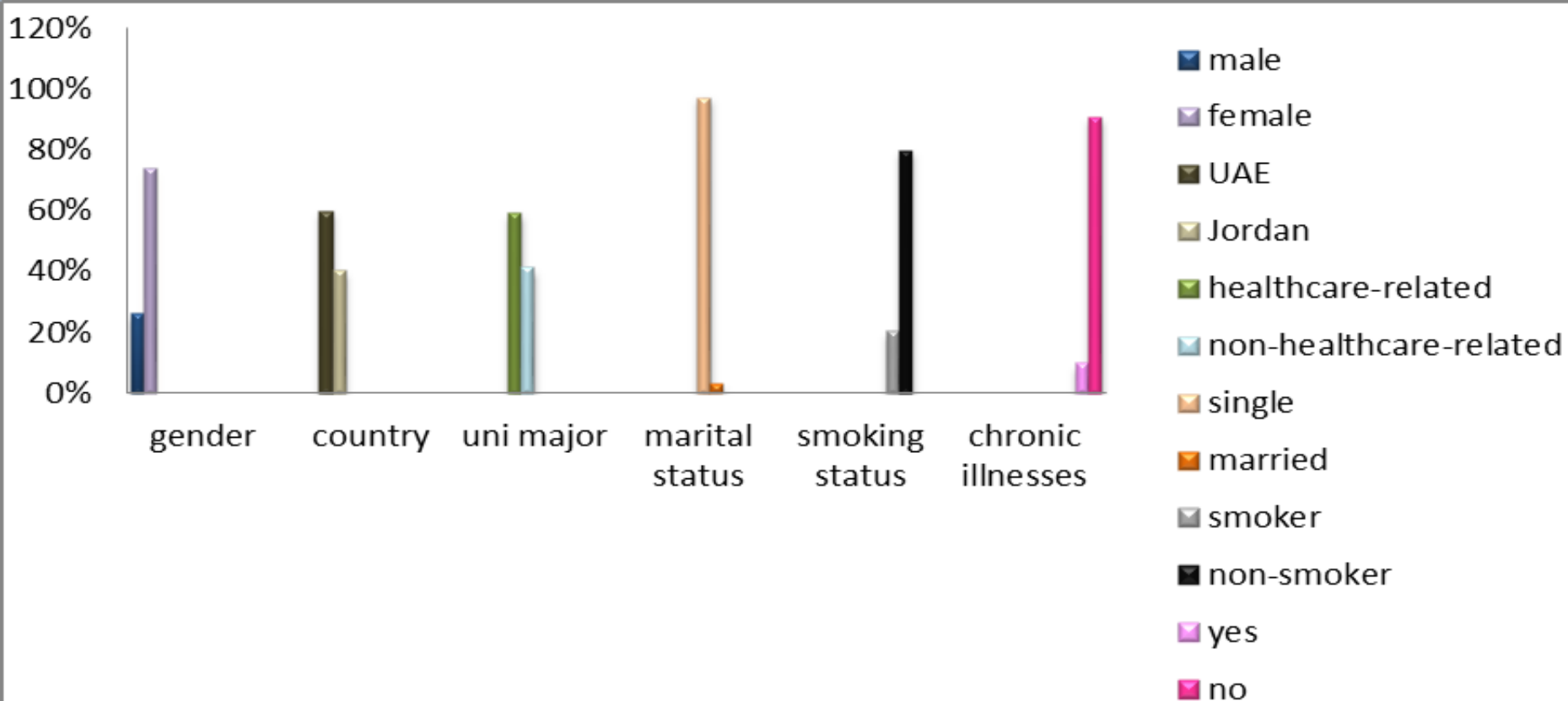
- A structured questionnaire was used to collect data, adapted from various instruments.
- The questionnaire consisted of four sections: sociodemographic characteristics, past medical and surgical history, self-use of certain drugs, and academic performance.
- The study found a conservative estimate of a 50% prevalence rate of self-medication (SM) among students at both universities.
- Data analysis was performed using the Statistical Package for Social Sciences (SPSS) program version 26.





# Results

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**Figure 1: participants background**

**Note in the research paper this bar chart was previously a table that is now changed to display the data clearer.**

Self-Medication	Family and Friends	Pharmacist	Inappropriate/Extended Use of a Doctor Prescription	Self
Paracetamol	156 (52.2%)	51 (17.1%)	59 (19.7%)	33 (11.0%)
Ibuprofen	63 (42.5%)	17 (11.5%)	54 (36.5%)	14 (9.5%)
Other NSAIDs	32 (37.2%)	13 (15.1%)	38 (44.2%)	3 (3.5%)
Central Analgesics	11 (33.4%)	3 (9.1%)	18 (54.5%)	1 (3.0%)
Antibacterial Drugs	28 (17.3%)	15 (9.3%)	117 (72.2%)	2 (1.2%)
Sleeping Pills	14 (36.9%)	7 (18.4%)	14 (36.8%)	3 (7.9%)
Anabolic Drugs	5 (50.0%)	2 (20.0%)	2 (20.0%)	1 (10.0%)
Propranolol	5 (62.5%)	0 (0.0%)	3 (37.5%)	0 (0.0%)
Amphetamine	2 (33.3%)	0 (0.0%)	4 (66.7%)	0 (0.0%)

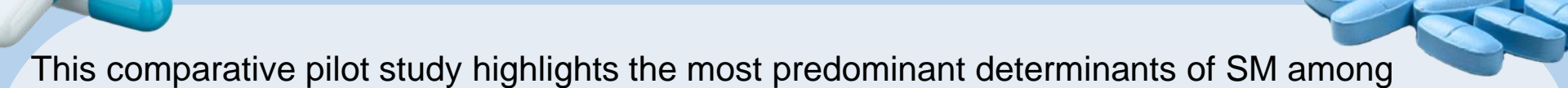
**Abbreviation:** NSAIDs, non-steroidal anti-inflammatory drugs.

**Table 1: Distribution of Self-Medications by the Source Recommending Its Use**



# Discussion

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This comparative pilot study highlights the most predominant determinants of SM among university students in the MENA region using UAE and Jordan as an example.

**The main findings of this study are:**

1. Over-the-counter analgesics as well as antibacterial drugs are the most widely misused medications by university students.
2. Female gender, Jordan as the country of study, and majoring in healthcare fields were the significant determinants of SM in our sample, with the latter being the most consistent factor impacting this practice.
3. Only a minority of university students believe that SM boosts their academic performance, NSAIDs, and antibacterial drugs have been most frequently self-used by university students.





## **1. Over-the-counter analgesics and antibacterial drugs**

This finding is justifiable for peripheral analgesics as they are sold over-the-counter and represent a patient's "best friend" in the face of conventional pain.

## **2. Students majoring in healthcare fields as the significant determinants of SM**

In pharmacy majors, a study surveyed the SM habits among pharmacy and PharmD students at the University of Jordan, our results show the social influences from family, friends, and relatives played a significant role in spreading the practice.

## **3. Students believing that SM boosts their academic performance**

Students in Saudi universities, as well as Egyptian universities, were found to list "relatives" knowledge of medications as the second main source of information regarding drugs, our results highlight an encouraging limited abuse of central analgesics, sleeping pills, Amphetamine, and propranolol.





- The sample size is not sufficient to yield more robust statistical analyses with more precise correlation statistics, which precludes the generalizability of results.
- The stratified sampling technique in our pilot study has its inherent limitations that could affect the interpretation of the results.





# Conclusion

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- The conclusion of This study provides valuable insights into the determinants of self-medication (SM) among university students in the MENA region, in the UAE and Jordan.
- The main findings underscore the prevalence of SM among university students, highlighting the significant role of gender, country of study, and university major in shaping SM habits.
- The study reveals a high prevalence of SM among university students, with over-the-counter painkillers and antibacterial drugs being the most commonly self-medicated medications.





- The study identifies female gender, students from Jordan, and those majoring in healthcare fields as the major determinants of SM among university students.
- The study sheds light on the sources of recommendation for SM, with family, friends, and relatives playing a significant role in influencing students' medication choices.
- The study examines students' perceptions regarding the rationale and benefits of SM on academic performance.
- The need for targeted awareness campaigns and interventions to address the prevalent practice of SM among university students in UAE and Jordan.





# References

# References

- Ahmadi SM, Jamshidi K, Sadeghi K, Abdi A, Vahid MP (2016). The prevalence and affecting factors on self-medication among students of Kermanshah university of medical science in 2014. *J Clin Diagn Res.* 10(5):IC01–IC04.
- Alshogran OY, Alzoubi KH, Khabour OF, Farah S. (2018) Patterns of self-medication among medical and nonmedical University students in Jordan. *Risk Manag Healthc Policy*, 11:169–176.
- Arria AM, Caldeira KM, Vincent KB, et al (2017) . Do college students improve their grades by using prescription stimulants nonmedically. *Addict Behav.* 65:245–249.
- El Ezz NF, Ez-Elarab HS. (2011) Knowledge, attitude and practice of medical students towards self medication at Ain Shams University. *J Prev Med Hyg.* 52(4):196–200.
- Nusair MB, Al-Azzam S, Alhamad H, Momani MY (2021) . The prevalence and patterns of self-medication with antibiotics in Jordan: a community-based study. *Int J Clin Pract.* 75(1):e13665.
- Volkow ND, Fowler JS, Wang GJ, et al. (2008), Methylphenidate decreased the amount of glucose needed by the brain to perform a cognitive task. *PLoS One.* 3(4):e2017
- Zafar SN, Syed R, Waqar S, et al. (2008), Self-medication amongst university students of Karachi: prevalence, knowledge and attitudes. *J Pak Med Assoc.* 58(4):214–217.





**Thank you for  
listening**

