

Evaluation of knowledge, Attitude and Practice About Self-Medication Regarding OTC Analgesia Among Undergraduate University Students: A Survey-Based Study

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Abstract

Background: Self-medication is defined as the use of medications for the treatment of self-recognized diseases. It is influenced by several factors such as family, education, law, society, availability of medications and exposure to advertisements. This study was done to evaluate self-medication with analgesics among Al farahidi university students.

Materials and Methods: A randomized, survey-based study was conducted from December 2021 to May 2022. The target population of this study was 179 students attending non-medical science colleges at Al Farahidi university in Baghdad\Iraq. Data were analyzed using MS Excel 2019.

Results: 88.2% of the students used analgesics frequently as self-medication. Of all the respondents, 76.5% reported headache as the problem. This was the most common problem, after which came dysmenorrhea and backache. Leg pain and tooth pain were other problems that led to the use of analgesics. The most commonly used analgesic was Paracetamol (70.8%) followed by mefenamic acid (13.9%) and Ibuprofen (9.4%). Most of the respondents (96.3%) didn't know about the adverse effects of the analgesic they took.

Conclusion: Self-medication with analgesics is very common among Iraqi students at Al-Farahidi university, and we thought it is a general issue among other Iraqi university students. This could be an index for other parts of the Iraqi community. we recommend education courses about analgesics and self-medication on the radio and television for the entire population.

Keywords: analgesics, students, self-medication.

1. INTRODUCTION

Self-medication is a common issue worldwide [1]. It is defined as the use of medications for the treatment of self-recognized conditions or symptoms. It is also the recurrent or regular use of a medication prescribed by a doctor for chronic or recurrent symptoms.[2]

It is affected by several aspects, such as law, education society, family, exposure to advertisements, and availability of medications.[3] Health authorities have to ensure that self-medication is performed in a controlled manner and ensure that only safe medications are available over the counter (OTC) and that patients are given information about the use, adverse effect, and contraindication of the medication. [4]

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Proper self-medication can alleviate medical problems and save time spent waiting to see a physician.[5] This may save money and even lives in acute conditions.[6] It has also been pointed out by the WHO that wise self-medication may be helpful in the prevention and treatment of diseases that do not require medical or pharmaceutical consultation and offers an affordable choice of treatment for common diseases.[7]

This study aims to determine the quality and prevalence of self-medication with analgesics and assess this problem among different college students in Baghdad city as a sample community in the central part of Iraq.

2. Materials and Methods

An anonymous questionnaire-based study carried out at Al-Farahidi university, Baghdad, Iraq, was conducted after getting permission from the University. The survey was conducted by six trained pharmacy college students.

A total of 179 non-medical students of both sex and of all ages were included in the study. A brief description of the study and how to complete the questionnaire was explained to the student. The questionnaire was consisted of close ended questions, the questions was in Arabic language, and all the respondents were native Arabic speakers. A total 12 questions on the self-medication with analgesic including the complaint for using the analgesics, the most commonly used analgesic, source of information on the analgesic, and the knowledge about self-medication. The data were summarized as counts and percentages. Microsoft office excel 2019 was used for data analysis.

3. RESULTS

A total of 179 students participated in the study voluntarily, out of the 110 (61%) were males and 69 (39%) were females. The mean age in years was 21.7; ranging from 18 to 28 years. Out of 179 students total of 158 (88.2%), students took Self-medication and the rest 21 (11.8%) students have not taken Self-medication ever till now.

3.1. Knowledge

Among those who took the analgesic (n=158), only n=6 (3.7%) knows about the adverse effects of what they took. N=1 (0.6%) knows about the maximum allowed dose per day. In 87 (55%) students the source of information on self-medication is based on advice from a pharmacist or a previous prescription.

3.2. Attitude

In this study, we asked "Have you ever thought of consulting a doctor or pharmacist about this treatment?" and it is found that out of 158 students who used analgesics as self-medication, n=128 (81%) answered "no", where the students answered "yes" was only n=30 (19%).

3.3. Practice

Out of 158 students, most of them n=121 (76.5%) took the analgesics for headaches followed by menstrual symptoms n=21 (13.2%). (Table I)

Table 1 Various indications for self-medication among the volunteers

INDICATIONS	NUMBER OF STUDENTS
Headache	121
Menstrual pain	21
Back ache	8
Cervical pain	4
Leg pain	4
Tooth ache	3
Any type of pan	1

N=112 (70.8%) used paracetamol, N=22 (13.9%) mefenamic acid, N=15 (9.4%) used Ibuprofen, N=9 (5.7%) diclofenac sodium. (Table II)

Table 2 Different analgesics used for self-medication in this study

DRUG	NUMBER OF STUDENTS
Paracetamol	112
Mefenamic acid	22
Ibuprofen	15
diclofenac	9
Aspirin	4
Paracetamol-orphenadrine combination	1
other	1

4. DISCUSSION

One of the main contributions of the present study is the analysis of self-medication patterns in Iraq from a university students' perspective.

In this study, out of 179 students a total of 158 (88.2%), students took self-medication, some higher rate were reported in Saudia Arabia (98.7%), [8] Iran (89.6%) [9] and a lower rate were reported in Punjab (40.6 %) [10].

The source of information on the analgesics used for self-medication was a previous prescription or advice from a pharmacist or family member, this may be due to that they had visited the doctor or the pharmacist for the same illness previously and do not find it necessary to visit the doctor again for the same complaints.

Most of the male and female students took analgesics for headaches, this may be due to the stress of studying, Similar findings were in study carried out by Bernhard Langer et al,[11] however, the second complaint that led to self-medication is the period pain (dysmenorrhea) for the female students.

Our findings generally reveal that Paracetamol was the most

used analgesic, similar findings were in study carried out by Mohammed Al Essa et al,[12] this may be due to that Iraqi people think that Paracetamol has minimal to no adverse effects and is available in many generics at a cheap price, actually, Paracetamol has a good reputation as an effective analgesic for many years in Iraq. Similar findings were in the study carried out by Rawa J.K et al. [13]

The primary challenge faced in this study was that it was a cross-sectional survey. Therefore, it focuses on the current situation, that may differ in other seasons.

5. CONCLUSION

Self-medication with analgesics is highly prevalent among college students in a large Iraqi university, and it is believed that it could represent college students in general in Iraq. However, we suggest a complete study around self-medication in Iraq. We have to pay attention to the awareness programs and activities around the danger of using analgesics without a prescription from the doctor or advice from a pharmacist (for OTC medications). The help from physicians, pharmacists, and medical college students can help in increasing the awareness of self-medication among the other university students. The use of brochures, posters, social media, pharmacy college students and/or flyers may increase the knowledge, attitude, and practice around the potential harm of self-medication in Iraq.

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