

Prevalence of Analgesic Use amongst University Students

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ABSTRACT

Objective: To determine the prevalence, use frequency, indications, adverse effects and types of analgesics amongst university students.

Study design: Cross sectional study

Setting: Superior University, Raiwind Road, Lahore.

Duration: August 2011 to October 2011

Methods: A total of 200 (100 male and 100 female) students aged 18-22 years were included. The main outcome measures studied were; prevalence, use frequency, indications, adverse effects and types of analgesics.

Results: The history of analgesic use was positive in 98% students under study. Out of these, 57% used with a frequency of once a month or once in two months. Headache was the most common indication for the use of analgesics. 35% of female students used analgesics for dysmenorrhea. Paracetamol was the most commonly used analgesic (46%) followed by Aspirin (18%). The main problems reported were gastric upset, nausea and mental confusion while 33% students never had any problem with the use of analgesics. Most of the students (61%) used the pain killers without doctor's advice.

Conclusion: The use of analgesics is very common among university students. Headache in general and dysmenorrhea in female students are the main indications. Paracetamol and aspirin are consumed by the majority while gastric upset, nausea and mental confusion are the common adverse effects reported.

Key words: Pain, analgesic, indications, adverse effects.

INTRODUCTION

Pain remains one of the main reasons for medical consultation worldwide. Numerous organizations and scientific associations have made efforts to find solutions for this problem¹.

Analgesics, commonly known as pain killers are substances which work in various ways to relieve different types of pain experienced in the body. Over the counter (OTC) analgesics that are generally used by public are paracetamol, weak opioids such as codeine, and non steroidal anti inflammatory drugs (NSAIDs) such as ibuprofen and aspirin. (2) About 17 million non steroidal anti inflammatory drugs (NSAIDs) are prescribed annually in England alone. (3) Chronic use of NSAIDs is associated with a high incidence of renal and gastrointestinal toxicity. (4) Recent studies have shown that cardiovascular risks of regular use of analgesics also need attention. (5) University students owing to constant work pressure have little room for minor illness and hence a typical student's social life could lead to the consumption of analgesics as a 'quick fix'. (2) This study was

conducted to look for the prevalence of analgesic use amongst the university students in a Pakistani setup.

PATIENTS AND METHODS

A study amongst 200 students of Superior University, Lahore aged 18-22 was conducted from August 2011 to October 2011. Among them 100 were boys and 100 girls. The students were randomly selected using convenience sampling. A comprehensive questionnaire was made under I.H.S guidelines and was filled by the students. Considerable attention was paid to the language of the questionnaire to make it simple and understandable for the students. SPSS for windows was used to tabulate data and to calculate frequencies and percentages.

RESULTS

Among 200 students 195 were using analgesics with a prevalence rate of 98%. 100% of girls and 95% of boys were using analgesics (Table I)

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Table I: Use of analgesics among university students

	Male	Female	Total
Using Analgesics	95 (95)	100(100)	195 (98)
Not using analgesics	5 (5)	0	5 (2)

Most of the students (31%) used analgesics once a month, 21% weekly and 8% used the analgesics on daily basis. (Table II)

Table II: Frequency of analgesic usage

Frequency	=n	%age
Daily	15	8
Weekly	40	21
Fortnightly	30	15
Once a month	60	31
More than a month	50	26

Regarding indications of analgesic use, 54% took for headache, 7% for body aches, 7% for joint pains and 7% for other reasons like injury etc. It is worth mentioning that 35% of the female students used analgesics for dysmenorrhoea. (Figure I)

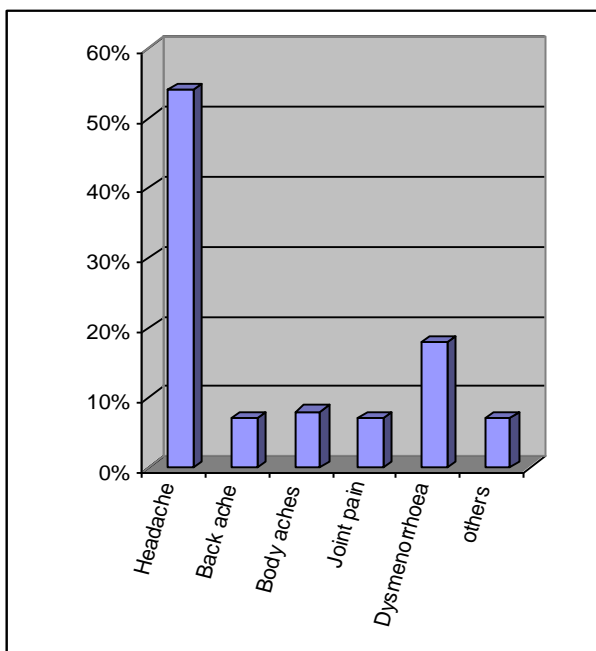


Figure I: Indications for the use of analgesics among students

The analgesic most commonly used was acetaminophen (Paracetamol) which was used by 46% of the study population. Others were Aspirin 18%, Ibuprofen 13%, Mefenamic acid 13%, Diclofenac 10%. (Table III)

Table III: The distribution of analgesics used by the students

Analgesic used by the students	=n
Aspirin	36(18%)
Paracetamol	89(46%)
Ibuprofen	25(13%)
Mefenamic acid	25(13%)
Diclofenac	20 (10%)

Majority of the users (33%) never had any problem with the use of analgesics. The main problems faced were gastric upset, allergy, nausea and mental confusion.

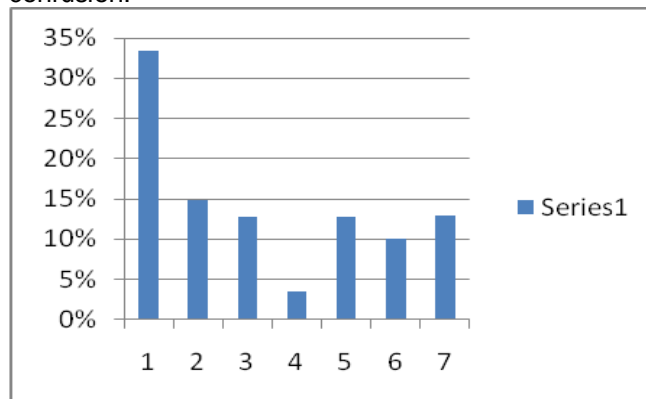


Fig II: Adverse effects reported by the use of analgesics

1. No problem 33%
2. Gastric upset 15%
3. Allergy 13%
4. Bleeding gums 4%
5. Nausea 13%
6. Anorexia 10%
7. Mental confusion 13%

DISCUSSION

Out of 200 students interviewed (100 males and 100 females), 195 (98%) were using analgesics. All the females and 95% of males in the sample gave positive history of analgesic use. The most common indication was headache (54%). According to a study by FV Abbott, OTC analgesics are also widely used to treat dysphoric mood states and sleep disturbances⁶. It is worth mentioning that 35% of females used analgesics during periods. Our findings agreed to some extent to the findings in a study conducted among Aston University, UK students where more females were reported to use analgesics². Hargreave et al considers this gender difference due to some factors like sex roles, social support, stress and period pain⁷. In our study, 8% students were found to be chronic users as opposed to the study in Aston University students where none was a chronic user. Paracetamol was the most commonly used analgesic. Same was concluded by a study in 1997 where paracetamol was declared the non narcotic analgesic of choice. (4) Gastric upset, nausea and mental confusion are the adverse effects reported by most users in our study as were reported in some other studies².

CONCLUSION

The study concludes that the use of analgesics is very common among the Superior University students especially females. The chronic use without doctor's advice by the students is really alarming and it is the need of the hour to identify the factors

responsible for the repeated use of analgesics and awareness should be spread through all sources to address these issues.

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