Awareness Of Over The Counter Drug Usage Among Students

Venkateswaramurthy. N*, Revanth. R, Karthikeyan. C, Ashik Kumar. M
Department of Pharmaceutical Practice
J. K. K. Nattraja college of pharmacy, Kumarapalayam-638613, Tamil Nadu, India
Affiliated to The Dr. M.G.R. Medical University, Chennai, Tamil Nadu, India.

Corresponding Author*
Venkateswaramurthy. N,
Department of pharmaceutical Practice,,
J. K. K. Nattraja college of pharmacy,
Kumarapalayam-638613,
Tamil Nadu, India,
Affiliated to The Dr. M.G.R. Medical University,
Chennai, Tamil Nadu, India.

Abstract

Over-the-counter (OTC) medications are widely used for self-medication due to their accessibility, affordability, and perceived safety. This study assessed the awareness, attitudes, and practices regarding OTC drug usage among 258 students from diverse educational backgrounds. Results revealed that 71.3% of students reported using OTC drugs in the past six months, with paracetamol, ibuprofen, and cetirizine being the most commonly used. Although 60.1% consistently checked expiry dates and 51.9% read instructions before use, a substantial proportion neglected essential safety practices. Only 35.7% always consulted pharmacists, while 32.6% reported experiencing side effects, indicating gaps in knowledge and responsible usage. Furthermore, 50.8% of participants perceived OTC drugs as completely safe, reflecting misconceptions about their risk profile. Encouragingly, 69.8% of students expressed interest in attending awareness programs on responsible use. The study highlights the dual nature of OTC medications: they empower individuals in self-care yet pose significant risks if misused. Targeted educational campaigns, pharmacist-led interventions, and stronger regulatory oversight are recommended to enhance safe medication practices. By addressing these gaps, universities and healthcare professionals can contribute to fostering informed decision-making and reducing the risks of self-medication among students.

Keywords: Over-the-counter drugs, Self-medication, Student awareness, Public health, Pharmacist consultation

Introduction

Over-the-counter (OTC) medications have transformed self-care by providing quick and affordable relief for common ailments. Their widespread availability, especially among students, has led to increasing self-medication practices. While OTC drugs offer convenience and reduce healthcare burden, unsupervised use can cause misuse, overdoses, and adverse reactions. This study evaluates student awareness, highlighting the benefits, risks, and the need for health education and pharmacist guidance.

Background of the Study

Definition and Classification of OTC Drugs

OTC drugs are non-prescription medicines for minor conditions like pain, allergies, and digestive issues. Though generally safe when used correctly, misuse can result in serious health risks.

- OTC vs. Prescription Drugs: OTC drugs are assumed safer but lack strict supervision, leading to underestimated risks.
- Examples: Commonly used include paracetamol, ibuprofen, antihistamines, antacids, and cough syrups, with analgesics often misused.

Prevalence of OTC Drug Usage and Self-Medication

The ease of purchase promotes global self-medication, especially in developing countries. Among students, peer influence, online information, and misconceptions increase risky practices despite higher education levels.

The Role of OTC Medications in Public Health

- Benefits: Convenience, affordability, and promotion of self-care.
- Risks: Adverse reactions, overdoses, and long-term complications demand better education and regulation.

Problem Statement

Rising student reliance on OTC drugs is driven by availability, lack of awareness, and peer influence. Misconceptions that OTC drugs are completely safe lead to poor knowledge of dosage, side effects, and drug interactions.

Knowledge Gap and Misconceptions

Many students underestimate the risks of OTC misuse, resulting in overdoses, adverse reactions, and false perceptions of safety.

The Need for Comprehensive Awareness

There is an urgent need for educational campaigns to promote safer practices, highlight potential risks, and improve decision-making.

- Rationale:
    - Assess current awareness and practices.
    - Identify student information sources.
    - Evaluate misinformation and health risks.

Objectives of the Study

- General Objective: To evaluate awareness, practices, and risks of OTC drug use among students.
- Specific Objectives:
    - Identify commonly used OTC drugs.

- Assess awareness of dosage, side effects, and interactions.
- Examine sources of information.
- Document misuse and health outcomes.
- Recommend educational and policy strategies.

Significance of the Study
OTC misuse is a growing public health concern. Findings will guide preventive strategies, reduce healthcare costs, and inform curriculum development, awareness programs, and policy revisions.

Empowerment Through Awareness
Educating students fosters responsible self-care, reduces errors, and improves community health literay
Scope and Delimitations of the Study
Focuses on students from varied educational backgrounds, limited to common OTC drugs like analgesics, antihistamines, and antacids. Prescription-only drugs and controlled substances are excluded.

NEED OF THE STUDY

The increasing use of over-the-counter (OTC) drugs among students raises public health concerns, as easy access and perceived safety often lead to self-medication without awareness of risks like incorrect dosage, side effects, or drug interactions. This study evaluates students' awareness, identifies knowledge gaps, and explores the influence of peers, media, and online sources on self-medication habits. The findings aim to inform targeted educational programs, public health policies, and regulatory measures that promote safe and responsible OTC drug usage, ultimately protecting student health.

AIM

To assess students' awareness of safe over-the-counter (OTC) drug use, identify factors influencing self-medication, and provide insights for educational and regulatory measures to promote responsible practices and protect student health.

OBJECTIVES

1. **Prevalence:** Measure frequency and identify commonly used OTC drugs.
2. **Awareness:** Evaluate knowledge of dosage, side effects, interactions, and misconceptions.
3. **Influencing Factors:** Examine peer, media, online, demographic, and socioeconomic influences.
4. **Health Outcomes:** Assess adverse effects and risks linked to poor awareness.
5. **Recommendations:** Propose targeted education, health promotion, and policy strategies for safer OTC drug use.

METHODOLOGY

Study Design
A cross-sectional descriptive study will assess awareness and usage patterns of OTC drugs among students.
Study Period
1–2 months, including data analysis and reporting.
Study Site
JKKN Group of Institutions, Kumarapalayam, Namakkal, Tamil Nadu, India.
Sample Size
250 students, based on 90% confidence level, 5% margin of error, and 50% prevalence rate.
Inclusion Criteria

- Students aged ≥17 years.
- Enrolled in undergraduate or postgraduate programs.
- Provided informed consent.

Exclusion Criteria

- Students <17 years.
- Not enrolled during study period.
- Did not consent.

Study Tools

- Structured Questionnaire: Covers demographics, knowledge, attitude, practices, and awareness.
- Pilot Testing: Conducted on a small group to ensure clarity and reliability.

Study Procedure

1. Preparation: Develop and pilot test questionnaire; obtain ethics approval.
2. Recruitment: Identify eligible students, coordinate with faculty, and obtain informed consent.
3. Data Collection: Administer questionnaire (in-person/online), clarify queries, collect responses, and follow up with non-respondents.
4. Data Management: Code, enter, and clean data; ensure confidentiality and secure storage.
5. Data Analysis: Use descriptive (frequencies, percentages) and inferential (chi-square, regression) statistics; present results with tables/charts.
6. Interpretation & Reporting: Summarize findings, compare with literature, draft and revise report.
7. Dissemination: Present at academic forums and publish in journals/university repository.

Results

Table 1: Age wise distribution

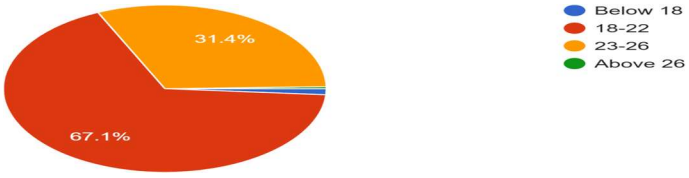

figure.1

Table 2: Gender wise distribution

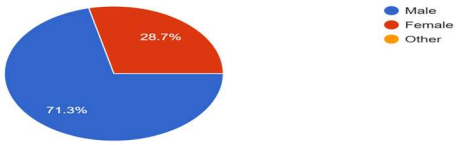

figure.2

Table 3: Educational background wise distribution

figure.3

Table 4: Have you used OTC drugs in the last six months?

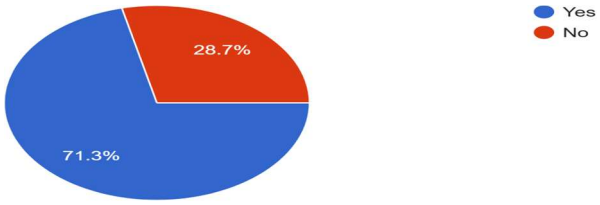

figure.4

Table 5: Response to Knowledge about OTC drugs question no.2(Do you check the expiry date before taking an OTC drug?)

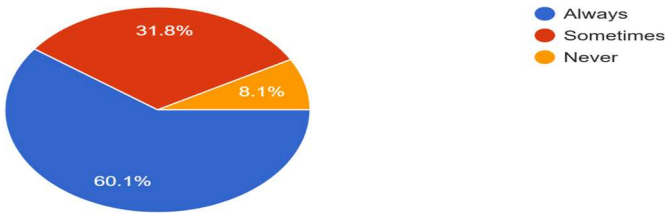

figure.5

Table 6: **Response to Knowledge about OTC drugs question no.3(Do you read the instructions and warnings before using an OTC drug?)**

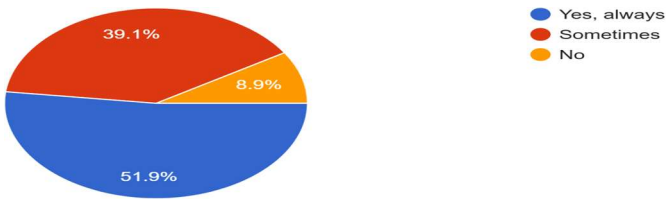

figure.6

Table 7: **Response to Knowledge about OTC drugs question no.4(Which condition(s) do you commonly self-medicate with OTC drugs?**

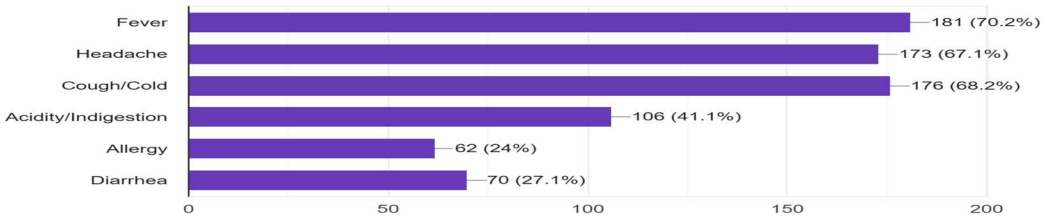

figure.7

Table 8: **Response to Knowledge about OTC drugs question no.5(Which of the following is a possible risk of excessive paracetamol use?)**

figure.8

Table 9: **Response to Knowledge about OTC drugs question no.6(What is the primary use of Loperamide?)**

figure.9

Table 10: **Response to Knowledge about OTC drugs question no.7(Which OTC medication is commonly used for motion sickness?)**

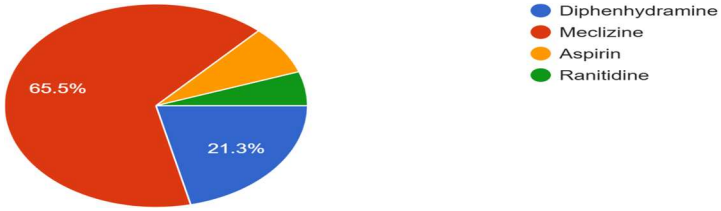

figure.10

Table 11: Response to Knowledge about OTC drugs question no.8(Which of the following OTC drugs are used to relieve acid reflux or heartburn?)

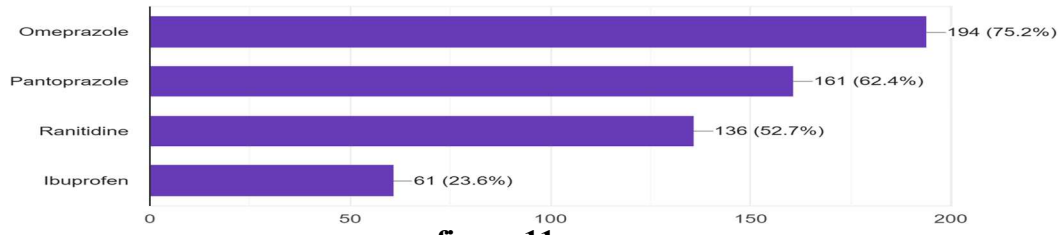

figure.11

Discussion

Awareness of OTC Drug Usage Among Students

This study assessed students' awareness, practices, and perceptions of OTC drug usage. The findings reveal both beneficial behaviors and significant gaps.

- Gender & Educational Influence: Of 258 participants, most were male (184). Pharmacy (108) and medical students (52) showed higher awareness compared to non-science students (42), highlighting the role of educational background in safe OTC drug use.
- Usage & Safety Practices: A majority (184) used OTC drugs in the past six months. While 155 students always checked expiry dates and 134 read instructions, many did so inconsistently, indicating weak safety practices.
- Pharmacist Consultation & Risks: Only 92 consistently sought pharmacist advice, while many relied on self-judgment or peers. Side effects were reported by 84 students, with 88 unsure of drug-related causes, showing poor recognition of adverse reactions.
- Preference for Self-Medication: About 126 students preferred OTC drugs over consulting doctors for minor ailments, reflecting convenience-driven self-treatment but raising concerns of misjudgment and misuse.
- Awareness & Education Needs: Although 191 recognized risks of excessive ibuprofen use, awareness about antibiotic resistance was unclear. Importantly, 180 students showed interest in seminars, indicating readiness for educational interventions.
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Limitations

- The study was limited to a specific student group, reducing generalizability.
- Self-reported data may involve over/underestimation of awareness and practices.
- Findings reflect a single point in time, not long-term behavior changes.
- Cultural, socioeconomic, and family influences were not deeply explored.
- Health outcomes of OTC misuse were not measured.
- Perspectives of pharmacists, healthcare providers, and regulators were excluded.

Conclusion

The study shows moderate awareness but risky practices in OTC drug use among students. While many check expiry dates and read instructions, self-medication without pharmacist consultation and poor recognition of side effects remain concerns. A large proportion (34.2%) were uncertain about adverse reactions, highlighting knowledge gaps. Encouragingly, most students (69.8%) expressed interest in awareness programs, offering an opportunity for universities and healthcare professionals to strengthen education through seminars and workshops. Promoting pharmacist consultation and structured awareness initiatives can help ensure safer, more responsible self-medication practices.

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